

**EFFECTS OF INSTITUTIONAL VARIABLES ON EARLY
LITERACY AMONG PUBLIC PRIMARY SCHOOL PUPILS IN
VIHIGA COUNTY, KENYA**

OBEYWA HERBERT AMUNAVI

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DECLARATION

I declare that this project is my original work and has not been presented in any other University/institution for consideration of any certification. This proposal has been complemented by referenced sources duly acknowledged. Where text, data including spoken words, graphs, pictures or tables have been borrowed from other sources, including the internet, there are specifically accredited and references cited using current APA system and in accordance with anti-plagiarism regulation.

Obeywa Herbert Amunavi

Date

E55/CE/28078/2015

Supervisor

This has been submitted as a fulfilment of the award of the degree of Master of Education with my approval as a Kenyatta University Supervisor.

Dr. Wilfrida Itolondo

Department of Educational Management,

Policy and Curriculum Studies

Kenyatta University

DEDICATION

Dedicated to my wife Naomi Cheloti and my parents Michael Sabwa and Terkesi Midika for support and encouragement through the entire period of my study and research. Many thanks to you and wish you God's blessings.

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ABBREVIATIONS AND ACRONYMS

CAQDAS:	Computer Assisted Qualitative Data Analysis Software
CSO:	Curriculum Support Officer
EFA:	Education for All
ELU:	Early Literacy Unit
FPE:	Free Primary Education
GoK:	Government of Kenya
KCPE:	Kenya Certificate of Primary Education
KICD:	Kenya Institute of Curriculum Development
Ksh:	Kenya Shilling
MoEST:	Ministry of Education, Science and Technology
NASMILA:	National Assessment System for Monitoring Learners Achievement
NGO:	Non-Governmental Organization
UNESCO:	United Nations Educational, Scientific and Cultural Organization
USAID:	United States Agency for International Development

ABSTRACT

Low literacy skills and performance among primary schools in Kenya have been found to be caused by poor instructional and evaluation methods. To this effect, TUSOME literacy programme undertook to carry out in-service training of lower primary teachers on reading skills with the view to improving literacy skills acquisition among lower primary school pupils. However, there seem to be a disconnect between literacy investment and learner reading achievement in the country and particularly in Hamisi sub-county. To address this, this study hypothesized that un-favourable school literacy environment could be a major reason for non-attainment of literacy in the sub-county. Thus, this study sought to assess the influence of school factors such as schools' physical infrastructure, instructional materials, teacher in-service training and supervision by Head teacher and TAC's on literacy on lower primary school pupils in Hamisi Sub-county. The objectives of the study were to; establish the influence of schools' physical infrastructure on literacy, examine the effect of instructional materials on literacy and find out the effect of teacher in-service training on literacy among lower primary school pupils in Hamisi Sub-county. The study finally sought to evaluate the role of supervision by Head teacher and TAC's on literacy among lower primary school pupils in Hamisi Sub-county. The target population was 10103 people comprising of 141 head teachers from 141 primary school in Hamisi sub-county, teachers' advisory centre officials, 1900 literacy teachers, 7980 class 1 and 2 pupils. The study used a cross-sectional survey research design to sample 2 Curriculum Support Officer, 14 head teachers, 28 teachers and 56 pupils. The research instruments were piloted in one public and one private primary school that were not included in the final study. The validity of the instruments was tested using content validity while the reliability was tested through test-retest method and Cronbach's alpha used to test the internal consistency of the responses of the two tests. Questionnaires, reading tests and observation checklist were used to collect data while in analysis, quantitative data in form of frequencies, means, standard deviations and percentages were found and data presented in tables. Quantitative data was entered into a Statistical Package for Social Sciences computer software. Analysis encompassed discussion use of means, percentages and summary. Data was presented using tabulation and charts. The study revealed that physical facilities in a number of the schools are inadequate and hence the study concluded that adequacy of teaching and learning resources in school influenced pupils' literacy achievement in public primary schools. Majority of the teachers regularly attended in-service training on how to teach reading at least once per term. The study recommends that the government should increase the funding to schools so as to cater for the essential teaching/ learning aids. The Ministry of Education Science and Technology should consider reviewing its supervisory support to teachers and support to schools.

CHAPTER ONE

INTRODUCTION AND CONTEXT OF THE STUDY

1.1 Introduction

This chapter covers the background to the study, problem statement, aim of the study, objectives of the study, research questions, significance, delimitation and limitations, assumptions, theoretical framework, conceptual framework and definition of terms.

1.2 Background to the Study

Literacy is one of the most integral parts of any human development (Guo, Connor, Yang, Roehrig and Morrison, 2012). The United Nation Education Scientific and Cultural Organization (2010) defined literacy as the capability of identifying, understanding, interpreting, creating, communicating and computing using written and printed materials related to varied contexts. Literacy encompasses a variety of activities that enables individuals to accomplish their goals, to develop their knowledge and potential, and to take part fully in the community and wider society. Although much emphasis is placed on its significance, literacy is still one of the most neglected education goals in a number of countries, especially among the less developed countries (UNESCO, 2009). Central to literacy is the impression that language (its use, teaching and learning) works as a intervening, interpretive system in the development of literacy (Hudelson, 2005).

UNESCO (2010, 2013) reported that the lowest literacy rates by year 2011, were recorded in Asia and Sub-Saharan African. Poor health, poverty and limited access to print are the issued likely to contribute to delay reading acquisition. Even highly

trained teachers are likely to struggle in these challenging settings (Tella, 2008). Achieving extensive literacy can happen only in the context of building literate populace that inspire individuals to acquire and use their literacy skills (UNESCO, 2008). Literacy skills include reading and writing and they enable a learner to learn to read and write with independence, comprehension and fluency (Lingualinks, 1999).

According to Shanaha (2006), '*Reading First*' is one program that was established in pursuit of a reading policy. 'Reading First' make available funds to disadvantaged schools to make more resources available: teaching and learning programs, professional development, evaluation, and interventions to provide for the needs of weak readers. This effort focused on kindergarten through Grade 3, and everything focused on oral reading fluency, phonics, vocabulary, phonemic awareness and reading comprehension strategies. Recent years have seen the explosion of literacy evaluations, as a growing agenda on a global scale. Various large-scale literacy assessments have been conducted in Kenya including the Early Grade Reading Assessment (EGRA), the National Assessment System for Monitoring Learner Achievement (NASMLA), Southern Africa Consortium for Monitoring Education Quality, and Uwezo among others (Rasinski, 2004). These assessments have established significant delays in the acquisition of basic reading competency. Evidence from the Uwezo (2010, 2011) estimated that only around 50% of children in grade 4 were able to read at standard two. Indeed, studies have showed that a noteworthy percentage of learners go through the primary school cycle without having accomplished the basic levels of reading and comprehension (UWEZO, 2010/2011).

Low reading abilities has far reaching impacts on literacy among children (Hernandez, 2011). Prinsloo and Stein, (2004) indicate that literacy levels in primary grades are low resulting in poor education outcomes among children. Conley (1992) observed that when learners lack the ability to read competently, there may be serious academic problems. The ability to read fluently and efficiently is vital both in school and in adult life. Good reading skills improves performance in all school subjects. Shanahan et al. (2010) asserts that through reading learners get knowledge that helps in improvement of lives.

UWEZO (2011) report on numeracy and literacy levels of children aged between 6 - 16 years showed that 90% of the children in class two could not read a class one story written in English. Neither could 75% children in standard three do class two division problem in mathematics. Therefore, the report indicated that there was a weak groundwork and insufficient school willingness in Kenya and that this could have contributed to low achievement among pupils in national examinations specifically KCPE at the end of the primary education cycle. Hamisi sub County has been ranked among the poorest performing counties when it comes to national examination for primary schools. The Kenya National Bureau of Statistics (KNBS) and Society for International Development (SID) (2013) observed that a total of 18% of Vihiga County residents had no formal education. Hamisi constituency has the highest share of residents with no formal education at 20%.

Reasons for low literacy skills can be traced to many different and largely problems which can be directly connected to the school environment and infrastructure, the teachers and the teaching and assessment methods. The school environment is an

important domain in the process of reading and writing skills development (Chipman, Segal and Glaser, 2013).

The school has the responsibility of facilitating the learning of these skills (Westwood, 2008). All the different components of the school environment including the physical infrastructure (classrooms, libraries, technical workshops and laboratories), teachers' in-service training, school management and teaching methods affect students' academic achievement. Mbugua, Kibet, Muthaa and Nkonke (2012) highlighted school factors as being highly influential in literacy performance of Kenyan learners. In their findings, insufficient teaching materials was found to impact on academic performance. Class size has also been found to influence literacy among learners.

Sifuna, and Abagi (2006) found out that classrooms designed for 45 pupils were accommodating up to 80 to 120 children. The introduction of Free Primary Education (FPE) resulted in an increased enrolment in schools. This was naturally an advantage, especially for families with small incomes, but this increased enrolment brought negative effects on teaching and learning in schools. Sifuna, and Abagi (2006) observed that in most of the schools, the buildings were unfurnished and some were of low quality. The study therefore attributed the low performance of children in these schools to poor classes, overcrowding and poor class environment. Mbugua et al., (2012) reported that safe and orderly classroom environment and school facilities were significantly related to students' academic performance in schools.

Mutua, (2012) argues that understaffing, lack of instructional materials in schools and lack of physical facilities influence pupils' academic performance. A report by UNESCO-Bangkok (2011) noted that accessibility and use of literacy materials as well as how they are planned in space can greatly influence learning and enhance the acquisition of reading and writing skills by learners. Teachers are key players in enabling children acquire literacy. It is therefore of importance that reading instruction for pupils at school is done by skilled and qualified teachers with an understanding of the literacy acquisition process and are able and willing to focus their teaching of reading on well researched findings. Hence teacher professional developments on instructional practices need to be put into consideration when looking at literacy interventions for children. Moreover, poor school performance and low skills are viewed as being caused by poor instruction and assessment methods by teachers and head teachers of institutions.

Kenya has seen passionate efforts, involvements and resources put into child literacy following Bill of Rights in the Kenya constitution (2010) in which education has been identified as of the essential rights to every Kenyan. One such intervention is the TUSOME Literacy Program. It is in view of this that TUSOME literacy programme undertook the in-service training of lower primary teachers on reading skills with the view to improving literacy skills acquisition among lower primary school pupils. TUSOME Early Literacy program has come up with a single strategy for teaching and assessment in all schools with a view of addressing the discrepancies in schools.

TUSOME is a four-year literacy teaching program in Kenya public primary schools. It was introduced by the Ministry of Education, Science and Technology in 2014

with the key objective of alleviating instruction of English and Kiswahili for millions of children in class one and two so that they can secure the ability to read and write by the time they join class three. The TUSOME Literacy Programme, was aimed at benefiting pupils in more than 23,000 public and alternative basic education schools in the country. The project was expected to reach approximately 5.4 million children in Kenya (Lusweti, 2014).

Additionally, training of teachers' advisory Centre tutors, head teachers and teachers was conducted countrywide in 31 venues spread across all the 47 counties. The activity targeted 1060 TAC tutors, 70 early childhood education officers who were by then performing the duties of tutors and close to 50,000 teachers. According to Lovett (2017), the training aimed at equipping the teachers' advisory centre tutors and teachers with skills on the innovative TUSOME instructional approach towards effective classroom instruction, supervision and support. The TUSOME Early Grade Reading activity is supported by the U.S. Agency for International Development (USAID) and the United Kingdom's Department for International Development. It seeks to enhance use of ICT to support education outcomes among other objectives. TUSOME project is established and based on the educational principle that learning to read is the first and most important activity any child undertakes at school (Mulongo and Amod, 2017). It is therefore important that ample environment is created for the achievement of literacy in schools. This study sought to assess the effects of institution based factors on achievement of literacy among lower primary school pupils in Hamisi sub-county. In Particular, this study focused on the influence of schools' physical infrastructure, instructional materials, teacher in-

service training and supervision by head teacher and TAC's on literacy among lower primary school pupils in Hamisi Sub-county.

1.3 Statement of the Problem

Uwezo (2016) reported that nationally, 9% of children could not identify letters (16% in Western, 2% in Nairobi) and 11% could not recognize figures (18% in Western, 3% in Nairobi). This meant that children in the Western Kenya were, more than five times, not likely to be able to identify letters and numbers than children in Nairobi. Table 1.1 shows the findings by Uwezo (2016) on literacy levels across the country.

Table 1.1: Literacy Level by Region

Region	Cannot Identify Letters
Central	3.8
Coast	7.5
Eastern	7.5
Nairobi	1.7
North Eastern	15.8
Nyanza	10.9
Rift valley	11.7
Western	15.8
National Average	9.1

The report indicated that Western had one of the highest number of children who could not identify letters. There seems to be insufficient evaluation of the effects of institutional factors on achievements of literacy program given the persistent poor

performance in literacy and numeracy in Kenya (UWEZO, 2010). Yet, the Kenya government, development partners and other stake holders have invested colossal sums of money to fund different programs aimed at enhancing children's literacy skills for a long time. For instance, in 2016/2017 budget, Kenya spent Ksh. 339 billion on education. In 2017/2018 budget, Ksh. 21.8 was allocated for free primary education while Ksh. 12.3 went to school feeding program. TUSOME literacy program have also invested heavily in ensuring that literacy levels in the country are enhanced. According to Uwezo (2016) report, despite marked progress in increasing access to education in Kenya in recent years, the country has not fully met its commitments under the Education for all (EFA) Goals. However, there seem to be a disconnect between the investment put in education by different stakeholders and the reading achievement levels among the learners in the country and particularly in Hamisi sub-county. There is therefore need to establish the factors responsible for low literacy levels in the country among primary schools in Kenya. This study therefore undertook to establish these factors focusing on schools' physical infrastructure, instructional materials, teacher in-service training and supervision by head teachers and TAC's on literacy level on lower primary school pupils in Hamisi Sub-county.

1.4 Purpose of the Study

The purpose of this study was to assess the effects of institutional variables on achievement of early literacy among lower primary school pupils in Vihiga County, Kenya.

1.5 Objectives of the Study

This study sought to achieve the following specific objectives

- i. Establish the influence of schools' physical infrastructure on literacy among lower primary school pupils in Hamisi Sub-county.
- ii. Examine the effect of instructional materials on literacy among lower primary school pupils in Hamisi Sub-county
- iii. Find out the effect of teacher in-service training on literacy among lower primary school pupils in Hamisi Sub-county.
- iv. Evaluate the role of supervision by head teacher and TAC's on literacy among lower primary school pupils in Hamisi Sub-county.

1.6 Research Questions

To achieve the above objectives, this study sought to answer the following research questions.

- i. How do schools' physical infrastructure influence literacy among lower primary school pupils in Hamisi Sub-county?
- ii. Do instructional materials affect literacy among lower primary school pupils in Hamisi Sub-county
- iii. How does teacher in-service training affect literacy among lower primary school pupils in Hamisi Sub-county?
- iv. What is the role of supervision by head teachers and TAC's on literacy among lower primary school pupils in Hamisi Sub-county?

1.7 Significance of the Study

The findings of this study may provide vital information on the influence of school factors on literacy in lower primary school pupils' in Hamisi Sub-county. The results may be used by school managers and head teachers in providing the necessary resources for the instruction of literacy skills. In addition, curriculum developers and course designers may benefit from the study as it will provide information on teachers' refresher courses needs and the subject requirements. Further, the findings can help Quality Assurance and Standards Directorate in the Ministry of Education Science and Technology (MoEST) to advice on reading instructional materials and resources and effective reading instructional strategies appropriate for lower-primary schools. Other stakeholders may use the results to identify challenges and come up with ways aimed at giving all children the necessary skills and competencies for upper primary school transition. Finally, the government may use the findings of this study to formulate policies on curriculum formulation, implementation and funding of vital areas that like in-service training for teachers that can enhance literacy in the country.

1.8 Delimitations and Limitations of the Study

This section presents the delimitations and the limitations encountered during this study.

1.8.1 Delimitations of the Study

This study was delimited to Hamisi Sub-county. Specifically, it focused on lower primary schools' classes one and two pupils, head teachers, teachers and CSOs. Additionally, the study focused on researching children's English subject literacy skills when there is Kiswahili and mathematics subjects that can be researched.

Hence, since Kiswahili and numeracy were not considered in this study, the literacy levels used in this study should be used and quoted with caution since it's not conclusive as done by other studies like UWEZO.

1.8.2 Limitations of the Study

This study covered only one Sub-county (Hamisi) in Vihiga County due to limitations of time and finances. Nevertheless, the study sample size was large enough (30% of the target population) to be representative of the larger county (Mugenda and Muenda, 2003). This study also focused only on lower primary school pupils instead of all pupils at primary school level. However, an adequate sample was used to provide a broader picture of primary school. Some schools were not easily accessible since they were situated in the interior with tough terrain. The researcher therefore used motor bikes and sometimes walked to ensure that all schools sampled were covered. There were also cases of insincere responses from teachers. The researcher therefore ensured he got honest responses from the respondents as pertains the literacy of the pupils. The use of interview, questionnaire, a pupils' test and observation checklists helped to collaborate the information given.

1.9 Assumptions of the Study

The researcher made the following research assumptions:

- i. Most schools and learners had a much lower literacy achievement owing to some school factors.
- ii. Pupils joined standard three and four with adequate literacy learning experiences acquired from lower levels.

- iii. That the respondents would co-operate and provide genuine feedback and that they would register a 100% return-rate of the questionnaires.
- iv. That the achievement of literacy was influenced by other factors other than the actual teaching process.
- v. That the ability or capacity of the pupils to learn or acquire the reading skills was more or less at the same level across individual classes.

1.10 Theoretical Framework

This study was based on Ecological Systems Theory advanced by Bronfenbrenner (1986) also referred to as the Bio-ecological theory. The theory contends that the biological characteristics of the child and the environment in which the child grows in collectively impacts on the development of the child. Hence, the literacy levels of a child are affected by the environment in which the child learns. According to the theory, natural environment is a set of layered interrelated structures one within the other. Bronfenbrenner argued that a child is usually at the centre and he/she is surrounded by several environmental systems. These environmental systems comprises of the Micro system (the immediate environment of the child), the Mesosystem which are the exchanges and relations between different facets of the Microsystem like the school of the child, where the child goes for prayers, family and peer groups), the Exosystem (involves features of edifices within the Microsystem which does not affect the child directly), the Macrosystem (the ethnicity and culture of an individual (child) and Chrono system which contains the transitions and shifts in one's lifespan. However, this study will only focus on Micro systems and Meso systems tenets of the theory since these are the variables of concern.

The theory avers that the child's biological environment and characteristics in which she/he lives determines his/her growth and development. Further, Bronfenbrenner explained that both the environment and the child have emotional impact to one another bi-directionally and variations or disagreements in any one of these layers affects all the other facets of the environment. The way in which these five systems interact with the child determines the child's development. A good and nurturing environment helps the child to grow and develop into a better person. This theory expounds on the growth, development and educational achievement of learners. In the school context, there are many factors that influence reading literacy skills acquisition among children including the school's physical design, the school literacy environment and the quality of teachers among other important parameters that influence the child's academic performance.

This theory was relevant to this study because it helped understand how the school physical infrastructure, presence of instructional material, teacher in-service training and teacher supervision affect how she/he grows and develop. Research also confirms that environmental factors lead to the success or failure of the child's acquisition or reading skills. The school literacy environment comprise of the immediate environment of the child and development. Therefore, an enabling, nurturing and sound environment will helps the child to achieve academic goals which help him/her to become a better person. Thus, the relevance of this theory was that it helped to bring out the compelling factors; Micro system (environment of the child – school's physical infrastructure and instructional materials) and Meso system (teacher in-service training and supervision by head teacher and TAC's) that influence the achievement of the child in reading in school as his/her environment.

1.11 Conceptual Frame work

Cargan (2007) defines a conceptual framework as a graphic/pictorial representation of how variables interact in a research study. A conceptual framework provides a clear impression of the areas in which meaningful relationships are likely to exist. In the figure 1.1 below, achievement in basic reading literacy is the dependent variable. School physical infrastructure, teaching methods, the provision of learning materials, and supervision of teachers are independent variables that affect the dependent variable. Achievement in reading literacy is dependent on effective implementation of teaching and learning in the classroom by the teacher. Organized pedagogical strategies are paramount in this regard. The teacher is therefore charged with the responsibility of getting adequate reading literacy activities. Other relevant aspects that influence achievement of reading literacy include the provision of appropriate and enough physical facilities by the school authorities and boards of management; availability of adequate teaching and learning resources. It is hoped that eventually this would lead to improved literacy, lifelong learning, language development, and high performance in class among others. This study sought to find out the influence of such variables on pupils' achievement in literacy in lower primary schools in County.

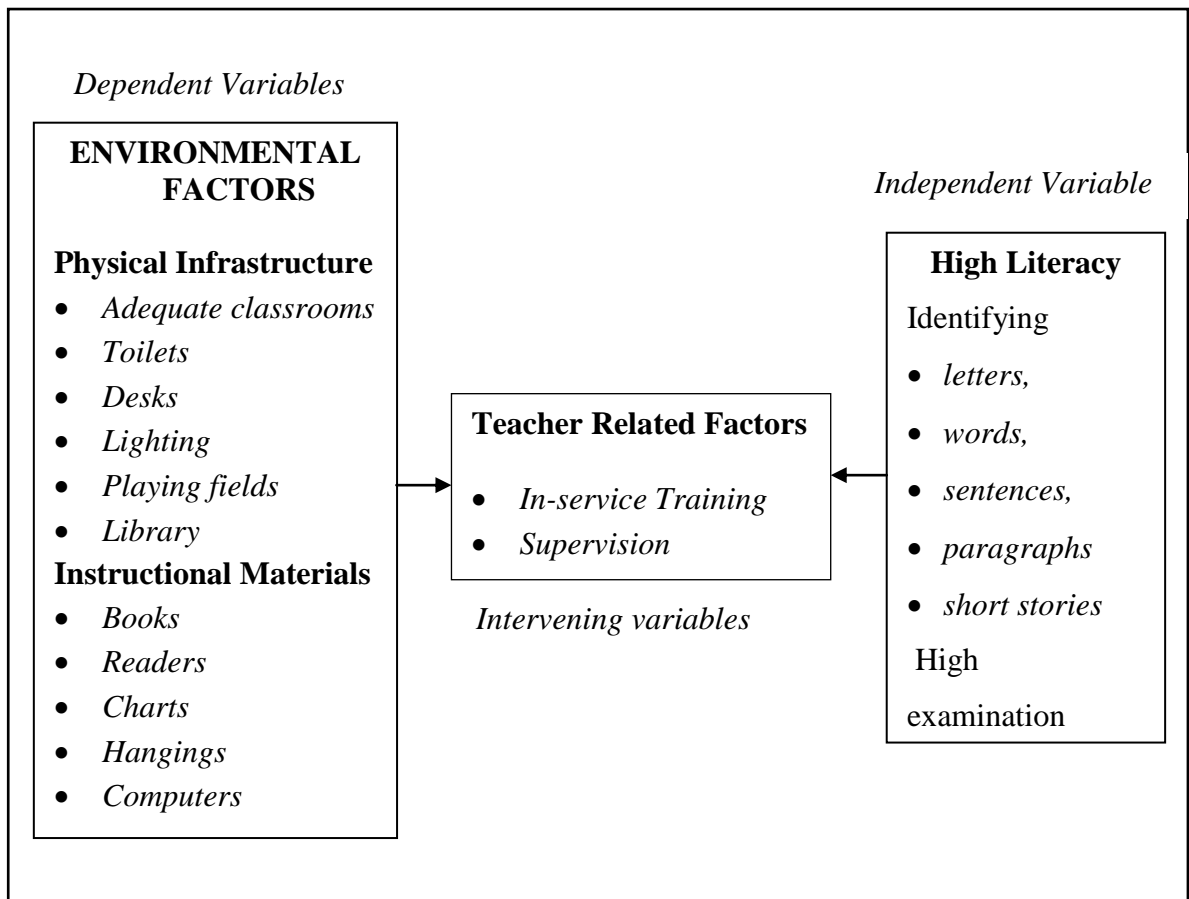


Figure 1.1: Institutional Determinants of Literacy among Lower Primary School Pupils

1.12 Operational Definition of Key Terms

Early Literacy Environment: Printed resources, electronic and broadcast materials and information and communications technology (ICT) which inspire literacy attainment. For this study the availability and adequacy of these variable was considered

Academic Achievement: Pupils' average scores in numeracy and literacy tests facilities.

Instructional Materials: Equipment, books, aids and other resources that are directly used in pedagogy by both teachers and learners and affect content delivery.

Learning Experiences: Ability to do basic numeracy and literacy tasks in standard one.

Literacy: Basic ability to read and write.

Lower-primary School: The first three grades in primary school in Kenya

School Environmental Factors: The quality of the physical environment, building and

School Physical infrastructure: Components of the school literacy environment which indirectly influence teaching and learning and comprise the classrooms, desks, chairs, lighting, toilets, playing field.

Supervision: Structures and techniques of monitoring content delivery and the instruction process by the CSOs and head teachers upon teachers and learners in the school.

TUSOME Literacy Program: A National Literacy Program targeting teachers and schools for improvement in literacy instruction and outcomes to ensure that maximum number of class 1 and 2 pupils are twice as likely to meet MOEST benchmarks for literacy.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

In this chapter, relevant literature is reviewed as per the study objectives. It includes influence of school physical infrastructure on learner literacy achievement, instructional materials on learner literacy achievement, teachers' in-service and the influence of supervision. Lastly, the study presents the summary of the chapter.

2.2 Physical Environment and Pupils' Literacy

The rudimentary elements of literate environments comprise of: literacy materials and activities, physical environment and socio-cultural environment. The vibrant relationship among all the components provide a rich and inspiring literate environment (UNESCO, 2011). The physical environment is a "literacy inducement." The physical environment has an influence on the progress and functioning of learners. An organized, attractive and fascinating environment that inspires conversations among learners or helps them to work on their own or in small groups, can hasten their development in literacy and promote good reading behavior and practices. The accessibility of literateness materials as well as how they are prepared and used in the classrooms can greatly encourage learning and improve the acquisition of writing and reading among learners (UNESCO-Bangkok, 2011).

According to Dorman (2008), school physical resources are the school's physical structure, equipment and other instructional resources, class size among others.

Environment in an educational setting refers to the emotional atmosphere, tone, ambience, or climate that prevails in a particular setting.

Rodriguez and Tamis-LeMonda (2011) examined children's learning environments at home in a low-income sample of 1,852 children and families when children were 15, 25, 37, and 63 months. Six learning environment trajectories were recognized, including consistently low environments, consistently high environments, and environments that were characterized by fluctuating patterns of variation in economy. The skills of children at the extremes of learning environment trajectories differed by more than 1 *SD* and the timing of learning experiences related to specific emerging skills. Whereas this study looked at home physical environment and its influence on learner achievement in school, the current study focused on the effect of the school physical environment on early literacy.

Nijhuis, Segers and Gijssels, (2005) observed that school environment is of great importance in promoting learning. A good prevailing atmosphere in school is a motivation for the children to learn more and more. Further, they argue that classroom environment is the aggregate of all emotional, mental, social and physical factors making general contribution to the instructional process in class. Goddard, Hoy and Hoy (2000) observe that favorable learning environment also improves academic and professional standards of the school and leads to higher achievement. Muhammad (2010) observes that school environment is of utmost importance in promoting learning. Maguti (2000) in his research has shown that factors closer to students' actual learning process have the strongest impact. Scheerens (2003) concluded after a study that availability of teaching/learning resources enhance the

effectiveness of schools as they are basic factors that can bring about good literacy achievement.

Akomolafe and Adesua (2016) carried out a study on the influence of physical amenities on learners' level of motivation and academic achievement in senior secondary schools in South West Nigeria. The study examined the importance of physical facilities in improving the level of motivation and the academic achievement of senior secondary school. Using ex-post facto research design, with 1050 senior secondary school students from 3 states out of the six states in the South West Geo-political zone, the study used an inventory together with a questionnaire in data collection. Findings indicated that there was a significant relationship between physical facilities and learners' level of motivation and educational achievement. The study recommended that more physical, human and material resources of high quality should be made available in public school to motivate students towards learning. The study recommended that more precedence should be given to provision of funds to make the public school favorable for instruction to take place; this would improve the academic standard of public schools.

Guo, Justice, Kaderavek and McGinty (2012) studied the relationship between features of the classroom physical literacy environment (book materials, literacy area and writing materials) and psychological literacy environment (teaching and learning support), and pre-school children's achievements in two areas of developing literacy in an academic year. Findings indicated that feat physical literacy environment features had petite direct relationship with children's achievements in growing literacy, other than the quality of literacy area being a positive and significant determiner of children's achievements in alphabet knowledge (but not

name-writing ability). The study also showed that the physical and psychological literacy environment seemed to be interdependent, particularly with respect to provision of writing materials. Precisely, availability of writing materials was positively and significantly associated with children's development in alphabet knowledge and name-writing abilities within the context of high-quality only, instructionally supportive classrooms.

Kyalo, MuIwa, Matuta and Rutere (2015) carried out a study government prisons (GK prisons) in Nairobi to assess the scope and level to which physical learning environment affects the inmates' participation in the adult classes at post literacy level. Using probability sampling procedures, the study selected three adult education officers, six officers of prison welfare, 32 teachers and 96 adult learners who were prisoner and one adult education teacher. The study findings showed that effective involvement in post literacy project in prisons was impeded by lack of competent adult education teachers, lack of facilities and instructional materials.

County and Ndeke, (2013) investigated the relationship between school environment and academic performance in KCPE in public primary schools in Chuka division, Tharaka Nithi County. Respondents comprised of Educational Officers, teachers and pupils randomly sampled. The study found that lack of library, dilapidated furniture, lack of enough playground, congested classrooms, insufficient learning and teaching materials, complicated curriculum, lack of pupils' books and supplementary teaching as well and also, failure in syllabus coverage affected the performance of the learners in the division. The study observed that teachers were not using aids, syllabus was not well covered and the physical facilities were dilapidated in 70% of schools surveyed. The playground in approximately 30% of schools was small and

classrooms in 70% of schools were congested. The study recommended that key stakeholders in education; parents and government needed to mobilize resources and revamp the physical facilities. While the outgoing studies were focused on the individual learner achievement and the factors at play, this study was interested in early literacy p among lower primary school children.

2.3 Instructional Materials and Pupils' Literacy

According to Omulando (2009), resources are valuable tools of enhancing teaching and learning in language learning situation. Teachers lack of sufficient instructional resources limit their instructional process. It also limits their use of appropriate language teaching methods and enhancing learners' use of language learning strategies. Similarly, Minae (2004) notes that teaching and learning resources facilitate and motivate students to learn. Therefore, teachers should make teaching and learning resources an essential part of their instructional practice. According to the Primary School English language syllabus (2002), teaching and learning resources for literacy skills include: audio-visual resources such as video tapes, printed materials which include class readers' books and other resources such as pictures which can be used to generate ideas for writing. With the advent of new technologies, many of these materials can be provided in electronic formats, thus making the facilitation of learning easier and sometimes faster (UNESCO-Bangkok 2011).

In addition, Gathumbi and Masembe (2005) point out that, audio-visual materials such as tapes, pictures and diagrams should be used to make students aware of the content of writing. They further note that good literacy materials should be learner-centered rather than teacher-centered. They should also focus on helping students to

develop their own strategies for learning. Resources should allow students to be creative and provide stimulating activities that focus students' attention on the reading and writing skills to be learnt. They should be task-based so as to motivate students' learning and make them see the usefulness of reading and writing.

Good quality reading materials should target all types of learners, from children who are new readers to competent readers (UNESCO, 2003). Reading materials should be appropriate and relevant to all types of learners. Materials based on the reading level, interests and needs of the learners, written in the languages they speak, addressing the problems they have identified, and helping to achieve their personal and community goals, will serve as a useful resource for their development (Malone and Arnove, 1998).

Oladejo, Olosunde, Ojebisi and Isola (2011) examined the influence of standardized and improvised instructional materials on performance in physics among secondary school in Oyo State, Nigeria. The study used a quasi-experimental of the pretest – posttest non-randomized control group. Three co-educational secondary schools were purposively sampled. The reliability coefficient was 0.76. Three hypotheses were formulated and tested at 0.05 level of significance. Using ANOVA and ANCOVA, results showed a significant difference in the achievement of students taught using standard instructional materials, those taught with improvised instructional material and those in the conventional instruction. Thus, the students taught with improvised instructional materials obtained the highest achievement score at posttest ($F=74.94$), followed by those with standard instructional materials ($F=63.07$), while the control group scored the lowest ($F=39.89$).

A study by Ouma (2005) on achievement motivation in reading and writing among primary school pupils, showed that pupils from schools with adequate teaching and learning resources were motivated to achieve reading and writing, unlike those from schools which were not adequately equipped with teaching and learning resources. This, therefore, shows that teaching and learning resources have a bearing on pupils' motivation and achievement in reading and writing. It is in light of this that the study will establish whether teaching and learning resources influence pupils' literacy achievement.

A study carried out by Michaelowa (2001) found that, the availability and relevance of textbooks had a significant and positive impact on learning outcome. School management therefore, should endeavor to provide necessary resources for the support of teaching and learning especially the purchase of relevant textbooks, building and equipping classrooms, libraries and laboratories with correct apparatus to facilitate effective learning in the school. Much literature in advanced countries suggest that resources matter and the most important cost-effective input to the textbook and other pedagogical and learning materials (Fullen and Clarke, 1994). Similarly, Hanushek (1995) argued that there were no clear systematic relationships between key inputs and student performance. He observed provision of quality education by merely providing more inputs is often not effective. The abundance or lack of school resources have a less important role than the efficiency in the use of such resources. According to him, performance depends on the quality of inputs, their appropriateness to curriculum or the school environment.

Bunyi (2001) in her study indicated that schools in Central and Rift Valley provinces in Kenya did not have enough resources for English literacy. Therefore,

he observed that shortage of English language and instructional resources was a major issue which needed addressing by the government and any other relevant bodies. The current study questions the adequacy of the literacy materials given that the government has been funding schools through Free Primary Education (FPE) program since 2013.

2.4 Teacher's in-service Training and Literacy Achievement

The teacher's educational standing is an important aspect since it predicts the pupil's level of literacy achievement, (Nyasimi, 2014). Ferguson and Gilpin (2001) argue that teacher quality is a broad term, which include dimensions such as experience, subject knowledge, scholastic aptitudes, and their teaching ability. Several researchers studying the relationship between teachers' and student achievements have shown that teachers with high educational backgrounds are more likely to produce a gain in pupils' achievement. Omulando (2002) and Omboto (2004) say the academically qualified teacher is more likely to have more knowledge about the relevant subject than the academically less qualified teacher.

Muhammad and Rashid (2011) showed that professional qualification, refresher courses or trainings, teacher experience and academic qualification were the most important qualities of an instructor. Qualities such as academic qualification and knowledge of the subject matter, commitment of a teacher and other characteristics have an influence on instructional process. They observed that the ministry should regularly provide for refresher courses for teachers in different subjects. Metzler and Ludger (2010), in their study found that teacher quality is a key determinant of student learning and subsequent literacy achievement. This may be because such a

teacher is well equipped with content hence able to ascertain the kind of knowledge to relay to pupils.

Similarly, Okumbe (1998) argues that there was a strong indication that many teachers in both primary and secondary schools in less developed countries were conceivably forced into the profession of teaching. This implied that the profession of teaching in some less developed countries had two groups of teachers, those who have chosen the profession for intrinsic motivations and those who, for reasons beyond their control found themselves in the profession. The two have varying influence on the learners owing to motivating factors for the job. Kombo (2005) observes that the learners regard the teacher as a source of power, knowledge and skills as well as personal satisfaction. A teacher is expected to take up many roles, which include teaching, guidance and administration.

A study done by Newstrom & Davis (2002) on quality of teachers, teacher training and student performance showed that qualified teachers made a difference among the learners unlike untrained teachers. Particularly, teacher qualification, experience and amount of education and knowledge had positive significant relationship with learner achievement. It is worth noting that it is the teacher who translates the curriculum goals into learning experiences and the method of presenting the content. They also do most of the evaluation. Therefore, the teacher initiates, develops and directs student learning so as to realize good results and a high level of transition.

Goddard, Hoy and Woolfolk (2011) have argued that self-efficacy was a pointer or predictor of effective teaching. Research also shown that highly efficacious teachers have the ability to indicate higher levels of determination and resilience in their

work, even in difficult and challenging situations. They further define teacher self-efficacy as a teacher's judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated (Barnett, 1995). Another dimension is the teacher's external efficacy which avers that a student's background, family status, and social upbringing are key factors that influence student learning in the classroom (Barnett, 1995).

Those pupils who are assigned to several ineffective teachers have significantly lower achievement and gains in achievement than those who are assigned to several highly effective teachers in a sequence (Metzler and Ludger, 2010). Kuenzi (2008) argues that certain teacher attributes like verbal ability, subject matter knowledge, pedagogical knowledge, years of experience and certification status influence student achievement. It is therefore necessary that a teacher of English should be a good communicator in terms of diction and relevance.

Research shows that teacher expertise has a significant influence on student learning (Saracologlu, 2000). Meaningful school improvement calls for enhancing the knowledge, skills, and characters of teachers. Whatever course of action a school or the Ministry takes, success depends on providing support and resources for teachers in order to strengthen existing expertise or for them to learn new practices. In the case of the teaching of reading and writing, quality teaching involves knowledge of how students learn to read, knowledge of how to assess reading proficiency and growth and knowledge of how to use assessment information to apply the appropriate strategies (Sahni, 2001).

According to Lancaster (2003) the best instructional practices for teachers entails the following characteristics: The teacher stimulates self-directed learning by giving activities adaptable to individual learning styles. The teacher is a coach, less active than students. The teacher poses questions rather than provides answers. The teacher inspires risk-taking, broad parameters, debate and support students' decision making. In Tusome literacy program the teacher is the core in learning having to prepare materials, set the context of a text, paraphrase and make cues. Learners only read, and follow directions giving little room for individual learner to explore literacy.

Teaching experience is also another measure of teacher quality as it is a lifelong process and part of personal development (KICD, 2006). Proficiency in English is a requirement for employees to advance and improve technical skills at work places (Daily Nation, 2009). Teachers need to be trained on how to enable children acquire literacy skills by coming up with better ways of lesson preparation, teaching strategies or methods and teacher motivation. From the foregone literature review, it is quite arguable, that the teacher's factors reflect heavily on language performance in primary schools and directly influence the achievement in literacy levels in pupils. The findings beg for a detailed study in Hamisi sub-county to ascertain how these variable influences achievement in literacy achievement.

2.5 Supervision and Literacy Achievement

Current educational reforms place a great value on the effective leadership and management of schools. The reason behind this position is that orderly, efficient and well managed school environment offers the prerequisites for improved student learning. Good leadership has been recognized as a vital characteristic of school

bores (Hoy & Hoy, 2009). According to Lezotte (2010) instructional leadership is one of the correlates of effective schools. Effective head teachers are practical and consults in building team leadership and a culture conducive to learning and professional growth. In the effective school, the head teacher, deputy and senior teachers act as instructional leaders and effectively and persistently communicate and model the mission of the school to staff, parents, and pupils.

Leadership has been shown to result in school improvement and effectiveness (Lezotte, 2010). The indicators of schools having effective instructional leaders include factors like teacher morale and satisfaction, teacher self-efficacy, school and organizational culture, teacher effectiveness and time on task, and improved academic performance (MacNeil, 1992). Effective instructional administrators are needed in the school to convey the vision and mission of the school. By obstinately emphasizing the school's mission, the administrators create a shared sense of purpose and institutes a set of common core values among the teaching staff which directs members of the teaching staff and the entire team towards the goals (Kirk & Jones, 2004).

A research done by Lezotte concluded that in effective school, the head teacher performs the role of an instructional leader and successfully and recurrently communicates the mission of the school to staff, parents, and students. In addition, the head teacher comprehends and applies the characteristics of instructional effectiveness in the management of the instructional program. Clearly, the role of the head teacher as the articulator of the mission of the school is crucial to the overall effectiveness of the school.

In 2007, Marks and Nance investigated how several accountability contexts including teachers, local boards, districts and school site councils, Teachers/parent associations, and states affected the capability of heads of institutions in influencing teaching and learning and administrative decisions in their schools. 1999-2000 Schools and Staffing Survey responses of 8,524 elementary, middle, and high school principals in low-, moderate-, and high-control states provided the data. The primary analytic technique for the study was hierarchical linear modeling (HLM) which was used to examine variation in principal influence within and between states. Results from the study showed that the various accountability contexts differentially affected principals' influence, which also varied by domain, extent of state control, and region. The study observed that the principals' influence in both the managerial and teaching/learning spheres was strongly related to that of teachers' active participation in decision making, suggesting that there were benefits of mutuality in school leadership.

Gentilucci and Muto (2007) did an investigation into what students perceived their principals do to influence their academic performance. Students were queried on the instructional leadership conducts of their current head teachers and their opinions and perceptions of head teachers they had met in previous schools. Students identified direct and highly influential instructional leadership behaviors. Among these were principal approachability, interactive classroom observation and/or visitation, and instructional leadership behaviors that firmly establish administrators as the "principal teachers" in their respective schools. The study found out that principal availability in schools correlated with improved school environment, less discipline cases and improved communications among students, teachers, and the head teachers.

Cibulka and Nakayama (2000) contended that to achieve meaningful changes in instructional practice; teachers ought to have opportunities to take part in shaping the vision of the school. According to them, teachers work hand in hand with the head teachers to guarantee prospects and visions for learner achievement are understood across classrooms and across grade levels. Johnson (1997) suggested that some serious elements ought to be in place for the leadership of the school to be effective – to create an environment where properly supported pupils can learn and teachers can teach. He listed these elements as: “effective administrative leadership; positive expectations; strong, integrated curriculum; shared decision making; and school wide responsibility for teaching and success” (pp. 3-4). These elements include the ideas that head teachers need to create a professional environment in which teachers can thrive in and contribute to the overall school goals and environment. Instructively, school administration aspects such as staff meetings, checking schemes and lesson plans and class observation by the head teacher were found to influence learner achievement in Kenya (Ouma, 2005).

However, some studies found a weak relationship between supervision and learner performance. For instance, focusing on school leadership relations between principals and teachers, Marks and Printy, (2003) examined the potential of their active collaboration around instructional matters to enhance the quality of teaching and academic achievement among learners. The analysis was grounded in two conceptions of leadership-transformational leadership and instructional leadership. Using a sample of 24 nationally selected restructured schools, they sampled 8 elementary, 8 middle, and 8 high schools. In keeping with the multilevel structure of the data, the primary analytic technique was hierarchical linear modeling (HLM).

The study found that transformational leadership was a necessary but insufficient condition for instructional leadership. When transformational and shared instructional leadership coexist in an integrated form of leadership, the influence on school performance, measured by the quality of its pedagogy and the achievement of its students, was substantial.

2.6 Summary of the Literature Review

Studies (Bernelius and Kauppinen, 2012; Thapa, Cohen, Guffey & Higgins-D'Alessandro, 2013) reveal the significance of the accessibility of physical facilities to learners and accentuated that the accessibility of these physical resources are very vital to achieving effectiveness in instructional delivery and supervision in the school system. McNeil, 2013 indicated that non-availability of these basic facilities such as classrooms, office accommodation, workshops, sporting facilities, laboratories, library et cetera which is being experienced in most of the primary schools in Kenya is a perfect reflection of what is obtained by learners in the national examinations. Goddard, Hoy and Hoy (2000) opined that favorable learning environment improves academic and professional standards of the school and leads to higher achievement. However, Guo et al. (2012) found out that that features of the physical literacy environment had little direct association with children's gains in emergent literacy, with the exception of quality of literacy area being a positive and significant predictor of children's gains in alphabet knowledge. This inconsistency warrants further research to ascertain the influence of the physical literacy environment on learner performance.

Brownell, Sindelar, Kiely and Danielson (2010) showed that teachers with high educational backgrounds are more likely to produce a gain in pupils' achievement

since an academically qualified teacher is more likely to have more knowledge about the relevant subject than academically less qualified teacher. Therefore, pupils assigned to several ineffective teachers have significantly lower achievement and gains in achievement than those who are assigned to several highly effective teachers in a sequence. It is therefore evident that teacher's factors reflect heavily on language performance in primary schools and directly influence the achievement in literacy levels in pupils. These assertions beg for a detailed study in Hamisi sub-county to ascertain how these variable influences literacy and objectives among learners in public primary schools.

While Marks & Nance (2007) and Gentilucci & Muto (2007) observed that the principals' influence in both the supervisory and instructional domains was strongly related to school performance, Marks and Printy, (2003) found that transformational leadership was a necessary but insufficient condition for instructional leadership and hence not a precursor to good performance. There is therefore need for a detailed study to establish the relationship between supervision and learner performance in Hamisi sub-county hence the need for this study.

CHAPTER THREE

METHODOLOGY AND RESEARCH DESIGN

3.1 Introduction

This chapter presents the research design, location of study, target population, sample size and sampling techniques, research instruments and pilot study. Methods of data collection and analysis, and ethical considerations are addressed.

3.2 Research Design

The study used a cross-sectional survey research design. This design was suitable for this study in that it gave the researcher an opportunity to collect data on determinants of literacy among lower primary school pupils. The research design was intended to help the researcher to describe the opinions or characteristics of teachers based on data collected as postulated by Ogula and Onsongo (2009). It allowed the researcher to gather information using different instruments, summarize, interpret and present findings for the purpose of clarification (Orodho, 2009). Important issues in Survey Research Design is Sampling. Teachers' curriculum support officers, head teachers and literacy teachers were involved in the study. Different children at class 1 and 2 were given a test at the same time to assess their literacy skills.

According to Kothari (2004), descriptive research design is used when the researcher has certain issues to be described by the respondents about the problem. In this case, the researcher went to the population in a bid to tackle the topic of the study. In this case, the researcher was interested in assessing the school based factors on literacy on lower primary school pupils' in Hamisi Sub-County.

3.3 Location of the Study

The study was conducted in Hamisi sub-county of Vihiga County in Western Kenya. The County covers an area of 745.5 square kilometers. It is made up of four sub counties; Vihiga, Hamisi, Emuhaya and Sabatia. Hamisi sub-county is a hilly terrain straddling the Equator, from east to west and most of the areas are rocky. Hamisi is inhabited by the Tiriki community sub tribe of the larger Luhya community. The population of the area is estimated to be 148,259 according to the 2009 census. The majority of the inhabitants are farmers. The main cash crop is tea, which is grown at higher altitudes in the region. Other crops are maize, millet, bananas, papaya, sweet potatoes and cassava. The inhabitants also rear cattle, goats, sheep and chicken. The area also has touristic attraction sites some of which include the Evergreen Kaimosi forest. This sub-county is one of the poorest in the country due to the high population growth among other factors. Hamisi has 147 total schools, 114 of which are primary schools while 33 are secondary schools while Vihiga County has 456 public primary schools and 108 private schools. Hamsi was selected owing to its poor rankings in national exams, low literacy levels and transition rates, (Uwezo, 2010 & 2011) as many other areas in the republic. However, in the past, no study had been done in the area to address the challenge under investigation. Singleton, Straits and Straits, (1993) asserted that a good setting for any given study is one which is directly related to the interests of the researcher and easily accessible. Therefore, Hamisi sub-county was purposively selected since it provides an area where the study objectives were well met and it was accessible too to the researcher.

3.4 Target Population

The target population for the study was the 147 primary schools, head teachers, teachers and class one, two pupils of the schools and Teachers' Advisory Centre officers. The schools had 147 head teachers, 1900 teachers and 7980 class 1 and 2 pupils. Head teachers and teachers were targeted since they play a key role in the reading lives of the pupils therefore it was important to establish their views on their contribution to reading in lower classes. Thus, a total population of 10029 people.

3.5 Sampling Techniques and Sample Size

3.5.1 Sampling Procedure

A stratified sampling technique was used. This technique entails balanced sampling in two or more stages from groups within the target population. Simple random sampling was employed to select eleven public and three private schools to represent the others. To accomplish this, the researcher wrote out the names of all schools in the study area and cut them out in small pieces of paper. The papers were folded and reshuffled in a container after which the desired numbers were picked. From each of the schools selected, the researcher picked two classes (a class at each of standard one and two) for purposes of lesson observation, reading tests and checklist. Again, pieces of papers bearing "yes" or "no" were administered to select the stream.

One literacy teacher from each class one and two of the sampled schools were selected by use of simple random sampling technique in schools with more than one stream. Four pupils (two girls and two boys) from each class were selected from the sampled schools by simple random sampling. All the pupils were asked to write their names on provided pieces of papers and to fold them. The researcher collected the papers from girls and boys separately, mix them and pick 2 members for each

group to be included in the sample. All the head teachers of the sampled schools were purposefully selected by virtue of their office.

3.5.2 Sample Size

Gay and Airasian (2003) suggested that 10-25% of the target population may be used as a sample. Therefore, the study used random sampling to select 10% (14) of the schools, 3 of which were private while 11 were public primary schools. From the 14 schools sampled, all head teachers, two literacy teachers and four pupils from every class constituting two girls and two boys were selected from each school. The study also selected 2 CSO officers. The total sample was therefore 100 respondents. Table 3.1 shows the sample grid.

Table 3.1: Sample Grid

Respondents	Target	Sample
Head teachers	141	14
Teachers	1900	28
Pupils	7980	56
CSO officers		2
TOTAL		100

3.6 Research Instruments

The data was gathered using observation, questionnaire, a pupils' test and checklist. The observation schedule helped gather information on the literacy levels during lesson delivery. Questionnaires were administered to the H/ teachers, teachers, pupils and CSOs. It had open and closed ended questions. The checklist was used to in collecting information which helped to determine reliability of the data collected

using the questionnaires. The pupils' test was used to collect information on the ability of the pupils to read simple words.

3.6.1 Head Teachers' Questionnaire

This questionnaire (Appendix II) had three sections; A, B and C. Section A sought to obtain demographic information including gender, academic qualification and duration of experience in the school headship. Section B sought to gather information on school based factors that affect teaching and learning literacy. Section C gathered information on the influence of the teacher's factors.

3.6.2 Teachers' Questionnaire

The questionnaire (Appendix III) was composed of five sections. Section A sought the teachers' demographic information which includes gender, duration of experience as a subject teacher and TELP information. Section B intended to gather information on teaching resources in the school. Section C seeks to get information on the influence of the state and availability of school physical facilities. Section D sought to gather information on teacher based factors. The last section E aimed at getting information on supervision of teachers handling the implementation of teaching literacy skills in the school.

3.6.3 Observation Checklist

Observation was another important part of data collection. Maxwell (2005) argues that observation often provides a direct and influential way of learning about people's behaviour and context in which this occurs. In line with this Gall et al (2007) says observation provides rich data sources that offer an in-depth explanation of the case. The researcher used an observation checklist (Appendix V) to

collaborate information gathered from other methods of data collection. The checklist had two sections. The checklist helped to gather information on the state and availability of the physical environment of the school which is a component of the school physical facilities, availability of school instructional materials, the teachers teaching methods and the role of supervision on the pupil reading ability.

In the first section, the researcher observed the availability, state and adequacy of various school physical facilities. The second section helped the researcher to obtain first-hand information on how the teachers implement the program in the classroom. The researcher scrutinized the classrooms for any information related to the use of teaching materials, reading practices such as group reading, individual reading, organization of the classroom, libraries, or information charts that had been displayed in classrooms or other reading rooms.

3.6.4 Pupils' Reading Test

The pupils' test helped ascertain information on pupils' ability to read simple words. The test was composed of fifty simple words which the pupils were required to read correctly and be scored. For any correct reading, the pupil was scored a maximum of 2 points. Similarly, a slightly correct reading earned the pupil 1 mark and 0 for an incorrect reading.

3.7 Pilot Study

The research instruments were piloted with pupils, teachers and head teachers in two primary schools; one public and one private primary school that were not to be included in the sample of the study. A pilot study is a crucial element of a good study design since it increases the likelihood of success of the main study (Van

Teijlingen & Hundley, 2002). The pilot study also helped in testing the suitability of the items with the intention of improving their validity and reliability.

3.8 Validity of the Instruments

Content validity was used to test the validity of the instruments. This was achieved by going through every item one by one and ensuring that all the variables and objectives of the study are covered in the instrument items. The researcher also sought expert opinion from university supervisors through discussions and insights.

3.9 Reliability of the Instruments

Test retest method was used to measure the reliability of the study tools. The researcher administered questionnaires to head teachers, teachers of the pilot schools and Teacher Advisory Centre (TAC) officers. After two weeks, the researcher visited the schools and TAC and administered the same questionnaires to the same respondents. The internal consistency of the responses was determined by Cronbach's alpha. The tools were considered reliable if the responses from the two tests were consistent. Using SPSS, Cronbach's alpha coefficient was determined to ascertain the internal consistency of items for each variable. Cronbach's alpha is expressed as a correlation coefficient ranging from 0 to +1. An alpha coefficient above 0.7 is acceptable (DeVellis, 2011). Alpha correlation was found to be 0.78 which according to George and Mallery (2003) was acceptable.

3.10 Data Collection

The researcher first got an introductory letter from Kenyatta University, with a view of getting a research permit from National Commission of Science, Technology and Innovation (NACOSTI). A permission from the head teachers of selected schools to

be allowed to conduct the study was sought. The researcher pre-visited every school for familiarization with participants and removed any anxiety and developed trustworthiness. The researcher made prior arrangements on the time and date of the study to avoid disruption of lessons. The researcher administered all the questionnaires in person. However, literacy teachers helped him in administering class tests to the pupils in their respective schools.

3.11 Procedure of Data Analysis

First, data collected using the questionnaires was coded, assigned labels to variables categories and entered into the computer. Frequencies and assertions of certain responses were noted. Quantitative data was entered into a Statistical Package for Social Sciences (SPSS) version 21 computer software data template during data collection process. Data cleaning was done before being processed and analyzed using quantitative procedures. Analysis involved discussion summary, presentation (tabulation and charts) and analysis using descriptive statistics (means, percentages, and frequencies) Inferences were made from particular data under each theme and conclusion were drawn from the findings. Frequency tables were used to present the information.

3.12 Ethical and Logistical Considerations

Authority to do research was acquired from Kenyatta University graduate school (Appendix VIII). The permit to undertake research was also obtained from the National Commission for Science, Technology and Innovation (NACOSTI) (Appendix IX & X). Discretion of the data and concealment of respondents was assured since participants' names were not used but were assigned codes. He also obtained informed consent of the individual respondents before collecting data.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

The purpose of this chapter is to report and interpret the finding of the research. The research sought to assess the influence of school factors on literacy in lower primary school pupils in Hamisi Sub County. The main sub headings include, instrument return rate, demographic characteristics of the respondents, school's physical infrastructure and literacy achievement, adequacy of teaching and learning resources/ instructional facilities and pupils' literacy achievement, influence of supervision by Head teacher and CSO's on literacy achievement. The study sought views from 100 respondents that comprised of 2 Curriculum Support Officers (CSO), 14 head teachers, 28 teachers and 56 pupils drawn from 11 public primary schools and 3 private schools.

4.2 Response Return Rate

Questionnaire return rate is the proportion of the sample that participated as intended in all the research procedures (Mugenda and Mugenda, 2003). The data was gathered using observation, questionnaire, a pupils' test and checklist. Questionnaires were administered to the H/ teachers, teachers, pupils and CSOs. A test was administered to pupils in class 1 and 2. The instruments were administered to respondents then collected. Table 4.1 shows the number of research instruments presented to respondents and the rate of returning the instruments.

Table 4.1: Return Response Rate

Target Category	Sample Size	Number Responded	Return Rate (%)
Curriculum support officers (cso)	2	2	100
Questionnaires returned by head teachers	14	12	85.71
Questionnaires returned by teachers	28	25	89.29
Tests done by pupils	56	54	96.43
TOTAL	100	93	93

All the two questionnaires administered to Curriculum Support Officers (CSO) were returned. This was 100% return rate. The questionnaires given to head teachers and teachers were returned in the rate of 85.71% and 89.29% respectively. Further, 96.43% of the pupils did the test. These percentages return rates fell within the recommended return rate of at least 50 percent (Mugenda and Mugenda, 2003). This implies that the data provided is reliable and valid to be a true representation of the entire population.

4.3 Levels of Reading Skills the Pupils

The study sought to establish the extent to which pupils manifested readings skills such as decoding, vocabulary, fluency and comprehension. Data was collected from 56 pupils and graded as Good (75 – 100%), fair (40% - 74%) and poor (below 40%). Results are indicated in Table 4.2

Table 4.2: Ratings of Reading levels of Pupils

Grade	Frequency	Percentage
Good	9	16
Fair	27	48
Poor	20	36
Total	56	100

Table 4.2 indicates that 16% of the pupils scored between 75% and 100% having been able to read most of the words correctly. The results also showed that 48% of the learners scored between 40% and 74% while 36% of the learners scored below 40% showing that they were unable to attempt some of the words. Head teachers also alluded to the view that most pupils in their schools were not very good in reading especially at the lower primary levels though some were good in comprehending vocabularies. The researcher also noted that most of the pupils manifested lots of difficulty in pronouncing words fluently.

These findings corroborate the assertions of Dahl (1974) and Samuels (1985) that reading fluency is u determined by oral readings, although good readers also demonstrate this skill when reading silently. Fluency develops from reading practice. Frequent oral reading is the best way for children to improve their fluency. These findings affirm the fact that skills such as letter-sound, letter combinations and the making of sense and association of words need to be acquired first before the reader can read more complicated comprehension skills. Besides, reading is the construction of meaning from a written passage that involves word recognition, vocabulary, fluency and comprehension.

These findings assert that most pupils lack the ability to read which is a major determiner of pupils' academic success or failure. In other words, successful acquisition of reading skills during the lower primary levels is a good indicator of later literacy achievement; skills which most public in Hamisi Sub-county lacked.

4.4 Effect of Physical Facilities on Literacy Achievement

The first objective was to determine how the adequacy of physical facilities influences pupils' literacy achievement. The respondents were asked about sufficiency of classes, latrines, furniture (desks) and availability of school library in the school.

4.4.1 Effect of Sufficient Classrooms on Literacy Achievement

The study sought to establish the adequacy of classrooms in public primary schools in Hamisi sub-county. The results were presented in Table 4.3 below.

Table 4.3: Sufficient classrooms and literacy achievement

Adequacy of Classes	Frequency	Percentage
Very Adequate	15	16
Adequate	27	29
Fairly Adequate	20	21
Inadequate	32	34
Total	93	100

According to Table 4. 3, 16% said they had very adequate classrooms, 29% adequate, 21% fairly adequate and 34 % inadequate classes. The findings imply that most of the schools had inadequate classes thus could be a contributing factor on

pupil's low literacy achievement in the sub county. This item was important because pupils will enroll in schools where they are guaranteed of shelter which offers good learning environment and promote better performance compared to those studying under trees whose lessons are always interrupted and dictated by weather conditions. In this study, it was also noted that 34% of the schools had inadequate classrooms which is against Goddard, Hoy and Hoy (2000) view where he observes that favorable learning environment improves academic and professional standards of a school and leads to higher achievement.

4.4.2 Adequate Furniture and Literacy Achievement

The study sought to establish the influence of the availability of furniture on pupil literacy level and how this has influenced literacy in public primary schools. Results are presented in Table 4.4 below.

Table 4.4: Furniture Availability and Literacy Achievement

Item	Frequency	Percentage
Very adequate	6	6
Adequate	16	17
Fairly adequate	33	36
Inadequate	38	41
Total	93	100

Table 4.4 shows very adequate furniture at 6%, adequate at 17%, fairly adequate, adequate at 36% and inadequate at 41%. The findings indicate that most of the schools have inadequate furniture for use since most of the respondents noted that they had inadequate furniture. Furniture is vital facilities in the school since they are

used by pupils while in class and make them more comfortable during the lesson. Its inadequacy may lead to poor concentration and ultimately low literacy achievement. The World Bank (1988) noted that most rural schools are characterized by dilapidated buildings, missing or broken desks and chairs, lack of good ventilation and sanitation facilities had the net effect of discouraging schools to perform better. This is in agreement with the present study since most respondents noted that they did not have enough furniture 41%.

4.4.3 Enough Latrines and Literacy Achievement

The study sought to find out the adequacy of latrines in public primary schools and how the adequacy influenced literacy in Hamisi Sub County. Table 4.5 presents the results.

Table 4.5: Adequacy of Latrines and Literacy Achievement

Pupils queue at the latrines	Frequency	Percentage
Very adequate	11	11.8
Adequate	8	8.6
Fairly adequate	30	32.3
Inadequate	44	47.3
Total	93	100

As for adequacy of latrines, Table 4.5 shows that very adequate 11.8%, adequate at 8.6%, fairly adequate 32.3% and inadequate at 47.3%, the latrines were not enough and that pupils queued at the latrine for a long time. Those who responded very adequate at 11.8% noted that they don't queue at the latrine and both girls and boys

had separate utilities for use. It is worth noting that most of the schools at 47.3% had inadequate number of latrines for its pupils and most of them were in poor condition. This implies that inadequate number of latrines in the schools; which is a vital facility, makes pupils to waste a lot of time queuing at the latrines instead of being in class to learn. According to Oni (1992), facilities constitute a strategic factor in organizational functioning yet in most public schools in Hamisi Sub County had inadequate latrines at 41% this is likely to have an influence on pupils' literacy achievement. This is so because they determine to a very large extent performance in public primary schools. Olutulo (1982), noted that the availability of the school latrines and other structures contribute to good literacy achievement as they enhance pupils' wellbeing.

4.4.4 Availability of a school Library and literacy achievement

This study sought to establish the availability of the school library in the sampled schools. Results are presented in Table 4.6 below.

Table 4.6: Availability of a School Library and Literacy Achievement

Availability of a library	Frequency	Percentage
Yes	45	48.39
No	48	51.61
Total	93	100

Table 4.6 shows that 48.39% of schools had a library while 51.61% noted they had no library. The findings in table 4.5 reveal that most of the schools do not have a school library which is an important facility for proper storage of textbooks.

Through observation, the study revealed that the libraries were not equipped with all the necessary books for literacy. This is a pointer to the low literacy levels in the sampled schools. It is vital for the school management and the government to ensure that all schools have libraries because well stocked libraries enhance literacy achievement of pupils. Schools without libraries experience low literacy achievement levels since pupils have no place where they can do their own private studies. Sometime they do their studies at times under a tree or in the open field. Pupils' literacy achievement is a function of inputs such as laboratories, textbooks, school buildings and libraries among others (Goddard, Hoy and Hoy 2000) yet schools in Hamisi sub County at 51.61% did not have libraries thus the likely reason for decreasing academic performance in the region.

4.5 Teaching /Learning Resources and Literacy Achievement

The second objective was to investigate how teaching /learning resources influence pupils' literacy achievement in Hamisi Sub County. The section attempts to look at the extent to which teaching/ learning resources influence pupils' literacy achievement. The responses were sought from head teachers and teachers. The study analyzed the data in terms of provision of literate materials in lower primary schools. The study analyzed the provision in terms of text books, homework books, charts displayed in class, story books, preparation materials like mark pens, manila papers, sugar paper. The analyzed data is shown in Table 4.7.

Table 4.7: Sufficiency of Literate Materials in Lower Primary Schools

Material	Adequate		Inadequate	
	Frequency	Percent	Frequency	Percent
Text books	31	83.8	6	16.2
Homework books	36	97.3	1	2.7
Charts	22	59.5	1	39.5
Story books	18	48.6	21	56.8
Preparation materials	12	22.4	25	77.6

From the table 4.7, 83.8% of the respondents said there was enough text books provided while 16.2% negated. 97.3% affirmed for the provision of homework books. 59.5% of the respondents admitted they were adequately provided with charts while 39.5% of the respondents were on the contrary. 48.6% of respondents said that story books were adequately provided while 56.8% said they were not. Preparation materials not adequately provided rating at 77.6% while 22.4% indicated adequate provision. This generally means that Tusome program ensured adequate provision of materials to be used in the literate environment of lower primary schools in Hamisi Sub County.

The study findings are in agreement with the study done by Likoko, Mutsotso and Nasongo on the adequacy of teaching and learning materials and physical facilities and their effects on quality of teacher preparation who found out that lack of adequate facilities like libraries and inadequate instructional materials have negative effect on the quality of graduates produced. Moreover, Ouma (2005) in his study on achievement motivation in reading and writing among primary school pupils,

showed that pupils from schools with adequate teaching and learning resources were motivated to achieve reading and writing, unlike those from schools which were not adequately equipped with teaching and learning resources. This could more likely affect the private schools in Hamisi Sub County that have inadequate textbooks as they are not fully incorporate in the programme. To ascertain this, the study sought to establish pupil-textbook ratio in the sampled schools. Results are presented in Table 4.8 below.

Table 4.8: Ratio of Textbooks to Pupils

Ratio of textbooks to pupils	Frequency	Percentage
1:1	31	83.8
1:2	4	10.8
1:3	2	5.4
Total	37	100

Table 4.8 shows that the ratio of textbooks to pupils was 1:1 in most of the public schools at 83.8%. Only 10.8% of the respondents admitted that books are shared in the ratio of 1:2, only 5.4% reported the ratio of textbooks to pupils as 1:3. Advisably the small ratio is in accordance to MOE expectancy that the ratio of textbooks to pupils should be 1:1 by 2012 (GOK, 2010) thanks to grants disbursed by sponsors (USAID) inform of textbooks and teaching aids for the pupils. This conforms to the views of Compassion (2011) who avers that school sponsors provide educational support to primary school pupils. From the findings, the textbook – pupil ratio was good enough to help children achieve high literacy level because the highest percentage of the pupils (83.8%) had a text book by themselves and didn't share it with any other pupil. This therefore indicates that there were other causes of low literacy levels among the pupils other than text books.

Omulando (2009) avers that resources are valuable tools of enhancing teaching and learning in language learning situation. Teachers lack of sufficient instructional resources limit their instructional process. It also limits their use of appropriate language teaching methods and limits learners' use of language learning strategies. Still, the sentiments resonate with Mutai's (2006) assertions that learning is strengthened when there are enough reference materials such as textbooks, teaching aids that can positively change teachers and learner's attitudes. The study notes that there are teaching / learning materials to match the number of pupils in the school is which likely to increase pupil's enrolment and subsequently retain them at school.

4.6 Teachers In-service Training or Seminars

The researcher sought to find out from head teachers and teachers on whether they have or do attend (an) in-service training aimed at enhancing Tusome literary skills in their learners. This was important to help establish whether the teachers in charge of teaching reading literacy enhance their skills regularly, the head teachers and teachers were asked how often they attended in-service training or seminars. Table 4.9 presents the responses from the head teachers.

Table 4.9: Teachers' Response on In-Service Training or Seminars Attendance

Often	Frequency	Percentage
Once per term	2	5.4
Twice per term	29	78.4
Never	6	16.2
Total	37	100

An analysis of the Table 4.9 of head teachers and teachers' responsible for teaching reading (English) in their schools' responses on whether they have ever or do attend any in-service training showed that the majority (78.4%) of the teachers have ever/do attend(ed) in-service training on how to teach reading, two (5.4%) reported that they attend in-service or seminar once per term, while (16.2%) of the sampled teachers reported they have never. Interestingly, they were from the private schools. The results generally showed that most of the teachers updated their skills regularly (once per term). In-service training for teachers has been found to have a positive influence on their output and learner performance for instance Harris and Sass (2011) found out that teachers undergoing in-service courses were highly efficient in classrooms when compared to teachers who had no further training. Therefore, owing to the findings that over 75% of the teachers attended the inservice training twice in a term, there was a high likelihood that pupils would have performed better in literacy, hence the low literacy among the pupils was not as a result of lack of inservice training for teachers. This is in line with Daily Nation (2009) that notes proficiency in English is a requirement for employees to advance and improve technical skills at work places. Naoreen, Arshad and Aslam (2011) whose study on the effect of in-service teacher training on students' achievement which revealed that trained teachers were better than untrained teachers. These findings points to having effective teachers which translates to effective implementation of teaching and learning. It is therefore hoped that literacy skills will improve forthwith.

4.7 Supervision of Teaching Instructions and Literacy Achievement in Lower Primary

The fourth objective sought to establish whether supervision had a serious bearing on the achievement of literacy skills in lower primary school pupils. The head teachers and CSOs were asked how they assess English teachers who are responsible for teaching reading literacy. The study investigated the number of times teachers were observed by head teachers to ensure literacy is enhanced among children. The result of the analyzed data is shown in Table 4.10 below.

Table 4.10: Supervision and Literacy Achievements

Supervision	Frequency	Percentage
Not regularly	2	20
Supervised	7	70
Once a month	1	10

From the Table 4.10, it is clear that head teachers supervise teachers (70%) in its instructional practice to ensure it is implemented in schools. This act by head teachers does influence the extent of implementing Tusome Program by teachers in their daily instructional practices in lower primary school in Hamisi sub County. The head teachers were asked how they assess teachers. Table 4.11 presents some ways used in their assessment.

Table 4.11: Methods of Assessing Literacy Teachers

Assessment method	Frequency	Percentage
Subject mean score in exams	9	90
Inspection of learner's exercise books	4	40
Class observation	8	80
Checking records of work	7	70
Daily lesson attendance sheet	2	20
Syllabus coverage	6	60
Schemes of work	2	20
Lesson plan	3	30

Some head teachers reported use of more than one method of assessing a teacher. Table 4.11 indicates that majority (90%) of the sampled head-teachers, assess teachers by checking their subject mean score in tests and examinations done by pupils. 40% of the head teachers inspect the learners' exercise books, 80% class observation, 70% check records of work, 20% use daily lesson attendance sheet, 60% syllabus coverage, 20% Check the schemes of work and 30% check the teachers' lesson plan.

These results indicate that majority of the head teachers do supervise the process of teaching and learning through Subject mean score, class observation, checking syllabus coverage, and record of work. These points to an effective implementation of teaching and learning of the Tusome basic literacy programme. Instructively, Ouma (2005) notes that school administration aspects such as staff meetings, checking schemes and lesson plans and class observation by the head teacher influence learner achievement in Kenya.

4.8 CSO Supervision of Instruction in Lower Primary

The study also sought to know from the CSO, head teachers and teachers the extent of supervision by CSO. The results are presented in Table 4.12.

Table 4.12: Supervision by CSO

Supervision	Frequency	Percentage
Once fortnight	3	7.7
Once per month	71	7.9
Once per term	25	64.1
Not supervised at all	4	10.3
Total	39	100

The Table 4.12 reveals that indicates that majority 64.1% of the respondents said CSO supervised teachers once per term, 17.9% said once per month, 7.7% at least after a fortnight and 10.3% said they are not supervised. Instructively those not well supervised were from the private schools hence a need for their in-corporation in the programme. The vastness of the sub county and the number of schools in the sub county to be covered by may be the cause for lack of frequent supervision from the CSO. However, it is clear from the data that teachers were supervised to bring out the expected influence on lower primary pupils as evidenced by supervision from the head teacher and CSO. From the findings, majority of teachers also indicated that there is constant instructional supervision by head teachers and CSO.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter covers summary of the study findings, conclusions as well as recommendations and suggestions for further research.

5.2 General Summary

The purpose of this study was to assess the effect of school based factors in lower primary pupils' literacy skills in Hamisi Sub County, Vihiga County. The specific study objectives included; assessing the extent to which schools' infrastructure, instructional materials, teachers' in-service training and supervision affect literacy achievement in lower classes. The study utilized a cross-sectional survey research design targeting all the schools, Curriculum Support officers, head teachers, teachers, and pupils. Purposive, stratified and simple random sampling techniques were employed. The study sample consisted of 56 pupils, 28 teachers, 14 head teachers and 2 CSOs. Data was collected using questionnaires, pupils reading tests, checklists and observations. The summary of the findings is presented below.

5.3 Summary of Findings

In relation to the first objective, *“to establish the influence of schools' physical infrastructure on literacy among lower primary school pupils in Hamisi Sub-county”*, the findings of the study revealed that physical facilities in a number of the schools are inadequate. Most of the respondents noted the scarcity of classes that has consequently resulted in overcrowding or in some instances classes being conducted

under trees. In addition, the study revealed a number of inadequacies in schools in terms of furniture, latrines, table and libraries.

The second objective was *to examine the effect of instructional materials on literacy among lower primary school pupils in Hamisi Sub-county*. The findings show that there was a significant positive relationship between adequate teaching/learning resources and literacy achievement in pupils. Though the provision of charts was found to be adequate, the story books and preparation materials were not adequately provided.

The third objective sought *to find out the effect of teacher in-service training on literacy among lower primary school pupils in Hamisi Sub-county*. Results showed that most of the teachers (78.4%) update their skills regularly by attending in-service training on how to teach reading at least once per term, while only a few teachers reported they have never. Interestingly, they were from the private schools. The findings in this study points to having effective teachers which translates to effective implementation of teaching and learning process among the lower primary pupils. Ultimately it is hoped that literacy skills will improve forthwith.

The fourth objective investigated whether supervision of the program implementers had a serious bearing on the achievement of literacy skills in lower primary school pupils. These results indicate that majority of the head teachers do supervise the process of teaching and learning. They reportedly used more than one method of assessing a teacher notably through subject mean score, class observation, checking syllabus coverage, and record of work.

The study also revealed that majority (64.1%) of the respondents admitted that CSOs supervised teachers on literacy once per term and only a few (10.3%) said they are not supervised. Instructively those not well supervised were from the private schools hence a need for their full in-corporation in the programme. The vastness of the sub county and the number of schools in the sub county to be covered by the CSO may be the cause for lack of frequent supervision. Hence the low frequency of supervision by the CSO could be one of the factors leading to poor literacy levels in Hamisi sub-county.

5.4 Conclusions

The first objective was to establish the influence of schools' physical infrastructure on literacy among lower primary school pupils in Hamisi Sub-county. The findings revealed that most of the schools had inadequate physical facilities. The inadequacies hinder literacy achievement. Inadequate physical facilities like classes and library limit the attainment of a conducive atmosphere that supports literacy, leading to congestion and consequently poor delivery of the content to the learners. In addition, the presence of adequate storage facilities can minimize losses and unnecessary damage to the literary materials. Many public primary schools do not have enough physical resources and this could be the reason for low literacy levels experienced in the study area.

The inadequacy of teaching and learning resources available in the school influences pupils' literacy achievement in public primary schools in Hamisi Sub County. The findings indicated that majority of the schools did not have enough books especially other resource/reference books even though most of the pupils each had a textbook (course book) of his/her own. This implies that the higher the number of textbooks

schools have, the higher the literacy achievement. However, the lack of other supplementary books hindered the pupils from achieving high literacy. The study however found out that the number of textbooks in private schools was relatively low. Therefore, the study findings reveal that lack of necessary books caused the low literacy recorded in the study area.

The study also found out that most teachers attended Tusome in-service training which was vital for the teaching of literacy among pupils. However, the low literacy levels in the study area suggest that teachers were not using the knowledge acquired from the training in instruction. In-service training has been found to have a strong association with student achievement hence the low achievement in literacy would point to the use of the knowledge acquired from in-service training.

The supervision of the program has a serious bearing on the achievement of literacy skills in lower primary school pupils. The study found out that head teachers and CSOs supervise the process of teaching and learning though not as often as would be required. Several methods were used in supervision of the programme. Summarily, there was an effective implementation of teaching and learning of basic literacy. The vastness of the Sub County and the high number of schools in the sub county makes it impractical for the CSO to frequently supervision all schools in their jurisdiction. Therefore, the study observed that there was inadequacy in the number of personnel at the CSO to assure adequate supervision in the entire sub-county which would lead to higher achievements in literacy.

5.5 Recommendations

The following recommendations have been suggested:

- i. The study established that there was a shortage of physical facilities in schools including classrooms, desks, chairs, libraries, play fields among others. The study further observed that these facilities have a significant influence on the achievement of literacy among public primary school pupils. Based on these findings, the study recommends that a thorough needs assessment for individual schools need to be done. This will help identify those schools with limited facilities so that communities, the national and county government can help fill the gaps that exist hence help to improve literacy levels in public schools. Policies should also be formulated to ensure that head teachers only admit a number of pupils that the school facilities that accommodate to avoid congestion and subsequent compromise of education standards which are affected by low literacy levels among the learners.
- ii. The study established that most schools have inadequate teaching and learning resources especially the preparation materials. This phenomenon has a negative influence on the achievement of early literacy in Vihiga County. The government should therefore increase funding to schools so as to cater for the essential teaching/ learning aids. With more purchases of books and other materials, schools will be able to improve literacy levels among pupils hence the achievement of early literacy which seem to be limited by inadequate teaching and learning materials among pupils in public primary schools in Vihiga County. Moreover, it is imperative that stakeholders are sensitized to support schools within the community knowing that the children will still give back to the community at the same time creating a generation that is well educated.

- iii. Training of personnel responsible for teaching reading literacy has been shown to have a positive influence on learner achievement. This study has revealed that most of the teachers have attended either seminars or other relevant in-service training in teaching of literacy in primary schools. More seminars, workshops, for a and other training relevant training should be done so as to enhance teachers' skills. Well trained teachers are likely to implementation teaching and learning process effectively. It is therefore imperative for the ministry of education, government agencies and NGOs to organize and facilitate in-service training, seminars and workshops on more than once per term. Literacy teachers from private schools should also be fully incorporated into the programme in all facets.
- iv. The study established that both CSOs and the head teachers supervised the teachers in the implementation of literacy objectives. The study further established the supervision had a positive influence on the achievement of early literacy. The Ministry of Education, Science and Technology should consider reviewing its supervisory support to teachers and schools. The study observed that region covered by CSOs was vast, limiting them from covering the area adequately. This therefore calls for the government to either provide transportation or employ more officers to be able to traverse the entire area of jurisdiction.

5.6 Suggestion for Further Research

This study recommends that further studies should be conducted to establish the effect of other physical facilities such as lighting, toilets and playground on learner achievement both at primary and secondary school. This study was concerned on

supervision and the effect of conducting it on literacy. However, supervision may have more in it than just supervision. This study therefore suggest a study to evaluate the effectiveness of every tenet of supervision to teacher output and learner achievement. This will provide a basis for an informed conclusion that inadequate physical literacy facilities experienced at earlier stages in education affects the entire academic life of a person.

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APPENDICES

APPENDIX I: LETTER TO THE RESPONDENT

HERBERT OBEYWA,
Kenyatta University,
Department of Curriculum Studies in Education
P.O. Box 43844 Nairobi, Kenya.

Dear Sir/Madam,

RE: MASTERS IN EDUCATION

I am a Masters' Degree student at Kenyatta University. I am carrying out a study on, "*Assessing the influence of school factors on achievement of Early Literacy in Vihiga County Kenya*". Please respond to all questions asked by giving information. Information given will be treated with utmost confidentiality. Your honesty and cooperation in giving the right responses to this questionnaire will be most appreciated.

Thank you in advance.

Yours faithfully,

HO

Herbert Obeywa

APPENDIX II: HEAD TEACHERS QUESTIONNAIRE

PART I: INTRODUCTION

1. Sex Male () Female ()

2. Name of the school.....

3. For what duration has Tusome Early Literacy Reading program been in existence in the school? 0-1 () 1-2 () 3-4 ()

4. Which is the highest primary class that interacts with Tusome Early Literacy program in their lower primary level?
 Class 1 () Class 2 () Class 3 () None ()

PART II: SCHOOL BASED FACTORS

5. The statement below shows some resources used in teaching literacy in lower primary school. Indicate by ticking the ones used in your school and class?

(Please tick or write where necessary)

		Adequate	inadequate
i	Textbooks		
ii	Library with books		
iii	Wall maps		
iv	Exercise books		
v	Desks		
vi	Chalk boards		
vii	Playing ground		

6. The statement below shows some physical facilities in the school that can promote teaching reading literacy in lower primary school. Indicate by ticking the ones used in your school and class? (Please tick or write where necessary)

		adequate	inadequate
i	Classes		
ii	Toilets		
iii	Offices/staff room		
iv	Water		
v	Electricity		
vi	Computer room		
vii	Playing ground		

7. What is your assessment concerning teachers' preparation on reading to learn before attending classes? Good () Fair ()
8. How often do TAC officers visit the school to supervise teacher's lessons in progress in your school? Explain.
9. Have you ever undergone any specific training aimed at equipping you with skills to better implement the TELP? Yes () No ()
10. How beneficial did you personally find this training?
 Very beneficial () Beneficial () Quite beneficial ()
 Not beneficial ()

11. For how long did such training take?

Less than 1 week () One to Two weeks ()

Two to three weeks () Three weeks plus ()

12. What key areas did the training focus on?.....

.....

13. How many of your teachers have undergone in-service course in teaching

literacy in lower primary School.....

14. How would you describe the STD 1 / 2 Curriculum as contained in the pupils' books and Teachers' guides?

Very suitable () Suitable ()

Quite suitable () Not suitable ()

15. How would you describe the STD 1 / 2 Methodology as contained in the

teacher's guide?

Very suitable () Suitable ()

Quite suitable () Not suitable ()

PART III: TEACHER BASED FACTORS

16. How do you rate the teachers' commitment in implementing Tusome literacy programme?

Good () Fair () Poor ()

Other (specify).....

17. What is your perception on the frequency of teachers implementing Tusome literacy programme?

Moderate () Low () High ()

Give a brief explanation.....

18. Are your teachers motivated or not motivated to undertake Tusome literacy programme? Motivated () Not motivated ()

Give a brief explanation

19. Do you make sure teachers keep updated professional documents (schemes of work, lesson plans and records of work)

Yes () No ()

20. How do you rate the following practices in the school?

	adequate	inadequate
Visiting teachers in class to supervise teaching		
Involving teachers to decide on best strategies to improve teaching and learning		
Providing all the teaching and learning resources needed for improved performance		
Supervising teachers to ensure they complete the syllabus on time		
Building teamwork among teachers to ensure they support one another		
Holding staff appraisal meetings to discuss strengths, weaknesses and opportunities for academic improvement		

21. How often do inspectors visit your school?

Once per year () Never () Once Per Term ()

22. What major roles do the inspectors play in your school?

23. What are some other challenges you face as a head teacher in implementing of

Tusome Early literacy programme? Explain briefly.....

.....

.....

APPENDIX III: STD 2 TEACHERS' QUESTIONNAIRE

Part I: Background Information

(Please tick or write where necessary)

1. School:
2. Teacher's gender: Male () Female ()
3. Total number of pupils in class.....
Boys Girls
4. Is the TELP being implemented at this school?
Yes () No ()
5. For how long has the TELP been in use at this school?
Less than a year () One to Two years ()
Two to Three years () Three years plus ()
6. For how long have you been teaching STD 1 / 2 pupils at this school?
Less than a year () One to Two years ()
Two to Three years () Three years plus ()

Part II: In-Service Training

7. Have you ever undergone any specific training aimed at equipping you with skills which to better implement the TELP?
Yes () No ()
8. How beneficial did you personally find this training?
Very beneficial () Beneficial ()
Quite beneficial () Not beneficial ()
9. For how long did such training take?
Less than 1 week () One to Two weeks ()
Two to three weeks () Three weeks plus ()

10. What key areas did the training focus on?.....

11. As a teacher, how would you describe the STD 1 / 2 Curriculum as contained in the pupils' books and teacher's guides?

Very suitable () Suitable () Quite suitable ()
 Not suitable ()

12. As a teacher, how would you describe the STD 1 / 2 methodology as contained in the Teacher's guide?

Very suitable () Suitable () Quite suitable ()
 Not suitable ()

Part III: Teaching Resources

13. The statement below shows some resources used in teaching reading literacy in lower primary school. Indicate by ticking the ones used in your school and class?

Sufficient Available=**S.A**, Available=**A**, Not Sufficient = **NS** , Not Available =**NA**

	S A	A	NS	NA
English Text books				
Class supplementary				
Flash cards				
Jigsaws				
Charts				
Desks				
Table				
Chalk board				

PART IV: LEARNING STRATEGIES

14. (a). The following is a list of teaching and learning strategies that enhance achievement in reading and writing in lower primary school. Indicate by a tick (✓) those that you use and an (x) for those that you don't use.

Not Satisfactory- **NS**, Slightly Satisfactory- **SS**, Satisfactory- **S**,
Very Satisfactory –**VS**

	NS	S	SS	VS
Role play				
Brain storming				
Riddles				
Puzzles				
Cartoons				
Jokes				
Songs				
Debate				
Drama				
Verse speaking				
Songs				

(b). Indicate by a tick (✓) those that you use and an (x) for those that you don't use.

	NS	S	SS	VS
Subject mastery				
Time spent preparing for a class				
Amount of actual instructional time				
Frequency of homework				
Correcting of pupils homework				
Frequency of pupil tests				

PART V: PHYSICAL FACILITIES

15. Listed in the table below are some factors contributing to learner achievement.

Please give the most appropriate answer by ticking in the spaces provided.

Indicate by a tick (√) those that you use and an (x) for those that you don't use.

Not Satisfactory- **NS**, Slightly Satisfactory- **SS**, Satisfactory- **S**,

Very Satisfactory –**VS**

	NS	S	SS	VS
Availability of teaching learning resources				
Quality of school buildings				
Quality of classroom equipment e.g. desks, chairs, blackboard				
Access to water and electricity in the school				
Toilet pupil ratio/ different gender				
Availability of staff room				
Application of information technology				

PART VI: TEACHER'S FACTORS

16. Listed in the table below are some factors on the teacher that contribute to learner achievement. Please give the most appropriate answer by ticking in the spaces provided.

Indicate by a tick (√) those that you use and an (x) for those that you don't use.

	NS	S	SS	VS
Attended in-service teacher training				
Satisfied by the job				
Motivation of teachers				
Teachers experience has an impact on learner achievement				
Teachers workload impacts on learner achievement				

PART VII: TEACHER'S SUPERVISION

17. How often does the head teacher observe you when lesson is in progress using Tusome Literacy Programme?

Once a month () Once a term () None ()

Other (specify).....

18. What is your assessment concerning preparation on reading to learn before attending asses? Good () Fair ()

19. How often do TAC's officers visit the school to supervise teacher's lessons in progress in your school?

Once per year () Never () Once per term ()

Explain.....
.....

20. What major roles do the inspectors play in your school?

.....

APPENDIX IV: TEACHER ADVISORY CENTER (TAC)

OFFICER QUESTIONNAIRE

PART I: INTRODUCTION

1. Sex Male () Female ()
2. Which Sub- county are you in charge of.....
3. For how long has Tusome Early Literacy Programme taken effect in this area?
above? 0 years () 1 year ()
 2 years () 3 years ()
4. In how many schools has Tusome Early Literacy Programme been implemented?
Sub-county..... Number of schools.....

PART II: TEACHER BASED FACTORS

5. How is teachers' rate of commitment to their work on Tusome Early Literacy Programme?
Good () Fair () Poor ()
6. What is your perception on the frequency of teachers using Tusome Early Literacy Programme in their daily instructional practices?
Moderate () Low () High ()

PART III: READING BASED FACTORS

7. How often do you gather teachers for a Tusome Early Literacy Programme workshop? Once per term () Once per month ()
Other (specify).....
8. What do you do to ensure the reading programme is followed in schools?.....
.....
9. Do schools support Tusome Early Literacy Programme?
Yes () No ()
Briefly explain your answer above.....
10. Does school environment support Tusome Early Literacy Programme implementation?
Yes () No ()
If No, mention some of the factors that disrupt learning in the school.....
.....
11. What facilities does the government provide to schools to support Tusome Early Literacy Programme?.....
.....
12. What challenges do you face in implementing Tusome Early Literacy Programme supervision in schools?
.....
13. What is your opinion and recommendation for the success of the Tusome Early Literacy Programme in schools?
.....

APPENDIX V: OBSERVATION SCHEDULE

OBSERVATION	RATING				
SCHOOL RESOURCES					
School library	Not available	Poor	Poor	Good	Excellent
Classroom condition/repair status		Poor	Poor	Good	Excellent
Computer availability & adequacy	Not available	Not adequate	Adequate		
Toilets condition & adequacy	Not adequate	Poor	Poor	Good	Excellent
radio availability & adequacy	Not available	Not adequate	Adequate		
Piped water availability & adequacy	Not available	Not adequate	Adequate		
Electricity availability & adequacy	Not available	Not adequate	Adequate		
Telephone availability & adequacy	Not available	Not adequate	Adequate		
Desks	Not adequate				
Cupboards	Not available	Not adequate	Adequate		
Availability & adequacy of furniture	Not available	Not adequate	Adequate		

APPENDIX VI: TEACHER OBSERVATION

1. How are the pupils grouped for instruction? (Tick all that apply)
One-on-one with the teacher () Small groups or pairs ()
Whole group ()

2. What texts are incorporated in the lesson?
Chalkboard () Charts/Posters ()
Paper (Notebooks, Exercise Books) ()
Textbooks – used by teacher in the hands of the pupils ()
Supplementary books () in the hand of the teacher ()
in the hand of the pupils () Other ()

3. What is the teacher's role during the lesson?
Lecturing and asking the class to repeat () Guiding practice ()
Circulating or overseeing instruction () Questioning ()
No active involvement ()

4. What kind of writing is observed most often?
On the chalkboard ()
Copying on paper or in exercise books ()
Composing on paper or in exercise books ()
Recording observations or discussion ()
Other.....

5. Indicate how Tusome Early Literacy approach is being used by the teacher in class.

	adequately	fairly	inadequately
Teacher is goal oriented			
Teacher displays enthusiasm for teaching, Pupils/ for content of lesson			
The teacher demonstrates and models learning			
The teacher provides variability in participation			
Methodologies and interaction patterns			

6. Identify the strength of Tusome Early Literacy programme as is used by the teacher during instruction.....

.....

7. What challenges does the teacher seem to have in using Tusome Early Literacy programme during the lesson?

.....

APPENDIX VII: PUPIL'S READING TEST / SCORE SHEET

School: Class:

Name: Age:

Pupil's Gender: Starting TIME: Ending Time:.....

This test will be individually conducted and will be strictly time-bound. Each pupil is expected to read as many words as possible and as fast as possible.

Words	Correctly read (2 marks)	Incorrectly read (1 mark)	Not attempted (0 mark)
Is			
The			
To			
You			
Hot			
Pen			
But			
And			
Cup			
Sit			
Car			
Eat			
Read			
Market			
Study			
Writing			
Running			
First			
Reach			
End			
Pencil			
Find			

Deep			
Kick			
Eight			
Mice			
Bark			
Sight			
ice-cream			
Shirt			
Jump			
Church			
Middle			
Cost			
Room			
Drying			
Started			
Teachers			
Speaking			
Bucket			
Children			
Place			
Noon			
Villager			
sportsman			
Banana			
Bathroom			
Grasshopper			
Kitchen			
Classroom			

**APPENDIX VIII: RESEARCH APPROVAL FROM THE
GRADUATE SCHOOL, KENYATTA UNIVERSITY**



KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Website: www.ku.ac.ke

Internal Memo

FROM: Dean, Graduate School

DATE: 5th October, 2016

TO: Obeywa Herbert Amunavi
C/o Educational Management Policy
& curriculum Studies Dept.

REF: E55/CE/28078/15

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 21st September, 2016 approved your Research Project Proposal for the M.Ed Degree Entitled, "Effects of Institutional Variables on Pupils' Achievement of "Tusome" Early Literacy Program in Vihiga County, Kenya".

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.



JACKSON LUVUSI
FOR: DEAN, GRADUATE SCHOOL

c.c. Chairman, Educational Management Policy & curriculum Studies Department.

Supervisors.

1. Dr. Wilfrida Itolondo
C/o Department of Ed. Mgt. Pol & Curriculum Studies
Kenyatta University

JL/nn

APPENDIX IX: NACOSTI RESEARCH AUTHORIZATION



MINISTRY FOR SCIENCE, TECHNOLOGY AND INNOVATION
**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

Telephone: +254-20-2213471,
2241349, 3310571, 2219420
Fax: +254-20-318245, 318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
when replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No.

Date:

NACOSTI/P/16/73236/14571

7th December, 2016

Herbert Amunavi Obeywa
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *“Effects of institutional variables on pupils’ achievement of ‘tusome’ early literacy program in Vihiga County - Kenya,”* I am pleased to inform you that you have been authorized to undertake research in **Vihiga County** for the period ending **5th December, 2017.**

You are advised to report to **the County Commissioner and the County Director of Education, Vihiga County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.


BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

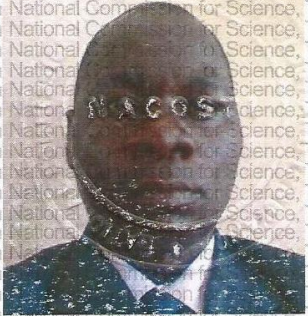
The County Commissioner
Vihiga County.

The County Director of Education
Vihiga County.


National Commission for Science, Technology and Innovation is ISO 9001:2008 Certified

APPENDIX X: RESEARCH PERMIT

THIS IS TO CERTIFY THAT: Permit No : **NACOSTI/P/16/73236/14571**
MR. HERBERT AMUNAVI OBEYWA Date Of Issue : **7th December,2016**
of KENYATTA UNIVERSITY, 0-50310 Fee Received : **Ksh 1000**
VIHIGA, has been permitted to conduct
research in Vihiga County
on the topic: EFFECTS OF
INSTITUTIONAL VARIABLES ON PUPILS'
ACHIEVEMENT OF 'TUSOME' EARLY
LITERACY PROGRAM IN VIHIGA COUNTY
- KENYA
for the period ending:
5th December,2017



.....
Applicant's
Signature


Director General
National Commission for Science,
Technology & Innovation