

**INFLUENCE OF SCHOOL ENVIRONMENTAL FACTORS ON LEARNERS'
LITERACY IN PUBLIC PRE – PRIMARY II IN WEBUYE WEST SUB - COUNTY,
KENYA**

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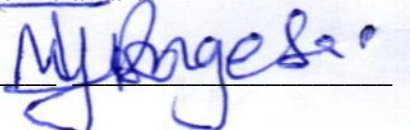
**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE AWARD OF MASTER OF EDUCATION DEGREE IN EARLY CHILDHOOD
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DECLARATION AND APPROVAL

Declaration;

The research proposal is my original work and has not been presented in any other University or for any academic award.

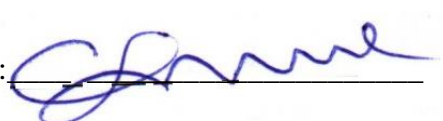
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DEDICATION

I dedicate this work to my late mother Nasike and my sons.



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I thank my supervisors Professor Charles Ngome and Dr. Stephen Tomno of Mount Kenya University for the guidance they gave me in writing this thesis. Further appreciation goes to: ECDE County director, Bungoma County; CSO Bokoli zone and Pamela for their support. Thanks to my classmates, the 2015/2017 academic year for their support. I sincerely thank my head teacher Mrs. Wakube for granting me permission whenever requested. I thank Mr. Kivelenge from Friends School Bokoli for his support. I also recognize the moral support I got from my family. I thank the County Commissioner, Bungoma County for granting me permit to carry out this study within his jurisdiction. I also want to appreciate the County Director of Education, for granting me permit to collect data from the sampled schools. Lastly, I appreciate all head teachers and their deputies, pre-primary II teachers and learners for accepting to participate in this study.



Mount Kenya

ABSTRACT

Learning standards and best achievement in learning areas rely on the ability of the learners to read and master other literacy skills such as writing and working out numerals. Failure to acquire these skills in good time builds a weak foundation for learners which leads to low performance. In this study, the researcher aimed at investigating the “Influence of school environmental factors on learners’ literacy in public pre-primary II in Webuye West sub- County, Kenya. The study was guided by the following objectives: to determine the influence of physical facilities on learner’s literacy in public pre-primary II; to find out the influence of instructional materials on literacy achievement in public pre-primary II; to investigate the influence of teacher-learner interactions on learners’ literacy in public pre-primary II, and to assess the influence of school culture on learner’s literacy in public pre-primary II in Webuye West Sub-County. The study used descriptive survey research design that employed cross-sectional survey research design and mixed method in data collection. The study targeted 3216 respondents. 2997 pre-primary II learners, 109 pre-primary II teachers, 55 head teachers and 55 deputies from 55 public primary schools in Webuye West Sub-County. The selected sample size was 523. These included 48 head teachers, 48 deputy head teachers, 86 pre-primary II teachers, and 341 pre-primary II learners drawn from the four wards that make up Webuye West Sub-County. The study used stratified sampling technique to categorize schools into wards that make up Webuye West Sub County. Simple random sampling was used to sample head teachers, deputy head teachers and pre-primary II teachers. To select pre-primary II learners in their respective schools, the researcher used simple random sampling. The researcher used Likert scale questionnaire to gather information from pre-primary II educators and deputy head teachers. Interview schedule was only used in the collection of data from the head teachers. Data from Pre-primary II learners was collected using observation schedule. Piloting was conducted in the neighboring Sub-County. Its main aim was to determine validity and reliability of the data collection instruments. The researcher used pre-test to check validity and re-test method to ascertain reliability of the instruments and Cronbach’s Coefficient Alpha Index was obtained. Research instruments were validated by Mount Kenya University Research experts. Descriptive Statistics which comprise of percentages, standard deviation, frequencies and means was done and presented in form of tables. The study found out that the school environmental factors were critical in influencing learners’ literacy in public pre-primary II in Webuye West Sub-County. In regard to this, the study recommends that, National and County governments should join together to improve on physical and literacy facilities to enhance effective teaching-learning process. The study further recommends that the county government should provide moderate teacher-learner ratio, enough instructional materials and follow available policies on providing pre-primary teaching and learning. Teachers Service Commission in collaboration with Kenya Institute of Curriculum Development should always supervise activities in pre-primary schools.

TABLE OF CONTENT

DECLARATION AND APPROVAL	1
DEDICATION	2
ACKNOWLEDGEMENTS	3
ABSTRACT	4
TABLE OF CONTENT	5
LIST OF TABLES	9
LIST OF FIGURES	10
LIST OF ABBREVIATIONS AND ACRONYMS	11
LIST OF APPENDICES	12
CHAPTER ONE	13
INTRODUCTION	13
1.0 Introduction	13
1.1 Background to the Study	13
1.2 Statement of the Problem	18
1.3 Purpose of the Study	19
1.4 Objectives of the Study	19
1.5 Research Questions	19
1.6 Significance of the Study	20
1.7 Justification of the Study	20
1.8 Scope of the Study	21
1.9 Limitations of the Study	22
1.10 Delimitations of the Study	22
1.11 Assumptions of the Study	22
1.12 Operational Definition of Key Terms	23
CHAPTER TWO	24
LITERATURE REVIEW	24
2.0 Introduction	24
2.1 Empirical Literature	24

2.1.1 Influence of Physical Facilities on Learner’s Literacy in Pre-primary II.....	26
2.1.2 Influence of Instructional Materials on Learner’s Literacy in Pre-primary II.....	29
2.1.3 Influence of Teacher-Learner Interactions on Learners’ Literacy in Pre-primary II ...	32
2.1.4 Influence of School Culture on Learner’s Literacy in Pre-primary II.....	35
2.2 Theoretical Literature	42
2.3 Theoretical Framework	44
2.4 Conceptual Framework	44
2.5 Research Gap.....	46
2.6 Summary of Literature Reviewed	47
CHAPTER THREE	48
RESEARCH METHODOLOGY.....	48
3.0 Introduction	48
3.1 Research Methodology.....	48
3.2 Study Location	49
3.3 Target Population	50
Table 1: Target Population and Sample Size.....	50
3.4 Sampling Procedure and the Sample Size.....	51
3.5 Data Collection Instruments and Procedures	52
3.5.1 Questionnaire for Deputy Head Teacher and Pre-Primary II Teacher	52
3.5.2 Interview Schedule for Head Teachers.....	53
3.5.3 Observation Schedule for Pre-primary II Learners	53
3.6 Testing for Validity and Reliability of Research Instrument	54
3.6.1 Validity	54
3.6.2 Reliability	54
3.7 Data Analysis Procedures	55
Table 2: Data Analysis Procedures	56
3.8 Ethical Considerations.....	56
CHAPTER FOUR.....	58
RESEARCH FINDINGS AND DISCUSSIONS.....	58
4.1 Introduction	58
4.2 Response Rate	58
Table 3: Questionnaire Response Rate.....	59

4.1.2 Gender of H/teachers, D/H Teachers, Pre-primary II Teachers and Learners	59
Table 4: Gender of Respondents	60
4.1.1 Age of Head teachers, Deputy Head Teacher, Pre-Primary Teachers and Learners....	61
Table 5: Age of Respondents	61
Table 6: Highest Academic qualification of Respondents	62
Table 7: Experience of the respondents	63
Table 8: Physical facilities on learners' literacy in public pre-primary II	64
Table 9: Instructional materials on learners' literacy in public pre-primary II.....	68
Table 10: Influence of teacher-learner interaction on literacy in public pre-primary II	72
Table 11: Influence of school culture on learners' literacy in public pre-primary II.....	76
CHAPTER FIVE	83
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	83
5.1 Introduction	83
5.2 Summary of Research Findings	83
5.2.1 To Determine the Influence of Physical Facilities on Learners' Literacy in Public Pre-Primary II.....	83
5.2.2 To Establish the Influence of Instructional Materials on Learners' Literacy in Public Pre-Primary II	84
5.2.3 To Investigate the Influence of Teacher-Learner Interaction on Learners' Literacy in Public Pre-Primary II.....	84
5.2.4 To Assess the Influence of School Culture on Learners' Literacy in Public Pre-Primary II.....	85
5.3 Conclusions	85
5.4 Recommendations for Practice.....	87
5.5 Recommendations for Further Research	88
REFERENCES	89
APPENDICES	94
APPENDIX I: QUESTIONNAIRE FOR DEPUTY HEAD TEACHERS AND PRE-PRIMARY II TEACHERS	94
Table 12: Influence of Physical Facilities on Literacy	95
Table 13: Influence of Instructional materials on Literacy.....	96
Table 14: Influence of Teacher-Learner Interaction on Learner's Literacy	97
Table 15: Influence of School Culture on Literacy	98

APPENDIX II: INTERVIEW SCHEDULE FOR HEAD TEACHER.....	100
APPENDIX III: OBSERVATION SCHEDULE FOR PRE-PRIMARY II LEARNERS	102
Table 16: Observation schedule for pre-primary II learners.....	102
APPENDIX IV: COVER LETTER	104
APPENDIX V: INFORMED CONSENT FOR THE PARENT/ GUARDIAN	105
APPENDIX VI: ETHICAL REVIEW COMMITTEE CERTIFICATE.....	106
APPENDIX VII : AUTHORIZATION LETTER FROM POSTGRADUATE STUDIES	107
APPENDIX VIII: NACOSTI CERTIFICATE	108
APPENDIX IX: LETTER FROM COUNTY EDUCATION OFFICE BUNGOMA	109
APPENDIX X: LETTER FROM COUNTY COMMISSIONER BUNGOMA.....	110
APPENDIX XI: TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION.....	111
Table 17: Determining sample size from a given population.....	111
APPENDIX XII: MAP OF THE STUDY AREA: WEBUYE WEST SUB-COUNTY	112
Figure 2: Map of the Study Area: Webuye West Sub-County.....	112



LIST OF TABLES

Table 1: Target Population and Sample Size	32
Table 2: Data Analysis Procedures	36
Table 3: Questionnaire Response Rate	39
Table 4: Gender of Respondents	39
Table 5: Age of Respondents	40
Table 6: Highest Academic qualification of Respondents.....	41
Table 7: Experience of the respondents	42
Table 8: Physical facilities on learners' literacy in public pre-primary II	43
Table 9: Instructional materials on learners' literacy in public pre-primary II.....	47
Table 10: Influence of teacher-learner interaction on literacy in public pre-primary II.....	50
Table 11: Influence of school culture on learners' literacy in public pre-primary II	53
Table 12: Influence of Physical Facilities on Literacy	73
Table 13: Influence of Instructional materials on Literacy.....	74
Table 14: Influence of Teacher-Learner Interaction on Learner's Literacy	75
Table 15: Influence of School Culture on Literacy	76
Table 16: Observation schedule for pre-primary II learners.....	80
Table 17: Determining sample size from a given population	89

LIST OF FIGURES

Figure 1: Conceptual Framework	27
Figure 2: Map of the Study Area: Webuye West Sub-County.	90



LIST OF ABBREVIATIONS AND ACRONYMS

AEO	Area education Officer
ANPPCAN	African Network for Prevention and Protection against Child Abuse and Neglect
BOM	Board of Management
CAT	Continuous Assessment Test
CBCC	Community Based Children Centers
CSO	Curriculum Support Officers
DEO	District Education Officers
DV	Dependent Variable
NGO	Nongovernmental Organization
ECDE	Early Childhood Development Education
ECD	Early Childhood Development
EFA	Education for All
FPE	Primary Education
IV	Independent Variable
KESSEP	Kenya Education School Sector Program
KNUT	Kenya National Union of Teachers
MDG	Millennium Development Goals
MOEST	Ministry of Education Science and Technology
NACECE	National Centre for Early Childhood Education
OST	Open System Theory
GOK	Government of Kenya
SDG	Sustainable Development Goals
UPE	Universal Primary Education
KSRAT	Kenya School Readiness Assessment Tool

LIST OF APPENDICES

APPENDIX I: QUESTIONNAIRE FOR DEPUTY HEAD TEACHERS AND PRE-PRIMARY II TEACHERS	72
APPENDIX II: INTERVIEW SCHEDULE FOR HEAD TEACHER	78
APPENDIX III: OBSERVATION SCHEDULE FOR PRE-PRIMARY II LEARNERS	80
APPENDIX IV: COVER LETTER	82
APPENDIX V: INFORMED CONSENT FOR THE PARENT/ GUARDIAN.....	83
APPENDIX VI: ETHICAL REVIEW COMMITTEE CERTIFICATE	84
APPENDIX VII: AUTHORIZATION LETTER FROM POSTGRADUATE STUDIES.....	85
APPENDIX VIII: NACOSTI CERTIFICATE.....	86
APPENDIX IX: LETTER FROM COUNTY EDUCATION OFFICE BUNGOMA.....	87
APPENDIX X: LETTER FROM COUNTY COMMISSIONER BUNGOMA	88
APPENDIX XI: TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION	89
APPENDIX XII: MAP OF THE STUDY AREA: WEBUYE WEST SUB-COUNTY	90

CHAPTER ONE

INTRODUCTION

1.0 Introduction

In this chapter, background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance and justification of the study, scope, delimitations, limitations, and assumptions of the study and operational definition of key terms are presented.

1.1 Background to the Study

School environmental factors influence learners' literacy in public pre-primary. These factors are facilities such as libraries, classrooms, workshops, playgrounds among others that promote teaching and learning in school (Ajayi, 2013). Improvement of the approach and the levels of learner's acquisition of knowledge depend on the provision of these facilities by the school to pupils and teachers. It has traditionally been believed that a school that is well-planned achieves good results and performance through the pupils (Ajayi, 2013).

Kitetu and Sunderland (2012) did a study in Britain regarding learning acquired by farmers. In reference to this, the study revealed that when basic education was accorded farmers for more than five years, there was increase in productivity, labour force reduced and increases yields of their farms. However, according to African Network for Prevention and Protection against Child Abuse and Neglect (ANPPCAN, 2010), children who attend such basic education are threatened by pathetic learning environment. The findings of the study categorically established that many children learn in classrooms which were ill-equipped. Again, the classrooms were in a pathetic state. In regard to this, some classrooms had no roofs, windows, doors, walls and even floors.

In Britain, disparities exist between private and public ECDE centres in terms of standards and facilities available to preschoolers which in turn affect literacy achievement in learners. A number

of learning institutions achieved good performance in difficult and challenging circumstances. This demonstrates that learners could still learn and achieve better results even in situations characterized by poverty. Contrary to this, in the third world countries, low economical ability of parents has disadvantaged many children from acquiring quality learning. Such is centrally attributed to inability of most parents to give them learning resources to enable them read. As a result, most of these learners end up going to school without any reading material. This eventually slows down literacy acquisition and low ambition in learning to a greater extent.

In the US, it is the responsibilities of the government to ensure that basic institutions are provided with physical and literacy facilities to enhance effective teaching-learning process. The UNICEF report, (2013) on the other hand established a contrary finding that poor learning conditions drastically affects learning in the developing countries. This leads to poor performance due to constraints on the available resources and the problem can be attributed to high enrolment of learners in the face of inadequate resources. For instance, in Uganda, physical characteristics of schools have a marked influence on the teachers, pupils and the entire process of literacy and its related outcomes. Conditions such as poor lighting and low ventilation of classrooms have occasioned poor health of the learners (Frazier, 2012; Lyons, 2001 & Ostendorf, 2001). Zimbabwe as well experiences scarcity of materials in schools which contributes to dismal teaching-learning process. This is so because availability and quality of learning materials such as textbooks increase the acquisition of learning (Chin & West, 2010).

Comparing the above disparities, it can convincingly be argued that poor learning environment affects learning in the developing countries, and more particularly the acquisition of literacy skills. Studies that have been done on how school environment influences the learner's academic performance indicate the prevalence of relationship between school-based factors and the learners'

performance (Limuli, 2009 Mayama, 2012). When physical resources are available in schools, the chances are higher that the level of retention will improve. But when physical facilities are in deplorable state, the pupil's achievement and retention level will be low.

Several government policy documents and renowned scholars perceive education as vital instrument that stimulates socio-economic development across the globe (World Bank, 2015: Salina, 2012). If a country has to develop into anything of value, it must invest in education of the citizen (Tadora, 2014). In addition, Hallack (2015) points out that education is a vital component in the society and determines the character and social economic growth of a nation. Globally, many countries are more interested in effective literacy skills in basic schools. He argues that "lighters" (i.e. teachers who distinguish themselves from the rest due their outstanding prowess and excellence) are important in the learning process. Such should immensely be used in the transmission of knowledge to the learners.

Considering the above, such teachers should as well be engaged for the optimum realization of learning in ECD (Lacina& Block, 2011; Nolan & Hoover, 1998). Reflective practice in the context of this study implies to a situation whereby teachers can be able to evaluate themselves to ascertain the extent of lesson delivery (Kift& Nelson, 2012). Learners should as well assess themselves whether they have gained some knowledge after the end of the lesson. Failure to engage in such self-evaluation has plagued the achievement of literacy among the learners.

In Malawi, ECDE centres play key role in promoting pre-schooling. It is among the African countries with a wide net of ECDE centres. These include pre-schools, day care and community-based childcare centres. (Yallow et al, 2012). The above mentioned centres help the children benefit from such interventions. The health care, community-based management of illness, nutrition and play promote holistic development of children. This helps care givers and parents to

build the capacity to handle the children. Although there is evidence that ECD programmes have significant influence on children in the society, investments in resource in poor countries do not really benefit vulnerable children (Munthali, et al, 2014). Malawi presents an outstanding precedence for emulation by other African countries in line with ECDE programmes.

The challenges facing the developing countries, and particularly in Africa, in terms of teaching-learning resources may not be common in the developed countries. Several African nations are faced with a considerable degree of illiteracy of parents. This makes them become passive in the issues pertaining to education of their children due to ignorance. On the contrary, developed nations actively concentrate in the funding of education of their children without fear (MOEST: Report, 2013). The situation experienced in developed countries might not be the same in Africa where poverty index is higher. The funding of education is more often a struggle both to the government in place and to the other major stakeholders in the education sector. To this effect, Kenya's education sector is not exempted from such inadequacies in funding, which further plagues learning and more so in the EYE centres.

The introduction of Free Primary Education in Kenya came at the right time to increase access to education and reduce the rampant level of illiteracy and ignorance. However, the government did not consider much to expand the available facilities. This has in turn led to abnormal overcrowding of classrooms, which makes it hard for the teacher to work effectively (Chuma, 2012). The high ratio of teacher to pupil in Kenya is as well discouraging since many schools are understaffed. School management committees are also unable to recruit extra teachers through BOM due to financial constraints. Such deplorable conditions may frustrate the learners and occasion school dropout (Sifuna, 2009). To this problem, Mbatia (2004) suggests that effective teaching-learning can only take place where there are adequate physical facilities, enough teachers and the

subordinate staff. This facilitates provision of services in the school especially to the learner. The concern of Mbatia has also been one of the major concerns of the teachers' unions in Kenya and more particularly the Kenya National Union of Teachers (KNUT). The union has endlessly been pushing series of regimes to employ more teachers. However, this has not been adequately done since the teacher-pupil ratio still remains a point of debate in the country.

As has been mentioned beforehand, the high ratio of teacher to student affects the education sector in Kenya and the world at large. This is also in line with the observations of Wamukuru (2016) who established meaningful findings that can be relied upon. He established that the enrolment of learners is higher than human and physical resources in 18,000 public schools. In the same vein, the MOEST (2010) established that the teacher learner ratio has been alarmingly on the increase. It has risen from the recommended ratio of 1:40 pupils per class to between 1:60, and 1:90 pupils per class. Kioko (2015) holds that the main objective in early years of education is the development of essential literacy skills such as comprehension, script and mathematics. These skills are enhanced by the learners' ability to connect the sounds of verbal communication with the lettering or signs used in printed form. The skills further constructed on the initial skills of listening and talking.

The above discussed concerns of teacher-pupil ratio coupled with high enrolment, therefore depresses classrooms since the few teachers have to congest many learners in one small room. The normal size for many classrooms at present is to have sitting arrangement in rows within the classroom. This system of arrangement makes pupils lose focus and creates disruption in the classroom (Grubaugh, S. & Houston, R., 2013). This arrangement does not promote communication among pupils, considering that human beings are social creatures that need attention from both their classmates and teachers. The areas that can make a noticeable impact on

the success of the learner are the physical environment of a school. These conditions generally present problems that need to be addressed if at all meaningful teaching-learning is to be achieved. At the same time these are the very conditions that are apparent in the study area which the researcher feels to investigate. This was with an aim to ascertain whether they affect literacy acquisition and to what extent.

1.2 Statement of the Problem

Learning standards and best achievement in learning areas relies on the ability of the children to read and mastery of other literacy skills such as writing and doing numerical activities. Basic skills that learners acquire in early grades are very important as they lay a well-built foundation for more complex skills acquired in later grades. Those who do not get these skills in early years of learning struggle to acquire them later in educational life (Mwoma, 2017). Failure to acquire these skills in good time or acquiring them haphazardly builds a weak foundation for the pre-primary learners, which leads to generally low performance. Unstable base in literacy skills during pre-school also gives teachers hard time in handling the same learners in the subsequent grades. Many pre-primary children in Kenya and Webuye West do not acquire these skills to the required standard. There was therefore need for teachers to set a good base in literacy as early as in pre-primary.

Wanjohi (2010) realized that Community Support Grants facilitated infrastructural development in Kiambu County thus increasing enrolment rate in pre-schools. A study by Githinji (2017) established that education level, training of pre-primary teachers and their qualification impact on the way children socialize and their cognitive achievement in the class. On his part, Sang (2013) found out that classroom environment has effect on mathematics performance of pre-school learners. The acquisition of literacy level remains relatively low in Kenya and Webuye West in particular. In view of the above, there are few if no study that has investigated how school

environment influences literacy achievement among pre-primary II learners, particularly in Webuye West sub-County. This study therefore sought to find out how school environmental factors influence learners' literacy in pre-primary II in public schools in Webuye West Sub-County, Kenya.

1.3 Purpose of the Study

This study intended to examine the influence of school environmental factors on learners' literacy in public pre-primary II in Webuye West Sub-County, Kenya.

1.4 Objectives of the Study

The study sought to accomplish the following objectives:

- i) To determine the influence of physical facilities on learners' literacy in public pre-primary II in Webuye West Sub-County, Kenya.
- ii) To establish the influence of instructional materials on learners' literacy in public pre-primary II in Webuye West Sub-County, Kenya.
- iii) To investigate the influence of teacher-learner interaction on learners' literacy in public pre-primary II in Webuye West Sub-County, Kenya.
- iv) To assess the influence of school culture on learners' literacy in public pre-primary II in Webuye West Sub-County, Kenya.

1.5 Research Questions

The study was guided by the following research questions:

- i) What influence do physical facilities have on learners' literacy in public pre-primary II in Webuye West Sub-County?

- ii) To what extent does sufficiency of instructional materials promote literacy in public pre-primary II learners' in Webuye West Sub-County?
- iii) What influence does teacher-learner interaction have on learner's literacy in public pre-primary II in Webuye West Sub-County?
- iv) To what extent does the school culture influence learners' literacy in public pre-primary II in Webuye West Sub-County?

1.6 Significance of the Study

The research findings would enable the government to make policies which would address challenges in pre-schools. Through this study, the donors would get informed and support pre-primary schools by improving infrastructural and instructional materials. The findings would attract international development partners to invest in Pre-Primary education which would improve community life. The findings may also add to body of knowledge of other researchers in the related field.

1.7 Justification of the Study

School environmental factors are factors within the school that can influence learner's literacy positively or negatively. These factors are physical facilities in the school, instructional materials, teacher-learner interaction and school culture among other factors. It is important that the County and National governments provide fully for pre-schools which provide basic skills in learning. Quality education can only be achieved if learners are comfortable in a good learning environment. Traditionally, it is believed that a school that is well-planned achieves good results and performance by the pupils (Ajayi, 2013). The UNICEF report (2013) established that poor learning conditions affect learning in developing countries leading to poor performance. For the government to achieve what is in Sessional paper 1 of 2005, it should improve infrastructure in all

schools, put up modern classrooms, provide enough instructional materials in pre-schools, employ enough teachers and provide snacks for pre-school learners. Webuye west Sub-County, just like other Sub-Counties in developing countries, has high enrolment with limited facilities. The limited facilities coupled with other factors made the Sub-County not to achieve much in literacy in public pre-schools. This was likely to affect literacy acquisition which may affect national performance in examinations if the government would not address the problem in time. The current study deviated from the concern of how school facilities in general influence academic outcome. Instead, it closely focused on different school environmental factors and their influence on the literacy of learners in public pre-primary in Webuye West Sub-County, Kenya.

1.8 Scope of the Study

The study was carried out in Webuye West Sub-County of Bungoma County in Kenya. It focused on School Environmental factors: (physical facilities, Instructional materials, Teacher-learner interaction and School culture) and Literacy (Reading, Writing and Arithmetic). The study was confined to learners in pre-primary II in public primary schools in Webuye West Sub-County. Data was drawn from a sample of 48 public pre-primary schools, 48 head teachers, and 48 deputy head teachers, 86 pre- primary II teachers and 341 pre- primary II learners. The study was a cross-sectional survey research in nature that used mixed method research design to collect data on Influence of School Environmental factors on learners' Literacy using questionnaires (deputy head teachers and Pre-primary II teachers), interview schedule (head teachers), observational schedule for Pre-primary II learners. The study was guided by Open System Theory postulated by Ludwig Von Bertalanffy. Data was collected between 2018 and 2019.

1.9 Limitations of the Study

The limitations of this study may have included obtaining information from the respondents who were not ready to share information concerning the concerns of the study for fear of victimization by their seniors. Some respondents were not willing to give information due to ignorance. Respondents could have also provided incorrect information.

1.10 Delimitations of the Study

The researcher assured all participants privacy and confidentiality by upholding anonymity. For those who were not willing to participate, the researcher explained to them the importance of the study and the need for them to participate. In order to overcome this, the researcher encouraged them to be honest and assured them that they would be given feedback of the findings after the completion of the study.

1.11 Assumptions of the Study

The study was based on the following assumptions

- i) That unavailability of adequate physical facilities and instructional materials affect learners' literacy acquisition.
- ii) That instructional material has influence on learners' literacy achievement in public Pre-primary II.
- iii) That teacher- learner interaction has influence on learners' literacy achievement in public Pre-primary II.
- iv) That school culture influences literacy in public pre-primary II learners.

1.12 Operational Definition of Key Terms

Early Childhood Education- refers to the kind of education offered to children in pre-primary up to grade three.

Instructional Materials- refers to as all materials that pre-primary II teachers require in class to facilitate literacy.

Literacy -the ability to listen, speak, read, write and do simple numeracy in arithmetic in pre-primary II learners.

Physical Facilities -refers to infrastructure and resources in schools that bring comfort to pre-school learners to aid in acquisition of literacy. They include play grounds, laboratories, classrooms, toilets, among others.

Pre-school – refers to the very first stage in learning during which a child is exposed to basic literacy skills for the first time.

School Environmental Factors – refer to the elements in the school that surround pre- primary II learners and affects literacy acquisition.

Teacher-Learner Interaction –refer to an aspect in which the teacher and the learner mix and relate closely and healthily to achieve a common goal in learning.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In this chapter, studies related to school environmental factors and their influence on learners' literacy were reviewed. The literature to be reviewed was guided by the research objectives. The sections include; the empirical literature review, the environmental factors that influence literacy among pre-primary II pupils, assessment on the availability of the physical facilities in school, adequacy of instructional materials, the influence of teacher-learner interactions, influence of school culture on the acquisition of literacy and lastly, theoretical and conceptual frameworks. After every objective, their related gaps were presented and finally, the general gap that the study sought to fill.

2.1 Empirical Literature

Environmental factors are factors within the school that influences acquisition of literacy on learners. Effective literacy is perceived as important by a number of authors (Goldhaber, 2012). Porter and Brophy (2017) while attempting to find out strategies of good teaching established that there is need for teachers to be specific on their goals if at all they desire to be effective in disseminating knowledge. The teachers should as well be conversant with the content to be delivered and communicate it to the pupils effectively. A study done by Saroyan et al (2017) found out that there are four areas on how to exhibit effective teaching. These include knowledge, preparation, and management of literacy and promotion of learning. This enhances the delivery of literacy, hence boosting learning. Nevertheless, the literature has not shown how the issues addressed influences acquisition of literacy of pre-school learners.

Sprinkle (2017) looked at the perception of pupils concerning effective teaching and presented some important views. It was revealed that pupils perceived effective teachers as those who applied different approaches to teaching and make learning a reality and enjoyable. It can be argued

therefore that the methods of teaching employed by the teacher sets desirable environment for the learners. In short, this implies that teachers should adopt variations on their teaching approaches if at all they wish to see learners achieve meaningful learning.

The Republic of Kenya (2016) analyses that during the world conference on Education for All (EFA) that took place in Jomtien, Thailand in March 1990, the importance of early years as base of the person was articulated. Growth of the intellect is mainly fast in the early years of the growing child and all the “serious windows of chance” are unlocked throughout this stage. During these periods, the children learn and acquire knowledge, skill and attitudes very fast without much struggle. These are very important times during which both parents and teachers are expected to holistically nurture the potential in the children. In this period, the brain is most flexible and very active. The influence of the environment nurtures, stimulates the child and imprints the greatest impact on the brain expansion. It is significant to note that this is the moment in time one can easily shape up and mould the character of the child by imparting values, habits and control of emotions.

Concerning the location of learning, Guffey (2013) asserts that the best place for learning is the school climate. Learning activities carried out within school environment greatly impacts favourably on the delivery and transfer of knowledge to the learners. Guffey continues to argue that it is within the organizational environment such as a school that teaching and learning can be conducted effectively. The assertions of Guffey also win the support of scholars such as Ajayi (2013) as cited in Chuma (2012) that the school encourages planning educational facilities, promotes good management and influence academic performance of the learners. In this regard, the school can be considered the most valuable environment in the process of literacy. Other learning environments that encourage learning hinge mainly on school. Since the pupil needs an

enclosed place free from distraction and improve concentration in learning, a classroom is of undisputable necessity. This is in order because it is within the classroom where the pre-school teachers can establish the socio-emotional needs of the learner. These needs are basically exhibited in the pupil's behaviour and therefore make the teacher easily identify and responds to it promptly (Schmuck & Schmuck, 2012). In addition, the foregoing source observes that the classroom set up gives the pupil a sense of security and instill self-esteem in the learner. This encourages learning and behaviour toward self and others (Schmuck & Schmuck, 2012).

There is also need for unrestricted but controlled informal interactions among the pupils such as movement in class, seating arrangements. As well the learners also needed to acquaint themselves with their teacher who fully takes control of the class (McCartney & Phillips, 2011; Vukelich & Christie, 2014). The teacher can as well enhance discipline in class by setting rules to guide the classroom behavior (Evertson & Weinstein, 2016). These aspects of interactions and class control are key elements in the success and delivery of lesson within the classroom environment. However, this may at times appear unimportant from the facial value. Learners should feel comfortable in learning in the language of their environment. Their classroom should be warm and relaxing since such environment influences on learners' motivation; it also increases chances for literacy achievement.

2.1.1 Influence of Physical Facilities on Learner's Literacy in Pre-primary II

It is crucial to present some concern on the way a school is set and its effect on teaching and learning environment. In this regard, the image of the school depends on the quality of infrastructure within the school, that is, the physical structure of the school. The physical facilities in the school affect teachers, pupils and the acquisition of literacy. Adequacy and good condition of physical facilities also play key roles in enhancing learning and boosts academic performance (Heyneman & Loxley, 2013; Lumuli, 2018). Considering that classrooms are places where a child

spends much of his time in the day (Ayoo, 2002; Eshiwani, 2013), there is need that these classrooms are kept tidy. Lockheed, Vail and Fuller (2016) suggest that when the working condition in school is improved, teachers and students tend to perform better, and this highly motivates teachers.

Observations by Chuma (2012), the Koech Report (1998), Nafukho (1991), Psacharopoulos and Woodhall, (2015) established that classrooms that in most learning institutions, classrooms are overcrowded. This situation makes the process of teaching-learning difficult and impedes free movement of both the teacher and the learner. Bernstein (2016) compared two aspects of learning environments in USA. The findings of the study found out that learners who attend schools that are well maintained in terms of infrastructure register better performance compared to those who attend schools that are poorly maintained. Juma (2011), Husen, Saha, and Noonan (2010) are in support of Bernstein's assertions. The literature have only addressed the degree of free learning environment yet have failed to show its implications on the acquisition of literacy skills in ECDE centres, and more particularly, on the learners.

Considerations of Mayama (2012) and Lumuli (2018) point out concerns of facilities in teaching-learning of science subjects. That, lack of facilities such as the laboratories greatly affects teaching of science related subjects. The absence of such facilities leaves the learner disadvantaged in doing practical activities. This greatly reduces the chance of the pupil's performance. Again, the size and organization of classrooms is another important aspect of physical facility and clearly stands out to influence literacy. Assertions by White (2017) indicate that learners do well in the classrooms that are properly organized.

The size of the class also has a degree of influence on teaching-learning process. When the class is smaller and carries the recommended capacity, the teacher and the learner to interact easily and

closely. This significantly promotes the level of literacy achievement among the learners. Conversely, when the class is large, there is tendency of negative impact on the learner since the teacher does not adequately interact with the learner (Bascia, 2013). In regard to this, the teacher may not have individual attention to every learner in a large class. This presents considerable impediment to the achievement in the literacy. Given that there is high population of pre-primary children in the study area, the reality of large classes were found evident. In the context of this study, 'large classes' implies classrooms with high population of learners. Schools and classroom in particular need to be designed to the appropriate standards. These include designing open windows and pleasant doorway areas, supervised private places for learners (McGregor, 2004 in Chepkonga, 2017). ECDE centres need to have adequate spaces that pupils can pass through to ensure smooth movement with less or no blockades or distractions (Bunting, 2004 in Chepkonga, 2017). Chepkonga (2017) further cites research study by Higgins, Hall, Wall, Woolner and McCaughey (2015). The study revealed that pupils' achievement was poor dilapidated school buildings. However, the study failed to show whether improvement in school infrastructure facilities resulted to acquisition of literacy skills in ECDE centres.

The size of furniture and equipment used by pre-school learners is very important in the teaching-learning process. NACECE (2015, 2010) suggested that tables and desks should be designed to fit the development adjustments of the growing child. This allows easy movement, group-work and play. The furniture should also basically be appropriate to the age of the learner. In addition, the findings of the Ministry of Education (2013) comparatively indicates that schools with permanent buildings and enough sizeable desks and tables for the pre-school learners do better than those that have inadequate or none. Kibaara and Kaburu (2013) hold that socio-economic, environmental and psychological factors determine learning outcomes of primary school pupils. Mbiti (2017) asserts that there is need for school environment to look tidy. This can be achieved by maintaining school

assets which normally suffer enormous tear and wear. As well, playing grounds should be in good, well-maintained condition. This makes the school environment look beautiful, safe and habitable for teaching-learning process.

Keeping the school environment tidy is vital and failure to this is in itself denying the learner an important part of their education (Mbiti, 2017). Further, the foregoing source holds that since many rural schools in Africa have semi-permanent buildings, most of the classrooms are left in a deplorable state. This menace is also exacerbated by improper hygiene of toilets that plague both rural and urban schools. In the light of this, achieving good teaching-learning environment in schools remains a challenge of great concern. Toilets in rural and urban are considered to be the most unclean places in the school compound due to lack of regular inspection by the school administration (Mbiti, 2017). This condition poses a great health hazard that makes teaching-learning unpleasant to the pupils. It is noteworthy that these scholars have failed to show how the environment of these physical facilities enhances the acquisition of literacy skills among the pre-school learners. Following this, the study sought to determine the influence of physical facilities on literacy of public pre-primary II in Webuye West Sub-County, Kenya the gap which the study filled.

2.1.2 Influence of Instructional Materials on Learner's Literacy in Pre-primary II

Availability of instructional materials influences the acquisition of literacy among the learners. Observations made by Twoli, *et.al*, (2017) and Hallack (2015) established that use of resources such as teaching-learning aids, audio-visual aids enhance the learning process. The foregoing sources further established that there was marked difference between children who are taught by use of such teaching-learning aids and the ones taught otherwise. Twoli (2017) categorically points out that learning becomes more interesting when pupils play with objects as well as watching others play with the same. It is also necessary that the child is provided with an environment that

can enable him to play freely such as good playing ground and spacious classrooms (Montessori, 1952; Fuller, 2015). In view of this, it is clear that most ECDE centres in public schools do not provide adequate playing space for learners. Instead the learners are only confined to smaller portion of the entire school compound, entitled ECDE section by the school administration. This presents a great impediment to the learning process since play toys and playing gadgets in particular, in this regard is part of teaching-learning aids.

A study conducted by Kamau (2012) in Kiambu County established that at school, the pre-children are engaged in various activities. These included, play and learning with the materials availed to them. These encouraged reading, writing, drawing and colouring, completing puzzles, building blocks, pretend plays and others. However, in instances where there are no provision of play and learning materials, the learners would not be very active. Kamau (2012) further found out that majority of parents concentrated more with provision of devices but lack awareness when it comes to provision of learning and play materials which their children need. In regard to the findings of Kamau, it is observed that there has not been any concern addressed on how these play activities and learning materials influence literacy achievement in ECDE learners.

Eshiwani (2013) and Bryant (2013) put more emphasis on the importance of instructional resources in ECDE centres. They both assert that availability of academic resources such as books, charts, models and play materials influence academic performance of the pre-school children. This necessitated the need to use instructional materials in pre-schools more often than in the upper classes for the achievement of literacy competence among the learners. Again, there is need for more research on the usage of resources, like charts, abacus and beads among others and their influence on academic performance. In terms of implementation of the curriculum, availability of resource materials is of central importance for the achievement of literacy competence. According

to Agosiobo (2017), teaching-learning resources offer stimulus variation to the learner, enabling him to concentrate throughout the whole process in learning. Curriculum implementation cannot be separated from pupil's academic achievement in school. Eshiwani (2013) and the Republic of Kenya (2016) argue that the availability of learning resources affects the superiority of learning outcomes. This quality in the context of the study is fundamentally based on the proper acquisition of literacy skills during the pre-school age. In addition, Fuller (2016) established that availability of quality instructional materials encourages child-centred learning. This approach enables the learner to embrace the discovery method of acquiring knowledge and skills by oneself.

In relation to the availability of instructional materials, Mwoma (2017) in a study explains the importance to this effect. The findings points out that having print materials for reading in pre-primary enables learners to acquire reading skill faster. The respondents echoed this factor by admitting that such learning materials including media expose children to the extent that they can learn how to read faster. The availability of text books and story books was as well seen as important in enhancing reading among children. Lastly, the study also revealed that there was need to improve methodologies used by teachers to impart reading skills. This therefore requires that more learning materials to train the children on how to read and acquire other literacy skills should be provided.

It is as well necessary that the instructional materials be prepared well ahead of time before use. This sentiment is echoed by Asikhia (2010) who pointed out that instructional materials determine learning outcomes. This is also in agreement with the findings of the Psychologists that human senses account for varying degrees of learning. Estimates has it that the taste sense accounts for 1%, the sense of touch 1.5%, that of smell 3.5% smell whereas the sense of sight accounts for 83%. Psychologists assert that human beings retain 20% of what is heard and 50% of what is seen. This

is enough evidence to justify the use of visual teaching aids in teaching-learning process. Learners who have their own books find joy in reading and always wanted to read compared to those without reading materials. However, the reviewed studies have failed to highlight major causes of inadequacy of reading materials and how this discrepancy affects achievement of literacy competence in pre-schools. In regard to this, the study sought to find out how availability of instructional materials influences literacy acquisition of pre-primary II in the study area.

2.1.3 Influence of Teacher-Learner Interactions on Learners' Literacy in Pre-primary II

Teachers' regular interactions with learners are important in ensuring that the learners are prepared for school. In the US, many state childhood systems and the federal government put into consideration teacher-learner communication when they measure the quality of the program. As much as many studies have been carried out, research findings in the country have not been so clear on the aspects of interactions which are useful on how learners perform academically and socially. However, in a study which analyzed data using a novel approach identified that teacher-learner interactions supports learners in learning and development in areas where interactions are desirable (Child Development, 2013).

In the foregoing source, the findings revealed that it was not the quality of instructional interaction that mattered for learner's progress. Instead, what matters was for the teacher to be approachable and sensitive to learner's issues. There is also need for the teacher to nurture positive relations and respect for the learner's independence. This immensely contributes to several aspects of learner's improvement in language and literacy development. As well; this improved their memory and the quality of interaction.

Ilias and Nor (2012) did a study in Malaysia on the "Influence of Teacher-Student Interaction in the classroom behaviour on Academic and Student Motivation in Teachers' Training

Institute in Malaysia.” The study established that, as the students interact with their teachers, there was improvement in the students 'academic behaviour. This means that there was improvement in learning outcomes due this kind of interaction. Further, the study established that students experienced marked motivational level when they interacted with their teachers. Moreover, the study found out that the students attained co-operation with the learning goals whenever they interact with their teachers. These findings clearly show that interaction between teachers and student is an important aspect in the general improvement in learning acquisition.

Nugent (2017), in a study, “The Impact of Teacher-Student Interaction on Student Motivation and Achievement” established concern on teacher-student interaction. While addressing how teachers and students interact, the study established that such interactions provided students with more freedom of choice. On another observation in the same findings, the study further established that in the process of teacher-student interaction, there were high chances of misuse of such interactions. This was reported to be causing unfriendliness between students and teachers due to the strictness nature of the teachers.

Booren., Downer, and Vitiello, (2012) studied on, “Observations of Children’s Interactions with Teachers, Peers and Tasks across Preschool Classroom Activity Settings.” The study established that, as children interacted with their teachers, there were positive engagements with their teachers in terms of communication. Again, the findings established that, most children had less positive interactions with their teachers. This was especially noticed when the children engaged in child-directed activities such as play. Children tend to take leading roles during such activities. For this reason, they feel uncomfortable interacting with their teachers during such activities which might involve large and small groups. The other important findings of the study found out that most

teachers were present during more child-directed activities though children proved to be less active. Such presence of the teacher did not encourage a healthy teacher-student interaction. The students were also not comfortable during child-centred activities.

Claessens and Tartwijk (2015) did a study on “Positive Teacher-Student Relationships go Beyond the Classroom; Problematic ones stay inside.” The findings of the study established that differences in teachers’ perception of teacher-student interactions in positive and problematic relationships. These observations in interactions mainly rated high on friendly basis, whereas in problematic relationships. Most respondents mentioned that levels of interaction rated low in hostile relations. This was particularly witnessed in circumstances where teachers proved to be unfriendly to the students. The teachers perceived that, the quality of teacher-student relationship depends on the way they relate. The findings also established that, teachers acquire intrinsic rewards from positive relationships and experience negative effect in problematic ones. These findings show that there are two kinds of teacher-student interactions; those that are positive and those that are problematic.

Digolo, Mwangi and Mungai (2017) did a study, on the “Relationship Between Quality of Teacher-Pupil Interaction and Primary School Readiness in Pre-school Pupils in Nairobi County, Kenya.” The study established that there was a positive relationship in the teacher-pupil interaction and primary school readiness. This was a good and desirable style of interaction. Further, the findings indicated that when the teachers properly engage the children in their activities more positively, more instances of laughing and smile were realized in classrooms. Conversely, classrooms where teachers ignored or had minimal interaction with the pupils, such realization of joy and relaxation was not observed. In addition, the study found out that good interaction between children and

adults at pre-school fosters more gains related to school readiness. The positive relationship in interaction of the teacher-pupil encourages readiness for school among the pre-school.

In the foregoing source, the quality of harshness in relation to school readiness was established. The quality of harshness in teacher-pupil communication and primary school preparedness in pre-school had negative relationships. Harshness is a harmful or unwanted pattern of contact between teachers and students. When teachers are harsh, this would impact negatively on the learner's outcomes. This implies that when the teacher exhibited an aspect of harshness, the pupil's desire to remain active in learning activities is negated. Therefore, the kind of pupil-teacher interaction which is characterized by harshness impacts negatively on the pupil's learning outcomes.

In view of the above reviewed studies, it is in order to first appreciate the contributions of the concerned scholars to the study. These contributions have enabled the researcher to find useful information that is related to the objectives of the study. The discussed studies have adequately informed the current study as they relate to the problem under review. However, these studies have not shown how teacher-learner interaction influences literacy especially in pre-schools. Therefore, the study investigated the influence of teacher-learner interaction on learners' literacy in pre-primary II in Webuye West Sub-County.

2.1.4 Influence of School Culture on Learner's Literacy in Pre-primary II

Cole, et al (2010) observed certain changes on the growing child. From birth to 5 years, young children undergo a lot of changes biologically, size, socially, emotionally and behavior. These changes are greatly influenced by culture and affect their learning capabilities. Culture consists of

beliefs, values, knowledge, materials and attitudes that affect the child's potentiality towards knowledge acquisition. The members of the society also embrace cultures which in turn has deep influence on the child. The members who socialize the general public are subjected to a diversity of factors as they perform their duties.

Vygotsky (2017) asserts that art play, representational play, and pretend play are forms of play that creates diverse educational surroundings for learning. Though, there are broad artistic differences in the level to which a mature person allows diverse forms of play in early days. Poddiakov (2016) verified how kids carry out community testing with other people in play and daily life. Some communities appreciate artistic practice of play at this age among the children. Vygotsky and other play scientists underscore the significance of commonality and exceeding expectations in play. They assert that play strengthens learning as the learners connect play activities to comprehension of what is desired to be learnt. In the context of the arguments of Poddiakov and Vygotsky, it is clearly seen that the school culture encourages an environment of play that in turn enables the children to develop curiosity in learning.

In line with health safety of children, Mazonde (2015) cites Graham-Brown, (2011) as arguing that teaching methods and classroom environment has direct impact on learners and learning. However, family background has a role to play. The family can help in improving health and nutritional status and this can be of immense help and beneficial to the pupil. Further, In terms of health and nutritional status, Mazonde highlights examples in different countries. For instance, in Burkina Faso, 90% of pupils in primary schools are infected with parasites, 29% are suffering from malnutrition. In Zaire and Zimbabwe, pupils have the same challenges. When these challenges are categorized, Zaire has 55% suffering from malnutrition and 45% are infected with parasites. Majority of pupils in Zimbabwe also have parasites; 63% are affected by parasites while 15%

suffers from acute malnutrition. In Kenya, pupils have even more problems i.e. 35% have been infected with parasites, 25% with acute malnutrition and 39% lack iodine. This report shows how unsafe the pupils are in relation to health hazards in their learning environment as well as in terms of general hygiene.

Discussions of school culture cannot be divorced from the home set-up from which the child comes from. The polygamous culture in many societies in Africa does not provide safety to the school-going children. O'Connor (2013) adds his voice in this by asserting that most children return from school to crowded homesteads which are polygamous in nature. For instance, the extended families live in compounds with large population. In families where there are many wives, which are predominant in larger parts of sub-Saharan Africa, every wife has a house and sits with her children around the fireplace. These children play with their brothers and sisters within the homestead. Apart from children playing around and making noise within the compound, there are also many adults within the polygamous homesteads. This situation endangers the safety of the pupil since it does not avail to the pupil a quiet place to study. It is therefore evident that from such environment, many children cannot find a private place where they can effectively study without much interruption. At the same time, they cannot find a safe place to store their learning materials.

Mwamwenda (2017) did a survey which sampled 51 primary schools in Botswana. The findings of the study revealed that schools with sufficient physical facilities and resources do well in academics compared to those with less or without enough facilities. This shows that the school culture of purchasing textbooks and other learning materials influence learning to a greater extent. The findings of Sunal, et al (2018) established that learners in many African countries buy textbooks from bookshops. As a result, there is no uniformity in terms of the content that the learner is required to learn.

In another point of view, availability of different varieties of books presents a challenge when it comes to the content coverage. Lockheed, Vail and Fuller, (2016) posit that it is more difficult for teachers and learners to cover specific material without standardization of textbooks. School and community also interact in terms of cultural orientations. Barnhardt (2014) argues that school and community should work hand in hand within the framework of the school. Within the designated framework, ways should be strategized to adapt formal learning to that environment. The community should be encouraged to build classrooms since this can effectively enhance the integration between the community and the school fraternity. This can provide the learner with real life teaching and learning experience on situations in the communities where learners come from. Learning takes place in natural situations by integrating formal and informal learning where they get persuasive and useful life skills.

Education has at times been faced with certain degree of discrimination. This has largely been due to cultures of different societies and classes of people. Fafunwa (2012); Ozigi and Ocho (2011) explains the case Nigeria. Here, Universal Primary Education (UPE) was tailored for children between 6 to 12 years. However, UPE tended was much focused on the male children at the expense of the female; on the urban children at the expense of the rural ones; on the rich at the expense of the poor. Such educational differences added challenges that already existed in a country with many tribes using different languages and religion. It was expected that through education, children would look at themselves as people of one nation. The experience of Nigeria is common in many third world countries where the girl-child is endangered by cultural domination in favor of the boy-child. Again, the rich also tend to excel in the access of education at the expense of the poor due to their financial stability.

Mazonde (2015) talks of language culture that is entrenched in African schools and that has since influenced on learning. He indicates that African education in south of Sahara use English or French as medium of instruction. The continued use of the two languages has led to high achievement among the minority group. Still, Mazonde (2015) continues to argue that for many reasons, globally education is being linguistically saturated. In reference to this, both pupils and teachers are demanding for sophisticated use in both spoken and written languages. This has been so partly because of emerging issues in education sector causing changes in methodology. Again, it can be attributed to changes in technology by integrating information technology in a classroom situation. It is seen as a way of acquisition of some degree of knowledge. In regard to this, many teachers and pupils alike endeavor at all cost to improve their language though this does not measure up to achievement in learning outcomes. It is just a mere culture of modernism and neo-colonialism that the learning institutions have embraced in the name of school culture.

Sadly, the culture of home language that should be engrafted into the school culture is missing in many schools in Kenya. Kioko (2015) presents an argument on the current existing gaps that is common in our society today. It is argued that the concepts acquired by pupils in mother tongue should not be repeated in official language at school. A pupil who has acquired literacy skills in mother tongue is able to apply the same knowledge in a new language. Preliminary schooling in the learner's native language therefore do not setback learning. Instead, it should lead to a quicker attainment of the skill and attitude required for achievement in official teaching and learning in general.

In view of the arguments of Kioko, it can rightly be observed that though this language policy has been in place for many decades in Kenya, more often than not, it has been violated. This could be attributed by an illusion that many parents have. Most of the parents tend to believe that when their

pre-school children are exposed to a second language immediately they transit from home, they are considered as brilliant. This impedes fast acquisition of literacy skills among the learners. In this regard, it is important that pre-school teachers in the rural should be allowed to operate in schools situated within their language of origin. As well, they should use the official languages especially those teaching within the urban set up.

In addition to the foregoing argument, Campbell, (2014) points out that there are over forty-two native languages and two certified languages for official communication. There is need that the school culture highly upholds the language policy in place. The policy has it that the means of teaching in the early years of learning from pre-primary one to grade three to be done in the native language or the language that learners can understand well. The main aim of this practice is to enhance smooth transition from home to school. With this policy effectively implemented, learners will easily and comfortably acquire the required literacy.

Different kinds of Safety measures when put in place can enhance teaching-learning environment. Mbiti (2017) is concerned with fire safety measures and designs of the openings of all school buildings. He argues that given the fire outbreaks that have been witnessed in Kenyan schools in the recent past, fire safety measures is debatable. For the learner to feel secure, an assurance that guarantees his safety is important. Mbiti (2017) further suggests that windows and doors should be designed in such a way that they open outwards. This particularly should include laboratory, library, dormitories, classrooms, kitchen, dining halls and offices. If such measures are put in place in the school, then teaching-learning environment can enhance better academic performance. However, the concerns of Mbiti have certain limitations. How these safety measures can create good environment which can in turn influence literacy achievement among the pre-primary

learners have not been addressed. The other reviewed literature has equally failed to show how their assertions influence literacy acquisition in pre-primary.

There should also be close interaction between the teacher and the student for acquisition of literacy to be effective. In reference to this, Barnhardt (2014) asserts that culture has an impressive consequence on the established role of educator and learner. The method of knowledge acquisition is changed from the instructor to the learner and society. During their straight input in the learning progression, the society member can get authority to manipulate the way of culture. In a societal-based approach, the teacher makes use of their skills to help pupils in getting similar skills. This enables the learner to explore the immediate normal, bodily and communal surroundings. Through this, learners can involve in projects related to their interest. It is the duty of the teacher to mobilize community resources into productive needs of the society which cannot be met without the community's participation. To achieve this, the teacher should work together with students in developing knowledge and skills. This involvement is aimed at improving participation in the responsibilities to be carried out in the community.

There are entrenched cultural practices in most schools in Africa. Freire (2012) points them out and critically labels them as the "banking concept" of cultural schooling. In this concept, ability to do something is seen as a gift vested upon those who look at themselves as people with high ability. In turn, they impose this ability to those whom they consider knowing nothing. About this, Freire lists several features of the banking concept of learning. In this, the educator teaches and the learners are educated; the educator understands everything and the pupils are empty slates ; the instructor thinks and the learners are deliberated on; the instructor poses question and the learners pay attention submissively; the educator guides and the students are closely controlled; the instructor decides and implements his/her preference and the learners obey; the educator

demonstrates, decides the curriculum content to be taught and the learners adapt to it without being consulted; the teacher is the master of the lesson while the pupils are mere objects.

It is important to profoundly consider the insights presented in the preceding paragraph. The problem does not lie with the instructor or the learner, but by the structural arrangement surrounding the educator and the learner and their interaction. Community patterns are customized to fit well in the structure of the institution, rather than the learning institution. Learning institutions is seen to be modifying its patterns to fit well in the structure of the society in which the school is situated. Such perspectives do not create desirable environment for achievement of literacy. The learners should be allowed to freely interact and participate and not take passive role in the teaching-learning process.

2.2 Theoretical Literature

The study adopted Open System Theory (OST) that was postulated in 1956 by Ludwig von Bertalanffy. His main argument is based on the solar system. It is argued that the solar system has different planets which join together to form the galaxy and the general universe system. The other auxiliary argument of Von Bertalanffy is based on the particles of an atom. An atom as well has different parts which join to form greater parts such as molecules and other atomic bonding. That these elements that initially stood alone join together to form a system, then there is an aspect of creation of an environment of interaction (Bertalanffy, 2012).

The OST is emphatic on the need for any given organization to depend on its immediate environment which makes it complete. This is so because the organization is perceived as a subset of the environment. Schmuck (1977) suggests that schools should be seen as dynamic systems that are living since they handle humanity whose absence renders the existence of school meaningless.

As such, the school therefore continually interacts with the community in which they are situated, and which forms its immediate environment. The dynamism of the school makes it be a complete system on its own. Senge (2016) presents a definition of a system as sets of elements which are interrelated and functions in harmony as a unit. Senge further states that there are two categories of systems; open system and closed system.

For better understanding, it is important to consider the nature of the Open System. The system perceives schools as an organization that draws much of its strength from the environment. The school also gives back to the community by transforming it. In view of this, a school is considered as a social system where more than two entities work together in one accord to achieve the desired goal (Norlin, 2010; Hanson, 2016). Scott (2018) on the other hand views open school system as an entity which is constantly interacting with its environment such as exchange of ideas between the school and the community.

The school as a communal entity has parts that interact with individuals within (input) and responds to individuals outside (output) its environment. Teaching and learning that take place in school and human input is involved. Services such as giving direction, advice, material and financial support form the basis of input. Services that form output aspects are: the product of teaching and learning. In this case, those who eventually graduate as a result of the services provided by the school form the result of the out-put (Scott, 2008). The external environment of a school comprises of political social and economic influence that might either work positively or negatively on school operations (Hanson, 2016). In addition, Boyatzis and Skelly (2015) observe that social interaction in school is important and promotes group work. Again, values acquired by individuals within the school influence the learners' behavior and attitude. Therefore, each learner should as well be encouraged to work on the individual task assigned by the teacher.

However, there are few criticisms levelled against Open System Theory. Chick (2014) points out that several researchers studying organizations find the OST not very much applicable. On one hand, this limitation may be blamed partly on researchers who have been unable to fully exploit the OST potentiality. On the other hand, the blame can be on the complexity in understanding the relevance and application of this theory.

2.3 Theoretical Framework

Despite the limitations, the researcher still found the theory relevant for use in the study due to its advantages. For instance, the OST provides an understanding of the fact that schools are organizations whose study deserves a theory relevant to its nature. For this reason, OST was considered fit for the study. The other reason for its relevance was the truth that public pre-primary schools, in which the study was undertaken, were categorized as open systems of organizations. The pre-schools are also established in community environment with which they find themselves interacting.

2.4 Conceptual Framework

The conceptual framework diagrammatically represents the interrelationship that exists between varied school environmental factors deemed to influence literacy of pre-primary II learners. It presents the summary of the study variables. In this study, the independent variables used are school environmental factors within and outside the school. Literacy which was being influenced by these factors formed the dependent variable. In the process of wanting to establish the influence of school environmental factors on learners' literacy, there were intervening variables involved. These were: government support, language policy in education and training of pre-primary II

teachers. These may have influenced the outcome experienced in the dependent variable. The diagrammatical representation to this effect is thus shown in Figure 1.

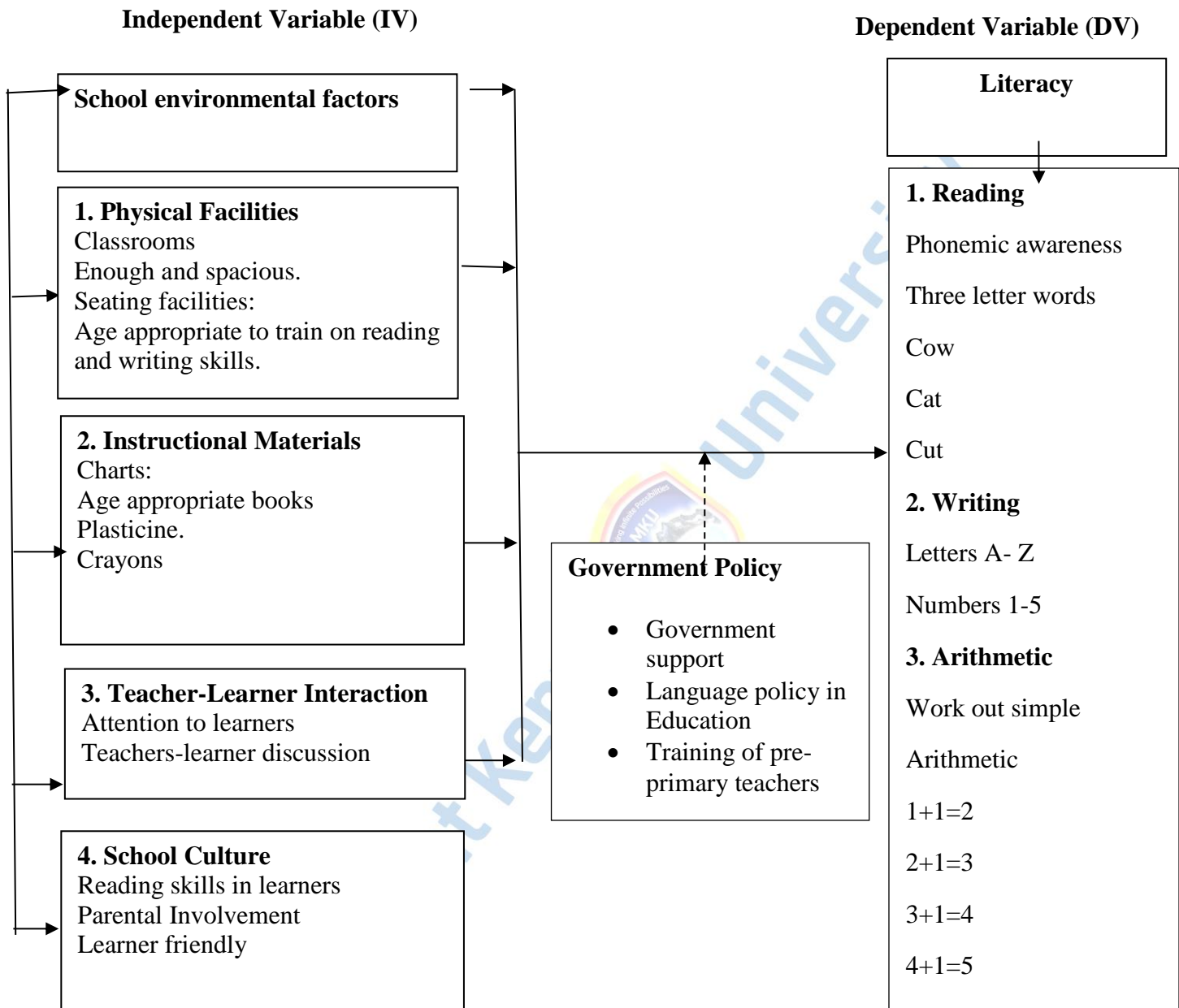


Figure 1: Conceptual Framework

Source Researcher (2019)

2.5 Research Gap

The reviewed literature presented different concerns on a number of issues that affect learning in schools in general. For instance, classrooms, teacher's preparation, staff collaboration and teaching-learning materials. There was also the influence of internal and external environment of the school. School culture and its role in pre-primary were also reviewed. However, the reviewed studies failed to address how these environmental factors affect the acquisition of literacy in public pre-school and more so among the pre-primary II learners. Again, the scanty information available did not address how school environmental factors influence literacy on the learners in public pre-primary II. Therefore, the researcher investigated the link between school environmental factors such as physical facilities, instructional materials, teacher-learner interactions and school culture. This was in regard to how they influence the acquisition of literacy among pre-primary II learners in public pre-primary schools. The findings formed the basis upon which suggestions and recommendations for improvements were made.

Information on how school environmental factors influence the process of teaching and learning in public primary schools is scanty. Previous studies in Homa-Bay district by Anyango (2012) found out that teacher' attitudes, adequacy of teaching-learning resources and girls' attitude towards education led to poor performance in KCSE among girls in Lower Nyokal division. Opudo (2012) found out that head teachers' style of management influences the performance of pupils in Webuye West Sub-County. Okuogo (2013) found out that the introduction of FPE led to increased enrolment of pupils in public primary schools in Webuye West Sub-County and this affected performance. However, no study known to the researcher has been conducted in Webuye West Sub-County on how the school environment influences the teaching-learning process. To complement these studies, the researcher investigated the relationship between school

environmental factors and the teaching-learning process in the achievement of literacy. This was therefore the gap the study filled.

2.6 Summary of Literature Reviewed

The chapter presented literature review. These were the concepts of environment and literacy, physical facilities and literacy, influence of instructional materials on literacy, teacher-learner interactions on the achievement of literacy skills, influence of school culture on literacy, theoretical framework, conceptual framework and the research gap. Many factors were observed to be affecting teaching-learning environment. The forces that majorly influence efficiency of teaching-learning were the state in which learning takes place. These were the physical facilities and resources like classrooms, textbooks, equipment, school supplies, and other instructional materials. In the learning institution, the surroundings in which learning takes place should be conducive spacious enough for teaching to produce the expected results. After reviewing literature in each objective, the identified gap was presented.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The chapter presents research methodology and design; the sections include study design, study area, target population, sampling procedures and sample size, data collection instrument, validity, reliability, data analysis and finally the ethical considerations.

3.1 Research Methodology

Kothari (2014) holds that research methodology is an organized and hypothetical analysis of the procedures applied to a subject area. It involves a series of steps in reporting, explaining and foretelling a phenomenon so as to get a solution.

The study used descriptive survey design and employed mixed methodology in approach. The mixed method approach entailed triangulation consistency of findings obtained through different instruments. These data collection instruments included interviews, questionnaires and observation schedule complementarily. Quantitative and qualitative results were used to assess overlapping distinct facets of the phenomenon under study (Green et al, 2019). The researcher opted to use this methodology because both qualitative and quantitative research when combined give much better understanding of the phenomenon. Creswell and Plano (2011) asserts that quantitative research deals with collection of data in numerals that can be exposed to numerical analysis. On the other hand, qualitative research relies on the views of the participants. This method was deemed appropriate as it gave elaborate information on how school ecological factors influence literacy in pre-primary II learners in Webuye West Sub-County, Kenya.

3.2 Study Location

The study was conducted in Webuye West Sub-County of Bungoma County, Kenya. The study area is among the nine Sub-Counties that make up Bungoma County. The study area borders Webuye East Sub-County on the eastern side, Kimilili Sub-County on the northern side, Bungoma Central Sub-County to the west, Bungoma South on the southern part and Kakamega County to the south-east. The County is mainly occupied by the Luhya Community with Bukusu sub-tribe being the largest. The study area has hills and several rivers. The major economic activity is farming and majority of farmers grow sugar cane as the main cash crop on which they rely to earn a living. They also grow maize as the main food crop. Due to poor and fluctuating prices of sugarcane, most of the residents have low economic ability.

Majority of the residents of Webuye west sub-county are Christians and a few Muslims. The most dominant cultural practice is circumcision of young boys in even-number years. This means that they only conduct the practices in the years whose number is divisible by two and within an interval of two years. For example, 2018, 2020, 2022. This practice has some negative impact on academics in the sub-county. Given the earlier described population characteristics and economic condition of the study area, education being a basic need remains key and essential sector of priority to the residents. There are a number of public primary schools within which many pre-primary schools are established and are referred to as pre-primary schools. Given the high demand of basic education to which pre-school is a prerequisite, many parents take their children to pre-schools.

Again, in comparing the population in the Sub-County and the rate of establishing new pre-schools or expanding the already established, it was apparent that the available pre-school facilities are not enough. This might have currently presented a learning environment which is not conducive,

posing a threat to teaching and learning in these pre-primaries. This was the situation that occasioned the researcher to do a study to ascertain how this environment influences teaching-learning in the study area. The researcher chose Webuye West Sub-County as a representative unit to other sub-counties because it was near, accessible and had adequate sample required for the study. Politically there are four County assembly wards that make up Webuye west sub-county. These are: Misikhu, Sitikho, Matulo and Bokoli and are presented on the map of the study area as shown in appendix XI.

3.3 Target Population

This refers to the whole set of available objects or individuals from which representative sample is obtained in order to make logical conclusions (Kothari, 2014). The study targeted 55 head teachers, 55 deputies, 109 pre-primary II teachers and 2997 pre-primary II learners. This provided the study with a total of 3216 respondents from 55 public pre-primary schools in Webuye West Sub-County as presented in table 1.

Table 1: Target Population and Sample Size

Respondents	Population	Sample Size
Head teachers	55	48
Deputy Head teachers	55	48
Pre-primary II teachers	109	86
Pre-primary II learners	2997	341
Total	3216	523

Source: County Education Office, (2019)

3.4 Sampling Procedure and the Sample Size

A sample is a representative population size derived from the target population. It is a group drawn from a larger population and used to approximate the features of the whole population (Kothari, 2014). In addition, Ogula (2015) refers to sampling as the method of choosing a number of objects or persons to participate in a study to represent the entire group. The researcher used Krejcie-Morgan-sample size table April 2016 to get sample size for the study. These included 48 head teachers, 48 deputies, 86 pre-primary II teachers and 341 pre-primary II learners in Webuye West Sub- County, Kenya. This provided the study with a sample size of 523. The researcher used Krejcie and Morgan sample size table because it is internationally accepted. Again, it is recommended for selecting sample size for large target population as in the current study. This gave true picture of the problem under study.

The researcher used stratified sampling technique because the study area was heterogeneous and required sub-groups of four wards. The study was a survey in nature and therefore it required a large sample that gave a reasonable number of items in each category of the population (Kothari, 2004). The researcher finally employed simple random sampling technique to select individuals in every stratum. Use of simple random sampling provides all individuals or objects with the same opportunity of being selected to participate in the study (Kothari (2014). The researcher used this technique to avoid biasness and the results from stratified sampling were more reliable and detailed (Kothari, 2014). To select pre-primary II learners in sampled schools, the researcher applied systematic random sampling technique.

3.5 Data Collection Instruments and Procedures

Before the actual time of collecting data, a survey to schools in Webuye West Sub- County was done. The aim of this was to enable the researcher familiarize oneself with the study area. During the survey visit in the study area the researcher made appointment with the persons identified to participate in the study. On meeting date, Likert scale questionnaires were distributed by the researcher in the daybreak and collected them by the end of the day. The researcher availed herself during this period for any question and clarification. Personal interview was conducted to head teachers only.

The researcher used different instruments in collecting data. The instruments were: observation schedule, questionnaires and interview guide and were the major instruments for collecting data in the study. Targeted respondents in the study were head teachers, deputy head teachers, pre-primary II teachers and pre-primary II learners. Data from deputy head teacher, and pre-primary II teachers was collected using questionnaires. Information from head teachers was collected using interview schedule and observation schedule was only used on pre-primary II learners.

3.5.1 Questionnaire for Deputy Head Teacher and Pre-Primary II Teacher

A questionnaire is given to participants who are supposed to read and answer the questions in the spaces provided (Kothari, 2014). This implies that those who participated were in charge of the Likert scale questionnaires, filled and then gave them back within the agreed time (Kombo & Tromp, 2016). The questionnaire was used due to its effectiveness in gathering data for a large sample within a short time. Using it was also cost-effective in terms of input, money and time. Open and close-ended questionnaires were given to teachers of pre-primary II and the deputy head teachers. Data was collected from the selected schools. In relation to this, Cohen and Manion (2013) applaud the use of questionnaires in the creation uniformity. This was evident in the way

in which questions are asked which enabled comparative analysis across respondents. It was also suitable because the target population was literate and thus limited chances of difficulties in responding to questionnaire items. In addition, Kothari (2014) holds that questionnaires fit suitability because they are free from bias. In reference to this, respondents were given considerable amount of time to give their responses which the researcher could aptly rely on.

3.5.2 Interview Schedule for Head Teachers

This instrument was designed to gather information from the head teachers only. Kumar (2006) argues in favour of interviews that its use curbs the problem of incomplete responses in questionnaires since all questions were responded to. Mugenda et al. (1999) add voice on this and points out the advantage interviews over questionnaires. Interviews provide in-depth probing on the respondents to bring out quality data. Importantly, the researcher was in a position to clarify any complicated questions that might arise from the participants. This was for the purpose of ensuring that responses were reliably consolidated, and comparisons made in between sample groups. The researcher created conducive atmosphere to ensure uninterrupted responses. The interviewer was fully in charge in controlling the entire interview process. The interview schedule had questions structured as per the research objectives and was used to guide the entire interview process.

3.5.3 Observation Schedule for Pre-primary II Learners

Observation schedule was constructed and used to help the researcher to measure the level of literacy acquisition among pre-primary II learners. Learners were observed as they handled reading, writing and arithmetic (number work). This procedure enabled the researcher to adequately assess the capability of the learner within their usual relaxed learning set up.

3.6 Testing for Validity and Reliability of Research Instrument

Validity and reliability of any given study are of central importance and as such, should highly be upheld. This entails concerns of precision and accuracy of the instrument and consistency of the results obtained to be relied on for any decision making and policy formulation.

3.6.1 Validity

Kothari (2014) states that, a tool is considered suitable and valid if it gives what the researcher wishes to assess. According to Borg and Gall (2013), content validity is confirmed by expert judgment. Putting this into consideration, the researcher identified areas in the questionnaire that presented elements of ambiguity and overlaps. The same was done by consulting key experts such as the supervisors. The outcome of such corrections finally fashioned the instrument for use in this study.

3.6.2 Reliability

Kombo and Tromp (2016) state that reliability is the level of assessment at which a research tool measures and gets same findings following frequent trials. In this case, the researcher carried out a pilot study on the instrument in Webuye East Sub-County which was adjacent to the study area. The pilot study location had similar characteristics to the study area. The reason for piloting was to help the researcher to establish the level of reliability or dependability of research tools. It also helped the researcher to habituate with the administration of the questionnaire which ultimately improved the instruments.

In addition, Christensen (2016) gives support that reliability is the level to which a measuring instrument assesses what it hypothetically needs to assess by using a re-test technique. The questionnaires were administered twice within an interval of two weeks. The instrument was

administered in a consistent fashion to enhance reliability through a pilot study before the actual data was collected. Cronbach's Coefficient Alpha was computed for each item to establish reliability of research instrument. Fraenkel and Wallen (2010) assert that, if internal reliability coefficient of a research instrument is 0.7 or over, then the assumption is that, it replicates the inner reliability of the tools. According to Neuman (2010), Cronbach's Coefficient Alpha is the best for testing reliability in Likert type of questions. The questionnaires deemed reliable after detected errors and omissions had been corrected.

3.7 Data Analysis Procedures

Kothari (2014) defines data analysis as procedures of organizing, manipulating and considering the meaning of the collected data. It is important to analyze data so that the researcher can obtain usable and useful information. Matthews and Ross (2010) points out that data is analyzed to characterize, deliberate about, assess and make clear the content and attributes of information collected to enable one to give answers to the research questions. In regard to this, after collecting data, editing was done. This aimed at identifying errors and omissions in the responses in tools in order to obtain clean information.

Cleaned data was coded and uploaded for analysis. To analyze cleaned data, the researcher used Statistical Package for Social Sciences (SPSS Version 23.0). Since the study adopted mixed methods approach, the research results yielded qualitative and quantitative data. Qualitative statistics was analyzed using Content Analysis basing on information from respondents. Quantitative data was analyzed using responses from Likert scale (questionnaire). This was helpful in finally finding the link between the two variables; independent and dependent variables which were analyzed using descriptive statistics. Data was presented using tables, frequencies and percentages as shown in table 2.

Table 2: Data Analysis Procedures

INDEPENDENT	DEPENDENT	ANALYTICAL TOOLS
School environmental factors and physical facilities on learners literacy	Literacy	Frequencies Percentages Mean
School environmental factors and instructional material on learners literacy	Literacy	Frequencies Percentages Mean
School environmental factors and teacher-learner interactions on learners' literacy	Literacy	Frequencies Percentages
School environmental factors and school cultures on learners' literacy	Literacy	Frequencies Percentages

Source: Adapted from the Study

3.8 Ethical Considerations

The researcher obtained clearance from Mount Kenya University Postgraduate Studies and Ethical Review Committee. This enabled the researcher to apply for permit from the National Commission for Science, Technology and Innovation (NACOSTI). This authorized the collection of data. To carry out research in Webuye West Sub-County, the researcher obtained permission from the Bungoma County Director of Education. The participants were informed of the need to be interviewed. In doing this, the researcher elaborated to participants the main aim of the study, whose consent was sought before interviewing them.

The participation of respondents was voluntary without coercion or enticed with a promised benefit. This is referred to as informed consent. The researcher assured the respondents of feedback in case they request for it. Assuring them feedback after the study encouraged the

respondents to cooperate. The researcher ensured that questionnaire sets and interviews were conducted in an environment that allows privacy and assurance of confidentiality. The researcher ensured that the identity of the respondents remained anonymous.



CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings of the study. Descriptive statistics was used to facilitate meaningful analysis. In the first part of the chapter, a report of the data according to the questionnaire responses coded was presented. This was done by use of tables and charts generated using spreadsheet package. The analysis was done in accordance to the requirements of the qualitative and quantitative research design. For qualitative data, analysis of the responses was based on themes. The study investigated the following objectives:

- i) To determine the influence of physical facilities on learners' literacy in public pre-primary II in Webuye West Sub-County, Kenya.
- ii) To establish the influence of instructional materials on learners' literacy in public pre-primary II in Webuye West Sub-County, Kenya
- iii) To investigate the influence of teacher-learner interaction on learners' literacy in public pre-primary II in Webuye West Sub-County, Kenya.
- iv) To assess the influence of school culture on learners' literacy in public pre-primary II in Webuye West Sub- County, Kenya.

4.2 Response Rate

The study considered a total of 523 questionnaires which were administered to the sampled population by the researcher. The duly filled and returned questionnaires were 402 out of 523

questionnaires. The response rate of (four hundred and two) constituted 77% of the returned questionnaires from the field which indicated that many respondents participated in the study.

Table 3: Questionnaire Response Rate

Respondents	Sampled Respondents	Those Who Participated	Achieved Return Rate (%)
Head Teachers	48	48	100
Deputy Head Teachers	48	48	100
Pre- Primary Teachers	86	86	100
Pre-Primary Learners	341	220	64
Total	523	402	77

Source: Field Data (2019)

From table 3, head teachers, deputy head teachers, pre-primary teachers and pre-primary learners registered a response rate of four hundred and two (77%). The researcher observed two hundred and twenty (64%) pre-primary II learners from Misikhu, Sitikho, Matulo and Bokoli wards using observation schedule. This confirmed the findings of Creswell (2009) that a response rate above 77 % is adequate and of suitable levels to allow for generalization of the outcomes to the target population.

4.1.2 Gender of H/teachers, D/H Teachers, Pre-primary II Teachers and Learners

The figures in table 4 show the gender of head teachers, deputy head teachers, pre-primary teachers and learners in public pre-primary II in Webuye West Sub-County, Kenya.

Table 4: Gender of Respondents

Gender	HT	(%)	DHT	(%)	Teacher	%	Learners	(%)
Male	33	69	30	63	6	13	119	54
Female	15	31	18	37	80	87	101	46
Total	48	100	48	100	86	100	220	100

Data Source: (Researcher 2019)

The findings on table 4 reveal that thirty-three (69%) of head teachers were male, while (Fifteen) 31% were female; this shows that most head teachers were male dominated but the female head teachers are the minority. On the same table 4 shows that thirty out of forty-eight deputy head teachers were male (63%), while female were only eighteen (37%). This was a clear indication that in terms of in guiding and counseling learners, most male deputy head teachers played key role. It is also likely that learners were free to open up to male deputy head teachers. On the same table, it revealed that eighty of teachers were female, constituting (87%) while six were male thus constituting (13%). These findings show that female teachers were the majority were friendlier to the learners at that stage of development.

In summing up, the table presented above revealed that one hundred and nineteen respondents (54%) were male while one hundred and one were female pre-primary learners (46%). The findings clearly revealed that all pre-primary school going children reported to school. The findings are supported by Mwangi (2009) citing a report from MOES (2000) which observed that gender imbalance in decision making positions had made women to stagnate. The appointment of women to key decision-making positions would be a great boost to the other women because they would act as role models. The findings on the rate of response in regard to gender were as well a

clear indication that it is imperative to continue empowering the girl-child in terms of access to education.

4.1.1 Age of Head teachers, Deputy Head Teacher, Pre-Primary Teachers and Learners

The figures in table 5 indicate the ages of head teachers, deputy head teachers, pre-primary teachers and learners in public pre-primary II in Webuye West Sub-County, Kenya.

Table 5: Age of Respondents

Age	HT	(%)	DHT	(%)	Teacher	%
15-20	0	0	0	0	0	0
20-25	0	0	0	0	0	0
25-30	8	17	16	33	56	65
30 and Above	40	83	32	67	30	35
Total	48	100	48	100	86	100

Data Source: (Researcher 2019)

Table 6 shows that majority of head teachers, forty in number were above 30 years with (83%) and those between 25-30 years were only eight which registered (17%). Thirty-two deputy head teachers aged 30 years and above years formed the majority ((67%)) while sixteen (33%) were between 25 and 30 years old. On the same table, fifty-six teachers (65%) formed the majority and were between 25 and 30. Thirty teachers (35%) were from the pre-primary II and were 30 years and above. This clearly reveals that majority of respondents were at their prime age and ready to deliver in their call of duty to the community.

Table 6: Highest Academic qualification of Respondents

Age	HT	(%)	DHT	(%)	Teacher	%
Certificate	0	0	15	31	20	23.2
Diploma	0	0	22	46	52	60.4
Bachelor	40	83	11	23	14	16.2
Postgraduate	8	17	0	0	0	0
Total	48	100	48	100	86	100

Data Source: (Researcher 2019)

The table 6 indicates that majority of head teachers, forty in number (83%), had Bachelor's Degree qualifications while eight had Postgraduate, constituting (17%). Twenty-two of the deputy head teachers, (46%) had Diploma while fifteen had Certificate (31%). Eleven (23%) had Bachelor's qualification. Majority of them, fifty-two in number constituting (60.4%) of the teachers had Diploma whereas twenty (23.2%) had certificate qualifications. Lastly, fourteen (16.2%) of the teachers had Bachelor degree qualification. This reveals that the respondents met the minimum requisite qualification to be head teachers, deputy head teachers and pre-primary teachers. This means that their level of education could make them understand the relevance of school environmental factors on literacy in pre-primary II. The findings revealed that respondents were educated and knowledgeable to manage the activities of the school.

Table 7: Experience of the respondents

Age	HT	(%)	DHT	(%)	Teacher	%
5 Years & Below	4	8	4	8	14	16
6-10 Years	15	31	20	42	26	30
11-15Years	20	42	7	15	30	35
Above 15 Years	9	19	17	35	16	19
Total	48	100	48	100	86	100

Data Source: (Researcher 2019)

Table 7 shows that in terms of teaching experience, twenty of the head teachers had worked between 11 and 15 years (42%). Fifteen had work experience of between 6-10 years (31%), nine had work experience of above 15 years (19%) and four head teachers had only worked for 5 years and below (8%). The head teachers require experience to obtain information from learners through cordial and friendly approaches. This implies that these instructors were familiar with primary teacher education as they had been in the field for many years. MoE (2009) acknowledged that lack of continuous professional development of teachers affects teaching-learning outcomes. The findings also revealed that majority twenty deputy head teachers (42%) which constituted the majority had worked between 6 and 10 years. Four (8%) had work experience of below five years while those who had served for between 11 and 15 years were seven (15%). Finally, those who had worked for fifteen years and above were seventeen (35%). In summing up on this, the findings revealed that most of the deputy head teachers in Webuye west Sub-county had enough experience in the administration of curriculum delivery.

The findings of the study showed that most of the pre-primary II teachers which were thirty (35%), had professional experience of between 11 and 15 years. Those who had served for between 6 and 10 years were twenty-six (30%), those who had served for more than 15 years were sixteen (19%)

while those who had worked for 5 years and below were fourteen (16%). These findings revealed that pre-primary teachers had enough experience in curriculum delivery. This implies that they had the capacity to handle pre-primary learners comfortably. The pre-primary II teachers' professional experience was also found to be in line with the assertions of Mazonde (2015). He argued that teaching methods and classroom environment has direct impact on the learners during the learning process.

Discussions of the findings in regard to the objectives of the study were deemed necessary. This will enable clarity and consistency in presenting the findings of the study in a logical manner. For this reason, the subsequent sections will present and discuss the findings as per the objectives that the current study sought to achieve. The findings of the first objective are presented in table 8 and highlights on physical facilities on learners' literacy in public pre-primary II. The responses were generated in regard to different question items that were presented to the respondents within the objective that was being investigated.

Objective One: To Determine the Influence of Physical Facilities on Learners' Literacy in Public Pre-Primary II in Webuye West Sub-County, Kenya.

Table 8: Physical facilities on learners' literacy in public pre-primary II

Description	D/SD		N		A/SA	
	No	%	No	%	No	%
There are enough classrooms & spacious with conducive learning environment	84	63	23	17	27	20
Toilets/latrines are enough with facilities to train learners in toileting	101	75	5	4	28	21
There are enough tables and Chairs of their size and age	34	25	8	6	92	69
Playing ground is big with all the required facilities for outdoor activities	101	75	11	8	22	17

There is computer room well-equipped for ICT integration	87	65	5	4	42	31
There is a store to store food for the learners	92	69	8	6	34	25
There is a kitchen where meals for learners are prepared	4	3	0	0	130	97

Key: RESP-Respondents; DHT-Deputy Head Teachers; PP II-Pre-Primary Teachers

Source: Field Data (2019)

Table 8 reveals that majority of the respondents eighty-four (63%) strongly disagreed with the statement that there were enough spacious classrooms with conducive learning environment. One hundred and one (75%) strongly disagreed that toilets/latrines were enough to train learners in toileting. The statement that sought to investigate whether there were enough tables and chairs of the learner's size and age met response of ninety-two respondents (69%) who strongly disagreed. One hundred and one (75%) respondents disagreed that playing ground was big with all the required facilities for outdoor activities. The statement that, computer room was well-equipped for ICT integration met strong disagreement from eighty-seven (65%) respondents. Ninety-two (69%) respondents strongly disagreed that there is a store for food storage for learner. However, the study established that there was a kitchen from where meals for learners were prepared. The response to this effect was drawn from one hundred and thirty respondents and constituted (97%) strongly agreeing with the statement.

The findings concluded that physical facilities affect literacy achievement in pre-primary II due to the lack of appropriate and adequate services to the learners. These findings are in line with the assertions of Heyneman and Loxley (2013), Lumuli (2018). They hold that there was need to provide adequate facilities as well as improving conditions of physical facilities in order to enhance learning. This would in turn boost academic performance. Considering that classrooms were

places where a child spends much of his/her time in the day (Ayoo, 2002; Eshiwani, 2013), there is need that these classrooms are kept tidy. Lockheed, Vail and Fuller (2016) suggest that when the working condition in school is improved, teachers and students would perform better and this could greatly motivate teachers.

The findings are in line with the assertions obtained from the head teachers. These were as follows: On the current status of physical facilities in PPII the response concurred that most PPII learners did not have enough classrooms. Also, the learners were congested in small classrooms with poor ventilation and the respondents deeply expressed their concern that the situation is pathetic (HT1).

The exact responses were expressed thus:

When asked further on the role of the county government said that pre-primary classrooms and toilets were constructed in few schools and because of high enrolment the classes were not enough. They further said that in one school, one classroom is shared with both PPI and PPII with an enrolment of over two hundred learners. When prompted further, the researcher established that most PP learners in Webuye West Sub-county learn in churches where they combine PPI and PPII facing different directions (HT1, Male, March 2019).

Just like the quantitative findings, these views are in line with NACECE (2015, 2010). The sources suggested that tables and desks should be designed to fit the development adjustments of the growing child. This allowed for easy movement, group-work and play. The furniture should basically be appropriate to the age of the learner. Kibaara and Kaburu (2013) hold that socio-economic, environmental and psychological various factors determine learning outcomes among primary school pupils. Mbiti (2017) asserts that there is need for school environment to look tidy by maintaining school assets which normally suffer enormous tear and wear, good and well-maintained playing ground. This makes the school environment look beautiful, safe and habitable for teaching-learning process.

The Head Teacher HT2 observed that,

There were no modern toilets and in fact the pre-primary learners shared with the primary section. This situation made it difficult for the teachers to train learners on toileting. When asked on sitting facilities, 98% of the head teachers admitted that some pre-primary learners sat on the dust floor while others sat on desks from primary section. Again there were no tables and chairs befitting the size of the learners. On inquiry about the availability and condition of the playground, it was established that there was only one common field. The available field also lacked modern facilities for outdoor activities (HT2, Female, March 2019).

Still on the above, the head teacher was asked about influence of physical facilities on literacy. In response to this, majority of them admitted that a school with adequate physical facilities motivates learners and reduces absenteeism. It also improves concentration as learners developed positive attitude towards learning. On measures taken to support literacy in PPII, most head teachers confessed that at times they organized for fund drive to put up toilets and classrooms for pre-primary.

The interviewees agreed on the views of the parents being active in improving the physical facilities of the school. On parent's role in improving physical facilities, the responses were that parents put up classrooms and some were semi-permanent structures. The parents also paid for some pre-primary teachers that were not employed by the county government. Parents through the Board of Management pay for snacks and other basic requirement for learning. A few head teachers complained about reluctance of some parents who feel education is free and therefore there should be no payment in support of the learners.

The findings from observation schedule revealed that literacy skills acquisition on reading, phonemic awareness, sound recognition and reading words like 'cut', 'cat' and 'cow'; writing letters of alphabet, number recognition like 1, 2,3,4, etc. and arithmetic from all the wards showed

that majority of pre-primary learners had not acquired the necessary skills. The findings concluded that physical facilities influenced literacy acquisition among pre-primary learners in schools.

From the mixed findings, it is evident that physical facilities were effective and influenced on literacy acquisition of learners. However, the inadequacy and scarcity of physical facilities witnessed in all the pre-primary schools evidently affected acquisition of literacy and skills. Literacy acquisition skills on reading, writing and arithmetic differed among the boys and girls from different wards within which the study was carried out. This affirms the fact that pre-primary teachers used different teaching and instructional resources to deliver their lessons in class. This was basically in order to enhance their literacy skills in public pre-primary II in Webuye West Sub-County. This marks the end of presentation and discussions of objective one. In the next section, presentation and discussion of the second objective is provided. Summary presentation is done in table 9.

Objective Two: To Establish the Influence of Instructional Materials on Learners’ Literacy in Public Pre-Primary II in Webuye West Sub-County, Kenya.

Table 9: Instructional materials on learners’ literacy in public pre-primary II

Description	S/D		N		A/SA	
	NO	%	NO	%	NO	%
There are enough wall maps, and charts	87	65	5	4	42	31
Plasticine for modeling is provided to learners	130	97	0	0	4	3
Indoor and outdoor play items are available	113	84	13	10	8	6
There are enough text and exercise books	110	82	11	8	13	10

The school provides crayons pens and pencils	113	84	0	0	21	16
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Key: RESP-Respondents; DHT-Deputy Head Teachers; PP II-Pre-Primary Teachers

Source: Field Data (2019)

Table 10 reveals that eighty-nine (66%) which entailed the majority of the respondents disagreed with the statements. This led to the conclusion that instructional materials provided were not adequate on promoting learner's literacy in public pre-primary schools. According to the findings there were not enough wall maps and charts for the learners with eighty-seven (65%) responding to this effect. A higher percentage (97%) representing one hundred and thirty respondents admitted that plasticine for modeling was not provided to the learner. This impeded the great role of instructional materials in the learning process. Also, indoor and outdoor items were not available. This was drawn from one hundred and thirteen respondents, representing 84%. Text and exercise books were also found inadequate drawn from one hundred and ten (82%) respondents. Lastly, the study found out that most school did not provide crayons pen and pencils. This was drawn from one hundred and thirteen (84%) responses. The findings concur with authors like Twoliet.al, (2017) and Hallack (2015) who established that when resources such as teaching-learning aids, audio-visual aids were used, the learning process is enhanced. Agosiobo (2017) adds that teaching-learning resources offer stimulus variation to the learner and this enables him/her to concentrate throughout the whole process in learning.

The findings of the study were consistent with quantitative results as follows;

During the interviews with head teacher (HT3) on sourcing of instructional materials, the following report was drawn:

The head teacher (HT3) said that charts and plasticine were improvised by teachers. Some instructional materials like books were provided for by parents and few from the county

government. When prompted further, some head teachers accepted that because the government did not fully support pre-schools, they at times used free primary education funds to provide them with some necessary instructional materials especially books (HT3, Male, March, 2019).

Another head teacher (HT4) was interviewed and had this to assert;

On the influence of instructional materials on literacy in PPII, majority of them said that if learners were exposed to learning materials, they were able to acquire literacy skills faster. They further said that if learners had enough learning materials, they were as well able to practice the three skills of Reading, Writing and Arithmetic faster. Majority of the head teachers said that use of instructional materials made the teachers to enjoy their work. This in turn reduced absenteeism, aroused curiosity, created interest, and motivated learners (HT4, Female, March, 2019).

The findings were consistent with the assertions of Eshiwani (2013) and Bryant (2013) who emphasized on the importance of instructional resources in ECDE centres. They both assert that availability of academic resources such as books, charts, models and play materials influence academic performance of the pre-school children. These findings indicate that there is need to use instructional materials in pre-schools more than in the upper classes. This would in the long run enhance the achievement of literacy competence among learners.

On the same note, another head teacher (HT5) was asked on the course of action they put in place to make sure that PPII learners acquired literacy skills before joining primary. The following were established:

It was established that they the head teachers monitored closely on the teaching-learning resources in pre-primary to ensure that the syllabus was well covered. From the interview, the researcher found out that most of the head teachers organized for teacher-parent meetings. It was also established that the academic council had been empowered to

supervise and monitor the assessment of learners and give feedback to the head teacher (HT5, Male, March 2019).

The findings concur with the assertions of Fuller (2016) established that availability of quality instructional materials encourages child-centred learning. This enabled the learner to embrace the discovery method of acquiring knowledge and skills by oneself. In relation to the availability of instructional materials, Mwoma (2017) in a study explains the importance to this effect. In this regard, the source points out that having print materials for reading in pre-primary enables learners to acquire reading skill faster. The respondents echoed this factor by admitting that such learning materials including media exposed the children to the extent that they could learn how to read faster.

The findings from observation schedule revealed that literacy skills acquisition on reading, phonemics awareness was wanting. Again, sound recognition and reading words like 'cut', 'cat' and 'cow'; writing letters of alphabet, number recognition like 1, 2, 3, 4 was still problematic. Further, the findings from all the wards established that understanding Arithmetic concepts and skills were still a problem to the majority of pre-primary learners. The findings concluded that physical facilities influenced literacy acquisition among pre-primary learners in schools.

From the mixed findings, it was evident that instructional materials were effective and their use influenced on literacy acquisition of learners. However, the inadequacy and scarcity of instructional materials provided in all the pre-primary schools was a clear indication that acquisition of literacy and skills was not being adequately achieved. The literacy acquisition skills on reading, writing and arithmetic differed among boys and girls from different wards under study. This affirms the fact that pre-primary teachers used different teaching and instructional resources

to deliver their lessons in class in order to enhance the learner’s literacy skills in public pre-primary II in Webuye West Sub-County, Kenya.

Objective Three: To Investigate the Influence of Teacher-Learner Interaction on Learners’ Literacy in Public Pre-Primary II in Webuye West Sub-County, Kenya.

Table 10: Influence of teacher-learner interaction on literacy in public pre-primary II

Description	D/SD		N		A/ SA	
	NO	%	N	%	N	%
Children who receive more negative attention from teachers have problems with emotional development and concentration	33	25	0	0	101	75
Teacher-learner interaction are predictors of learners behavior and academic outcomes	36	27	6	4	92	69
Classroom organization help learners to develop skills achieve higher in academics and develop interest in learning activities	32	24	10	7	92	69
Teachers use discussion and activities to promote learners higher thinking skills and cognition to focus on learning	50	37	0	0	84	63

Key: RESP-Respondents; DHT-Deputy Head Teachers; PP II-Pre-Primary Teachers

Source: Field Data (2019)

The findings in table 10 reveal that teacher-learner interaction strongly influenced on literacy in the learning activities in school. Children who receive more negative attention from teachers have problems with emotional development and concentration. This attracted strong agreement from one hundred and one (75%) respondents. Teacher-learner interactions were found to be predictors of learners’ behavior and academic outcomes drawn from ninety-two (69%) respondents. Classroom organization was found helpful to the learners in developing skills to achieve higher

academic performance. This was also found to be vital in developing interest in learning activities. This was drawn from ninety-two (69%) respondents. Lastly, all the respondents strongly agreed that teachers used discussion method and activities to promote learners higher thinking skills and cognition to focus on learning. This was drawn from eighty-four (63%) respondents. The findings also revealed that teacher-learner interactions had positive influence to literacy of the learner. Teachers' regular interactions with learners were important in ensuring that the learners were prepared for school. The findings concur with that of Ilias and Nor's (2012). Their findings established that as the students interacted with their teachers, there was improvement in the students' academic behavior. This implies that there was improvement in learning outcomes due to this kind of interaction. Further, the study established that students experienced marked motivational level when they interacted with their teachers. Moreover, the study found out that the students attained co-operation with the learning goals whenever they interacted with their teachers.

During the interviews with the head teachers (HT), the following responses were obtained. In responding to extent to which teacher-learner interactions influence literacy, the head teacher (HT6) reported that:

Learners' were motivated and their self-esteem uplifted thus improving learning outcome. They said that this brought parents on board to participate in assisting the learners who went home with homework. On the strategies used to ensure that the school was learner-friendly, the head teacher ensured that the school was well-fenced with security officer always at the gate. As well, in some schools, parents provided the learners with snacks. In some schools, the head teachers ensured that teachers arrived early enough to welcome the learners and provided them with the improvised play materials (HT6, Female, March 2019).

The findings are consistent with the assertions of Claessens and Tartwijk (2015) in their work, “Positive Teacher-Student Relationships go Beyond the Classroom, Problematic ones stay inside.”

The findings established that there were marked differences in teachers’ perception of teacher-student interactions in positive and problematic relationships. These observations in interactions mainly rated high on friendly basis, whereas in problematic relationships, they mostly mentioned interactions rating low in hostile relations in which teachers proved to be unfriendly to the students.

The Head Teachers were further asked on how they ensure that the programmes were followed. In response to this, they affirmed that their deputies had been assigned to monitor and give report. In line with this, another head teacher (HT7) explained that;

In response to how they monitor classroom organization in terms of teaching/learning, most head teachers reported that they carried out classroom observation. As well, they used academic council in the school to monitor classroom activities and assessment. After which they gave feedback through the subject panels. They also ensured that teachers prepared professional records and approved before use. When asked on what they used to monitor the assessment, majority of them reported on the use of monitoring tools and got daily reports from the teacher in-charge. They all agreed that daily routine and class timetable were followed (HT7, Female, March 2019).

The findings were in agreement with the study on the “Relationship between Quality of Teacher-Pupil Interaction and Primary School Readiness in Pre-school Pupils in Nairobi County, Kenya.”

This study was conducted by Digolo, Mwangi and Mungai (2017). The study revealed that there was a positive-relationship in the teacher-pupil interaction and primary school readiness. This was a good and desirable style of interaction. Further, the findings indicated that when the teachers supported and engaged the children properly in their activities more positively, more instances of

laughing and smile were realized in classrooms. This means that such interactions created an atmosphere where learners were free with their teachers.

The findings from the observation schedule revealed strange findings on literacy skills acquisition on reading, phonemics awareness and sound recognition. In regard to reading words like 'cut', 'cat' and 'cow'; writing letters of alphabet, number recognition like 1, 2,3,4...and arithmetic, majority of pre-primary learners had not acquired the necessary skills. The findings conclude that although teacher-learner interaction was positive, it had very little impact on literacy acquisition in pre-primary learners in schools. This was due to high enrolment in school.

From the mixed findings, it was evident that teacher-learner interactions were effective and influenced on literacy acquisition of learners. However, the low teacher-learner interaction experienced in all the pre-primary schools was evident that literacy and acquisition of skills was not well achieved. Literacy acquisition skills on reading, writing and arithmetic differed among boys and girls from different wards under study. This affirms the fact that teacher-learner interaction was needed to enhance their literacy skills in public pre-primary II in the study area.

The above discourses mark the end of the presentation and discussion of the third objective. It investigated the influence of teacher-learner interaction on learners' literacy in public pre-primary II in Webuye West Sub-County.

The next sub-section presented and discussed the fourth objective of the study. This was to assess the influence of school culture on learners' literacy in public pre-primary II in Webuye West Sub-County.

Objective Four: To Assess the Influence of School Culture on Learners' Literacy in Public Pre-Primary II in Webuye West Sub- County, Kenya.

Table 11: Influence of school culture on learners' literacy in public pre-primary II

Description	D/SD		N		A/SA	
	NO	%	NO	%	NO	%
Fence of the school is secure to the extent that no pre-primary II learner can sneak out of school	84	63	0	0	50	37
Learners in pre-primary II are afraid of their teachers and feel uneasy at seeing them	100	75	0	0	34	25
School compound is always safe for pre-primary II learners	92	69	0	0	42	31
Construction of classrooms has been left for the concerned parents	100	75	0	0	34	25
Learners in pre-primary II are taught in mother tongue	87	65	0	0	47	35
Parents contribute money for salary of some pre-school teachers	82	61	0	0	52	39
Pre-school parents are active members of Board of Management (BOM)	101	75	0	0	33	25
Pre-primary II learners are always safe in their classroom	74	55	0	0	60	45
Language policy from pre-school is English and Kiswahili	82	61	0	0	52	39

Key: RESP-Respondents; DHT-Deputy Head Teachers; PP II-Pre-Primary Teachers

Source: Field Data (2019)

The findings in table 11 revealed that school culture had strong influence on the learners' literacy in school. The findings further established that majority of the respondents disagreed that fence of the school was secure. The fence was so secure to the extent that no pre-primary II learners could sneak out of school. This was drawn from eighty-four (63%). In addition, the findings established that learners in pre-primary II were afraid of their teachers and feel uneasy when they see them. This was drawn from one hundred one (75%) respondents. The school compound was also found to be always safe for pre-primary II learners with ninety-two (69%) respondents. Construction of classrooms had been left for the concerned parents with one hundred and one (75%) responses to this effect. Learners in pre-primary II were taught in the mother tongue with eighty-seven (65%) respondents. Eighty-two (61%) responses were recorded that parents contributed money for salary of some pre-school teachers. As well, pre-school parents were found to be active members of the Board of Management (BOM) with seventy-four (55%) respondents. Pre-primary II learners were always safe in their classroom with eighty-two (61%) participants responding to this effect. Lastly, language policy in the school was found to be in English and Kiswahili as was being used from pre-school. This was registered from eighty-two (61%) respondents. The findings concluded that school culture significantly influenced literacy of the learners though the services provided were not appropriate.

The findings concur with that of Michael Cole, Pentti Hakkarainen and Milda Bredikyte (2010). They found out that, from birth to 5 years, young children underwent a lot of changes biologically, socially, emotionally in terms of behavior. These changes were greatly influenced by culture and affected their learning capabilities. The source further hold that culture consists of beliefs, values, knowledge, materials and attitudes that affect the child's potentiality towards knowledge acquisition. Again, the finding further concurs with that of Vygotsky (2017). He asserts that article play, representational play, and pretend play were forms of play that created diverse educational

surroundings for learning. Though, there were broad artistic differences in the level to which a mature person allows diverse forms of play in early days. In communities where play is appreciated, artistic practice at this age, kids carry out community testing with other people in play and daily life.

The findings of the interview with the head teacher (HT) collaborated as follows:

When asked about influence of school culture on literacy of PP II learners' head teacher (HT8) asserted that:

Majority of the head teachers (HT) reported that teachers came to school early to welcome learners in starting routine activities as they arrived at school. Some head teachers said the school took up learner's issues for concern. As well, the class teachers played the role of parents at school. Most of them said they ensured that the school stuck on language policy. This aimed at improving speech, fluency and punctuality for both learners and teachers for learning readiness (HT8, Female March 2019).

In line with health safety of children, the findings of the study were consistent with Mazonde (2015) cited in Graham-Brown (2011). This finding established that teaching methods and classroom environment had direct impact on learners. However, family background had a role to play in providing adequate health and nutritional requirements for the learning to be beneficial to the learner.

Still on the same note, the head teachers (HT9) were interviewed concerning lesson attendance and most of them said:

As a school, they ensured that teachers attended to the lessons and most head teachers had personal attendance register for teachers which were marked daily. PPII teachers kept records of work covered. Teachers in all schools had a duty to protect learners in all ways and reported sensitive cases to their head teachers (HT9, Male, March 2019).

In response to a safe and orderly learning environment in their schools, majority of them said that they ensured that teachers carried out themselves professionally as per the teachers' code of conduct. They also ensured that learners had been grouped and teachers monitored issues of indiscipline and truancy in their respective classes. The head teachers reported that they personally observed classroom environment activities and interacted with the learners. The findings are supported with the assertions of Barnhardt (2014). He argued that school and community should work hand in hand within the framework of the school. As well, ways should be strategized to adapt formal learning to that environment. The community should be seen as classrooms. When this was considered, teaching-learning becomes a real life experience on situations in the communities where learners come from.

During the interview with head teacher (HT10) an explanation was presented that:

They ensured that the few classrooms that were available were clean and safe for learning. There was no corporal punishment in schools as it was reported by the head teachers. It was also established that most schools had fenced compound with one gate manned by a security officer. This ensured that no PPII learner left the compound without permission. It was further established that most of the windows had no grills and this ensured safety for learners in case of emergency (HT10, Male, March 2019).

Majority of the head teachers reported that due to shortage of facilities, the PP II learners shared the field with the primary section. In doing so, they reinforced school rules which helped to reduce bullying of pre-primary learners. When asked about the safety of the toilets, they said that they shared with primary section but cleaning is done on daily basis. Generally, majority of head teacher accepted that there was a big challenge in pre-primary section but they ensured that it was safe and clean. The findings were consistent with that of Kioko (2015) which established that the concepts acquired by pupils in mother tongue should not be repeated in official language at school. A pupil

who has acquired literacy skills in mother tongue should be able to apply the same knowledge in a new language.

Another head teacher (HT11) was asked on how parents were involved in PP II literacy acquisition:

They said that they organized for teacher/parent meetings with the BOM parent representatives to discuss learners' progress and sensitized them on their roles and responsibilities. When prompted further on the role of parents in literacy, most of them said that learners were given homework daily and asked to ensure that parents assisted them at home. Some of them said that this program of giving learners home work had borne fruits. They also said that parents were sensitized on the need of providing basic needs for their children. Majority said they developed good relationship with the community by involving parents in development project at school and having them in BOM at school (HT11, Female, March 2019).

When the researcher inquired on how they evaluate the PPII learners in literacy, all head teachers reported that they use Kenya School Readiness Assessment Tool (KSRAT). On probing the Head Teacher (HT12) had this to say;

Majority of the school evaluate learners through monthly assessment and keep records. When the researcher asked on how the tool is used, they said assessment is done by their teachers through observation in different skills and the records were kept. When the researcher requested to look at the assessment tool, most of the head teachers were able to show (HT12, Male, March 2019)

When asked further on who monitored the assessment, it was established that most of the head teachers delegated this task to their deputies and the academic council who in turn gave them the feedback. The findings concur with that of Mazonde (2015) on language culture that is entrenched in African schools and that has since influenced learning outcomes. The source further indicates

that African education in south of Sahara use English or French as medium of instruction. The continued use of the two languages also led to high achievement among the minority groups in the country. The findings from observation schedule revealed that majority of pre-primary learners had not acquired the necessary skills such as reading, writing and number recognition. From the findings, the study therefore concluded that school culture influenced literacy acquisition to pre-primary learners in schools.

From the mixed findings, it is evident that school culture effectively influenced literacy acquisition of learners. However, the inadequacy and scarcity of school culture witnessed in all the pre-primary schools negatively influenced literacy and acquisition of skills. This was drawn from the observation schedule. The literacy acquisition skills on reading, writing and arithmetic differed among boys and girls from different wards. This affirmed the fact that pre-primary teachers used different teaching and instructional resources to deliver their lessons in class. This approach was found instrumental in enhancing literacy skills of learners in public pre-primary II in Webuye West Sub-County, Kenya.

To this end, the chapter has discussed data analysis, presentation and interpretation of the findings of the study. These discussions were consistently done according to the objectives of the study and formed the basis upon which summary, conclusions and recommendations were made. This is discussed in the subsequent chapter.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This is the last chapter of this thesis. It presents summary of the main research findings and conclusions. It also gives recommendations and suggestions for further research based on the findings of the study. For the purposes of clarity and consistency, this was done under each research objective.

5.2 Summary of Research Findings

This section provides detailed summary of the research findings based on the objectives of the study. These were: to determine the influence of physical facilities on learners' literacy in public pre-primary II in Webuye West Sub-County, Kenya; to establish the influence of instructional materials on learners' literacy in public pre-primary II in Webuye West Sub-County, Kenya; to investigate the influence of teacher-learner interaction on learners' literacy in public pre-primary II in Webuye West Sub-County, Kenya and to assess the influence of school culture on learners' literacy in public pre-primary II in Webuye West Sub- County, Kenya. The next section is a summary of the first objective.

5.2.1 To Determine the Influence of Physical Facilities on Learners' Literacy in Public Pre-Primary II

From the study findings, physical facilities had influence on learners' literacy in public pre-primary II schools. However, many public pre-primary schools were found not having sufficient physical resources. Classrooms were not well-equipped since there were not enough chairs, tables and desks suitable with the age and size of the learners. There were also not spacious playing grounds and food storage facilities were not adequate. Also, computer room was not well-equipped for ICT integration. There were no spacious and conducive classrooms with the required standards for use by pre-primary learners. This was attributed to inadequate facilitation by different wards

in the county. This situation had effects on pre-primary school learners' acquisition of literacy skills. This affirms the fact that physical facilities were in poor condition since others were non-functional. The subsequent section is a summary of the second objective.

5.2.2 To Establish the Influence of Instructional Materials on Learners' Literacy in Public Pre-Primary II

The study found out that instructional materials influenced on learners' literacy in public pre-primary II schools. However, many public pre-primary schools did not have sufficient instructional materials. There were inadequate wall maps, Plasticine for modelling, indoor and outdoor play items. There were enough text and exercise books, crayons, pens and pencils for use by pre-primary learners. This was attributed to inadequate facilitation by the different wards in the county. This situation had effects on pre-primary school learners' acquisition of literacy skills. This affirms the fact that instructional materials were not enough for all the learners. Here follows a summary of the third objective.

5.2.3 To Investigate the Influence of Teacher-Learner Interaction on Learners' Literacy in Public Pre-Primary II

Concerning this, the study revealed that teacher-learner interaction influenced learners' literacy in public pre-primary II schools. However, this affirms to the fact that children who receive more negative attention from teachers had problems with emotional development. Keeping this in mind, interaction between teacher and learners were predictors of learners' behavior and academic outcome. The classroom organization also helped learners to develop skills and achieve higher academic performance. The study as well found out that discussion promoted learners' thinking capabilities in public pre-primary schools. The following presents a summary of the fourth which was also the last objective of the study.

5.2.4 To Assess the Influence of School Culture on Learners' Literacy in Public Pre-Primary II

School culture was found instrumental in influencing on learners' literacy in public pre-primary II schools. This was confirmed as majority of the respondents attested to the fact that PPII learners were taught in the first language (mother tongue). This was inconsistent with the language policy which requires that English and Kiswahili should be used in pre-primary. Learners in PPII were also found to be afraid of their teachers, Majority of head teachers reported that teachers' came to school early to welcome the learners and direct them to do their routine activities. This had effects on pre-primary II learners' acquisition of literacy skills. This marks the end of summary of the study based on the findings and presented as per the set objectives of the study. The next section presents conclusions based on the findings of the study.

5.3 Conclusions

Drawing from the study findings, it was evident that school environmental factors were critical in influencing on learners' literacy in public pre-primary II in Webuye West sub-County, Kenya. These include; physical facilities, instructional materials, teacher-learner interaction and school culture which influence learners' literacy. The study on objective one concludes that physical facilities were inadequate and effective in influencing learners' literacy in public pre-primary II schools in Webuye West sub-County. The study concludes that physical facilities in the pre-primary schools would contribute to literacy of the learners. This would only be possible if the physical facilities were adequate, well-maintained and were relevant to learning in the pre-primary schools.

The study on objective two concludes that instructional materials were inadequate to influence learners' literacy in public pre-primary school in Kenya. The study further concludes that instructional materials ranging from wall maps and charts, Plasticine for modelling, indoor and outdoor play items, text and exercise books, crayons, pens and pencils offered were inadequate to influence learners' literacy in public pre-primary schools. The study also concludes that learners were not adequately provided with appropriate instructional materials. This impeded the bid to equip them with reading, writing, and arithmetic skills. The findings collaborated with that

which was drawn from the interview guide and observation schedule. Responses from these data collection instruments enabled the researcher to conclude that instructional materials were not adequate to effectively influence the learners' literacy in public pre-primary schools in Webuye West Sub-County.

The study on objective three concludes that teacher-learner interaction was inadequate in influencing learners' literacy in public pre-primary schools in Webuye West sub-County. The study concludes that teacher-learner interaction was adequate but not effective enough to influencing learners' literacy skills. This was much lacking in the area of decision-making, achievement of high academics and discussions among the learners in school. The study further concludes that teacher-learner interaction was not involving. This was found to be so because there were many learners in one class and this eased close interactions. Though the pre-primary teachers were assigned to each class, the number of learners was not appropriate to the teachers to influence learners' literacy in public pre-primary schools in Webuye West sub-County.

The study on objective four concludes that school culture was inadequate in influencing on learners' literacy skills in public pre-primary schools in Webuye West Sub-County. The study further concludes that most of the school culture was moderate but not to the level of influencing learners' literacy skills in pre-primary schools. This was found to be so because many of the respondents attested that learners in PPII were taught in the first language (mother tongue). Again, learners in PPII were afraid of their teachers since language policy from pre-primary was English and Kiswahili. Majority of the head teachers reported that teachers came to school early to welcome the learners and as they arrived to their routine activities. This had positive effect on pre-primary school learners' acquisition of literacy skills.

Therefore, the study finally concludes that physical facilities, scarcity of instructional materials, teacher-learner interaction and school culture were important and relevant. However, they were inadequate to influence on learners' literacy skills in public pre-primary schools in Webuye West Sub-County. There was need to improve on institutional materials as this would greatly boost learners' literacy skills in public pre-primary schools in Webuye West Sub-County. Based on the

conclusions presented, the researcher felt that there was need to suggest key areas that are recommended for practice as done in the next section.

5.4 Recommendations for Practice

Based on the Findings of the study, the following recommendations were deemed necessary:

The county government should provide all learning equipment to all public pre-primary schools in the county. This could be done by allocating adequate funding to the ministry of education in the county.

On the influence of physical facilities on learners' literacy, the study recommends that the county government should construct four or more modern classrooms in all public pre-primary schools to reduce congestion. Enough seating facilities to the age level of all learners should be provided in the county for easy training of writing skills. Playing grounds should also be well-equipped with modern facilities for indoor and outdoor activities to keep learners' alert. The county education directorate quality assurance and standards should be more active on the supervision of pre-school activities in the county.

On the influence of instructional materials on learners' literacy, the study recommends that pre-primary schools should have adequate materials like wall maps, charts, Plasticine for modelling, indoor and outdoor play items. There should also be enough text and exercise books, crayons, pens and pencils in public pre-primary schools in Webuye West Sub-County. The study further recommends that the ministry of education in the county should effectively disburse the allocated funds that were budgeted on buying scholastic materials (text books, chalk and reference books) for learning. As well, finances for repairs and maintenance of classrooms (space, board, erasers, chairs, teacher's table, audio-visual aids administrative, academic, school canteen, Laboratories,

Resource halls) that were allocated should be disbursed in time. There was need for maintenance of school transport (Buses, truck, van), and buying school stationeries per term.

On the influence of teacher-learner interactions on learners' literacy, the study recommends that the county government should employ more teachers to meet the required teacher-learner ratio. This would provide conducive environment and maximize the level of interaction. The county government should also ensure that there is proper remuneration for pre-primary teachers. This should be done in considering the enormous amount of time the teacher spends with the learners.

On the influence of school culture on learners' literacy, the study recommends that pre-primary schools should follow available policies on providing pre-primary teaching and learning. The county government should also provide enough service to allow school culture to be followed to the letter by all the learners and teachers. There should be teacher-parent involvement in order to provide appropriate room for quality teaching-learning. The county government should also provide safety standard manual for schools to ensure that all pre-schools were safe for the learners. Again, based on the findings of the study, the researcher found it imperative to recommend two key areas for further research, which is presented in the next section which of course is the last in this thesis.

5.5 Recommendations for Further Research

A study could be conducted to assess the influence of school culture on learners' literacy skills in public pre-primary schools in Kenya.

A study could be conducted to evaluate the extent to which teacher-learner interaction influences on learners' skills in pre-primary schools in Kenya.

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APPENDICES

APPENDIX I: QUESTIONNAIRE FOR DEPUTY HEAD TEACHERS AND PRE-PRIMARY II TEACHERS

Preamble

This questionnaire is used to collect data on the influence school environmental factors on literacy in level II in your centre. It's my humble request that you answer the questions as honestly as likely. All the information given will be accorded great confidentiality. Please do not write down your name anywhere in this questionnaire.

SECTION A: Demographic Information

1. Gender: Male [] Female []

2. Name of the school _____

3. Please indicate your teaching experience:

Five years and below [] 6-10 years [] 11-15 years [] above 15 years []

4. What is your professional qualification?

- Certificate []
- Diploma []
- Bachelors []
- Masters []
- Others, specify _____ []

SECTION B: Influence of Physical Facilities on Literacy

1. The following physical facilities affect literacy achievement in Pre-primary II. Please tick [√] in the grid your choice; SA- Strongly Agree A-Agree UD-Uncecided DA-Disagree SD-Strongly Disagree.

In my pre-primary II

Table 12: Influence of Physical Facilities on Literacy

Statement	Level of Agreement				
	SA	A	UD	DA	SD
There are enough classrooms for learning					
Toilets /latrines are enough to train learners in toileting					
There are enough and tables and Chairs of their size and age					
Playing ground is big to facilitate outdoor activities					
There is computer room for ICT integration					
There is a store to store food for learners					
There is a kitchen where meals for learners are prepared					

2. Briefly explain the availability of the above mentioned physical facilities in your school.

3. In your own opinion comment on how the above physical facilities have influenced the acquisition of literacy in pre-primary II in your school.

SECTION C: Influence of Instructional materials on Literacy

1. The following instructional materials promote literacy in ECD centres. Tick [√] in the grid your choice; SA-Strongly Agree A-Agree UD- Undecided DA-Disagree Strongly Disagree.

In my pre-primary II: -

Table 13: Influence of Instructional materials on Literacy

Statement	Level of Agreement				
	SA	A	UD	DA	SD
There are enough wall maps and charts					
Plastic in for modeling is provided to learners					
Indoor and outdoor play items are available					
There are enough text and exercise books for all learners					
The school provides crayons, pens and pencils					

2. Briefly state sources of instructional materials in your pre-primary II.

3. In your opinion comment on how instructional materials have influenced literacy acquisition in pre-primary II in your school

SECTION D: Influence of Teacher-Learner Interaction on Learners’ Literacy

1. The following activities influence teacher-learner interactions on literacy achievement in ECDE centres. Tick [✓] your preferred choice on the grid ; SA-Strongly Agree A-Agree DA- Disagree, UD- Undecided SD-Strongly Disagree

In my pre-primary II: -

Table 14: Influence of Teacher-Learner Interaction on Learner’s Literacy

Statement	Level of Agreement				
	SA	A	UD	DA	SD
Learners who receive negative attention from teachers have problems with emotional development					
Teachers –learner interaction are predictors of learners behaviour and academic outcomes					
Classroom organization help learners to develop skills, achieve higher in academics and develop interest in learning activities					
Teachers interact well with learners during outdoor activities					
Learners are free to express themselves during outdoor activities when the teacher is present					
Teachers use discussion and other activities to promote learners higher thinking and recognition to focus on learning					

2. What is your role in developing teacher-learner interactions in your school?

3. Please comment on how teacher-learner interactions influence literacy achievement in pre-primary. _____

SECTION E: Influence of School Culture on Literacy

1. The following are culture issues influencing pre-primary II learning: Tick [√] your preferred choice on the grid: SA-Strongly agree, A-Agree, UD- Undecided, D-Disagree, SD-Strongly disagree

In my pre-primary II

Table 15: Influence of School Culture on Literacy

Statement	Level of Agreement				
	SA	A	UD	DA	SD
There is good interaction between teachers and learners thus promoting literacy					
Learners in pre-primary II are afraid of their teachers and feel uneasy when they see them					
Parents are always involved by the school administration in matters concerning pre-primary II in schools where their children learn					
Construction of classrooms has been left for the concerned parents					
Parents in most cases teach their children how to speak mother tongue					
Parents contribute money for salary of some pre-school teachers					
Pre-school parents are active members of Board Of Management (BOM)					
Pre-primary II learners are always safe in their classrooms					
School compound is always safe for ECDE children to play					
The fence of the school is secure to the extent that no pre-primary II learner can sneak out of school without teacher' knowledge					

2. Briefly explain how parent-teacher interaction influence literacy achievement in public pre-primary II

learners _____

3. State briefly what you do to ensure that pre-primary parents-teacher interaction can be improved to encourage achievement of literacy competence among the learner

4. Give any suggestions on how parents can be involved in promoting acquisition of literacy among the public pre-primary learners

5. Suggest ways in which the safety of pre-school learners can be guaranteed in respective pre-primary schools

I sincerely thank you so much for accepting to participate in this survey research. Take time again just to be certain that you have put a mark for each questions

APPENDIX II: INTERVIEW SCHEDULE FOR HEAD TEACHER

The main reason for this interview is to seek for your opinion on Influence of School Environmental Factors on Learners Literacy in Public Pre-primary II in Webuye West Sub-County. The information you give will be confidential and will not be shared by any other person without your consent

SECTION A: Demographic Information

1. Name of school _____

2. Gender: Male [] Female []

3. Please indicate your experience as a head teacher

5 years and above [] 6-10 years [] 11-15 years [] above 15 years []

A: Influence of physical Facilities on Literacy

1. What is the current status of physical facilities in pre-primary II in your school?
2. How do physical facilities influence literacy acquisition in pre-primary II in your school?
3. What measures have you taken to support literacy in pre-primary II in your school?
4. What role do parents play in improving physical facilities for pre-primary II in your school?

B: Influence of Instructional Material on Literacy

5. How do you source for Instructional material for pre-primary II in your school?
6. To what extent do instructional materials influence literacy acquisition in pre-primary II in your school?
7. What course of action do you put in place to make sure that pre-primary II acquire literacy skills before joining primary?
8. How do you solicit stakeholders' support in terms of instructional materials?

C: Influence of the teacher-learner interactions on the learners' literacy

9. To what extent do the teacher-learner interactions influence literacy in pre-primary II in your school?
10. What strategies do you employ to develop and promote the frequency the teacher-learner interactions in your school?
11. How do you involve the teachers in improving their interactions with the learners to enhance literacy in pre-primary II?
12. How do you ensure that there are healthy interactions between the learners and the teachers in order to improve literacy in pre-primary II?

D: Influence of school culture on learner's literacy

13. To what scope does school culture manipulate literacy achievement in pre-primary II in your school?
14. How do you create a safe and orderly learning environment in your school?
15. How do you monitor teacher-learner interaction in your school?
16. What course of action do you put in place to make sure that parents are involved in pre-primary II literacy acquisition?

Thank you very much

APPENDIX III: OBSERVATION SCHEDULE FOR PRE-PRIMARY II LEARNERS

The purpose of this observation schedule was to enable the researcher to observe different literacy skills in pre-primary II learners. The learners were observed in three skills; reading, writing and arithmetic.

In my pre-primary II

Table 16: Observation schedule for pre-primary II learners

Statement	Skill	Learner has acquired the skill	Learner has not acquired the skill
Physical facilities influences literacy acquisition	-sound recognition- - sound reading -reading 3-lettered words: cut cat cow -recognize numbers from 1-5 -work out simple arithmetic: 1+1=2 2+1=3 3+1=4 4+1=5		
Instructional materials influences literacy acquisition	-sound recognition - - sound reading Reading 3-lettered words: Cut Cat cow -writing letters A-Z - work out simple arithmetic: 1+1=2 2+1=3; 3+1=4; 4+1=5		
teacher-learner interactions influence literacy acquisition	-sound recognition a e i o u -sound reading: A-Z -reading 3- lettered words:		

		Cow Cat Cut -writing letters A-Z -recognize numbers 1-5 - working out simple arithmetic: 1+1=2 2+1=3 3+1=4 4+1=5	
School influence acquisition	culture literacy	-sound recognition A e i o u -sound reading: A-Z -reading 3-lettered words: Cow cat cut -writing letters A-Z -recognize numbers 1-5 - work out simple arithmetic: 1+1=2 2+1=3 3+1=4 4+1=5	

y : The learner has acquired the skill

x : The learner has not acquired the skill

Thank you for allowing your child to be observed in the study.

APPENDIX IV: COVER LETTER

Dear Teacher

The survey study is being conducted by Mrs. Nyongesa Irene Naliaka. I am a master's degree student at Mount Kenya University, Eldoret Campus. The intention of this survey is to get your opinion on the Influence of School environmental factors on learners' Literacy in Public pre-primary II in Webuye west Sub- County, Kenya. This is not an examination and therefore there are no wrong or correct answers. Your response will help in the management and improvement of early year's education in Kenya. This survey questionnaire will not take long to complete. Participation in this study is also voluntary. So please feel confident when answering the questions because you are not required to write your name in the papers. This means that your identity will remain concealed during the entire process of the study including reporting the findings of this study. Please sign these forms and retain a copy if you choose to participate. You may then proceed to respond to the question as honestly as you can.

Yours Faithfully,

Nyongesa Irene Naliaka.

The Participant's commitment:

I have read and am well informed about this study and my participation. I therefore willingly consent to respond to the survey

Signature_____

APPENDIX V: INFORMED CONSENT FOR THE PARENT/ GUARDIAN

I am Mrs. Nyongesa Irine Naliaka a student at Mount Kenya University pursuing Master of Education Degree in Early Childhood Education in the department of early childhood studies. As part of the requirement for completion of my studies am supposed to conduct a study titled **“INFLUENCE OF SCHOOL ENVIROMENTAL FACTORS ON LEARNERS’ LITERACY IN PUBLIC PRE – PRIMARY II IN WEBUYE WEST SUB-COUNTY, KENYA”**

For the above stated reason, I kindly request you to allow your child to participate in this study on a voluntary basis. Feel free to request for withdrawal from the study in case you do not feel contented and comfortable. Any information gathered will be treated with utmost confidentiality.

The parent/ Guardian’s commitment and the researcher’s witness:

I have read and understood the content of the consent form and ready to participate in the study.

Parent/Guardian Signature..... Date.....

Researcher Signature..... Date.....

(Mrs. Nyongesa Irine Naliaka)

In case of any complains, you are always free to consult the chairman, ethical review committee
P.O Box 342-01000, Thika.

APPENDIX VI: ETHICAL REVIEW COMMITTEE CERTIFICATE



REF: **MKU/ERC/1318**

Date: 30 May, 2019

TO: **NYONGESA IRENE NALIAKA** REG: **MECS/2015/26697**

Dear Sir/Madam,

RE: INFLUENCE OF SCHOOL ENVIRONMENTAL FACTORS ON LEARNERS' LITERACY IN PUBLIC PRE-PRIMARY II IN WEBUYE WEST SUB-COUNTY, KENYA

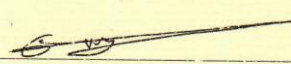
This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **722**. The approval period is **30/05/2019 – 29/05/2020**.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by **Mount Kenya University**.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,


The Chairman
Mount Kenya University
Ethics Review Committee
P. O. Box 342 - 0100, Thika
Prof. Francis W. Muregi
Chairman, Mount Kenya University IERC

APPENDIX VII : AUTHORIZATION LETTER FROM POSTGRADUATE STUDIES



SCHOOL OF POSTGRADUATE STUDIES

MECS/2015/26697

19th June, 2019

*The Director, Research Coordination Division
National Commission for Science, Technology & Innovation
Utalii House, 8th & 9th Floor
P.O Box 30623- 00100
NAIROBI*

Dear Sir/ Madam,

RE: NYONGESA IRENE NALIKA - REGISTRATION NO. MECS/2015/26697

The purpose of this letter is to introduce the above named student who is pursuing **Master of Education** in the **Department of Educational Management & Curriculum Studies** in the **School of Education**.


The title of her research is *"Influence of School Environmental Factors on Learners' Literacy in Public Pre-Primary II in Webuye West Sub-County, Kenya."*

She has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data for her research between **June and August, 2019**.

Any assistance accorded to her will be highly appreciated.

Thank you.

Mount Kenya University
Dean, School of Postgraduate Studies
P. O. Box 342 - 01000
Thika


Dr. Samuel M. Karenga, Ph.D
Dean, School of Postgraduate Studies
Enc.

APPENDIX VIII: NACOSTI CERTIFICATE

THIS IS TO CERTIFY THAT:

MS. NYONGESA IRENE NALIKA
of MOUNT KENYA UNIVERSITY, 0-50205
WEBUYE, has been permitted to conduct
research in Bungoma County

on the topic: INFLUENCE OF SCHOOL
ENVIROMENTAL FACTORS ON
LEARNERS' LITERACY IN PUPLIC PRE-
PRIMARY II IN WEBUYE WEST
SUB - COUNTY, KENYA

for the period ending:
19th August,2020

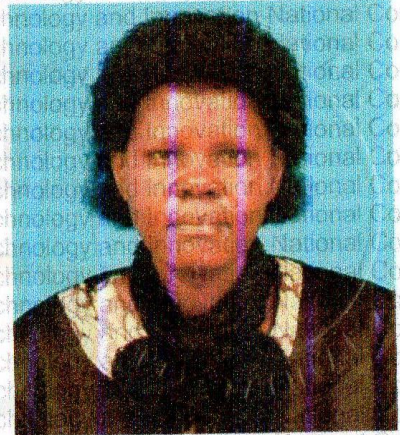


Applicant's
Signature

Permit No : NACOSTI/P/19/14562/31667

Date Of Issue : 20th August,2019

Fee Received :Ksh 1000


Director General
National Commission for Science,
Technology & Innovation

Mount

APPENDIX IX: LETTER FROM COUNTY EDUCATION OFFICE BUNGOMA



MINISTRY OF EDUCATION
STATE DEPARTMENT OF EARLY LEARNING AND BASIC EDUCATION

e-mail: bungomacde@gmail.com
when replying please quote:

County Director of Education
P.O. Box 1620-50200
BUNGOMA

Our Ref. No. BCE/DE/19/VOL.III/164

20TH, JANUARY, 2020

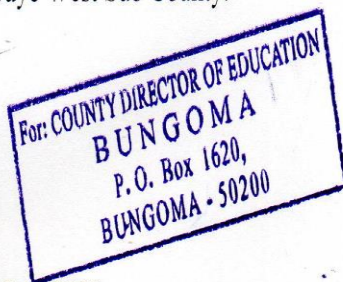
TO WHO, IT MAY CONCERN

REF: AUTHORITY TO CARRY OUT RESEARCH - NYONGESA IRENE NALIKA
REG. NO. MECS/2015/26697.

The bearer of this letter Ms. **Nyongesa Irene Naliaka** of **Mt. Kenya University** has been authorized to carry out a research on "*Influence of School Environmental Factors on Learners Literacy in Public Pre-Primary II*" in Webuye West Sub County.

A handwritten signature in black ink, appearing to be 'Tsimango Godwin', written over a white background.

TSIMANGO GODWIN
FOR: DIRECTOR OF EDUCATION
BUNGOMA COUNTY.



APPENDIX X: LETTER FROM COUNTY COMMISSIONER BUNGOMA

REPUBLIC OF KENYA



**THE PRESIDENCY
MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT**

Telephone: 055- 30326
FAX: 055-30326
E-mail: ccbungoma@yahoo.com
When replying please Quote

Office of the County Commissioner
P.O. Box 550 - 50200

BUNGOMA

13th January, 2020

REF:ADM.15/13/VOL.1I1/8

TO WHOM IT MAY CONCERN.

RE: RESEARCH AUTHORIZATION –Mrs. NYONGESA IRENE NALIKA

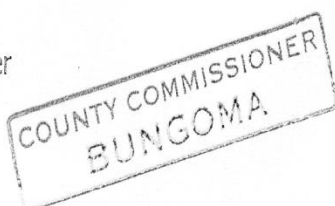
Reference is here made on the letter Ref; NACOSTI/P/19/14562/31667 dated 20th August, 2019 National commission for Science, Technology and innovation.

The bearer of this letter **Mrs. Nyongesa Irene Naliaka**, of Mount Kenya University has sought authority to carry out research on, "***Influence of School Environmental Factors On Learners' Literacy in public Pre-primary II in Webuye West Sub county, Kenya*** " for a period ending 19th August, 2020.

Authority is hereby granted for the specific period and any assistance accorded to her in this pursuit would be highly appreciated by this office.

A handwritten signature in black ink, appearing to read 'Walukhu Leonard'.

Walukhu Leonard
For: County Commissioner
BUNGOMA COUNTY



APPENDIX XI: TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	36	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Table 17: Determining sample size from a given population

Source: Krejcie, Robert & Morgan, Darle, “Determining sample for research activities” Education and Physiological measurement 1970

NOTE: “N” is the population size “S” is sample size.

INFLUENCE OF SCHOOL ENVIRONMENTAL FACTORS ON LEARNERS' LITERACY IN PUBLIC PRE – PRIMARY II IN WEBUYE WEST SUB - COUNTY, KENYA

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