

**AN EXAMINATION OF READING SKILLS ACQUIRED BY GRADE 2  
LEARNERS IN CINYANJA UNDER THE REVISED CURRICULUM IN  
LUSAKA DISTRICT**

**BY**

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A dissertation submitted to the University of Zambia in partial fulfillment of the requirements for the award of the degree of master of education in literacy and learning.

**THE UNIVERSITY OF ZAMBIA**

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## **AUTHOR'S DECLARATION**

I, **Josephine Chileshe Mutale**, do hereby solemnly declare that the dissertation represents my own work, and does not incorporate any published work or material from another dissertation, except where otherwise acknowledged, and that has never been previously submitted for a degree at the University of Zambia or any other University.

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## APPROVAL

This dissertation of **Josephine Chileshe Mutale** has been approved as partial fulfilment of the requirements for the award of the degree of Master of Education in Literacy and Learning by the University of Zambia.

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## **ABSTRACT**

The purpose of this study was to examine reading skills acquired by grade two learners in Cinyanja under the revised curriculum in Lusaka district. The study was conducted to find out if instructional method in Primary Literacy Programme (PLP) which focuses more on phonics approach resulted in improved reading skills before learners begin to read in English language in grade three. In the study differences between schools and between boys and girls were made. Similarities of findings were also made with previous studies conducted among grade 2 learners by Read To Succeed Project.

The research was a longitudinal study. Research utilized mixed methods employing a convergent parallel design in examining the levels of reading skills among grade 2 learners in Cinyanja which included letter-sound knowledge, word reading, oral passage reading and listening comprehension and learner stimulus for answering test questions. The teacher interview guide was used to collect additional information from the teachers. Samples of study were 98 grade two learners randomly selected from 6 randomly selected schools and 6 teachers representing the population under study.

Data were analyzed by using SPSS version 20. Paired and independent t-tests and one way analysis of variance (ANOVA) and LSD post-hoc tests were used for statistical analysis. Comparative interpretation and explanations for histograms and graphs and statistical descriptions of results were given on the four variables.

Results showed that levels of reading improved from the first test conducted at the end of grade 1 to the second test conducted at the beginning of grade 2 and from the test conducted at the end of term two of grade 2. The levels of reading were not the same in all schools. The difference between boys and girls was observed in only test 1 where girls obtained significantly higher mean scores than boys. In tests 2 and 3 in grade two, girls obtained higher mean scores than boys but results were not significant. Learners taught by teachers who had inadequate materials for teaching PLP obtained higher mean scores than those taught by teachers who had adequate materials.

It is recommended that the programme should be given more support by provision of appropriate, relevant and interesting stories, more training of teachers in instructional methods and close monitoring of the programme. The study also recommends that further research in other familiar languages and in use of other interventions is required to support teachers in teaching phonics.

## **DEDICATION**

This dissertation is dedicated first to my Lord Jesus Christ to whom I owe all that I have as my strength and my refuge. I also dedicate it to the loving memory of my late parents. To my husband Dr. Francis K. Sampa who has been on my side for strength, encouragement and financial support and to my children Nkole and Chanda my brothers and sisters for their encouragement, moral and spiritual support.

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## ACRONYMS AND ABBREVIATIONS

ADEA	Association for Development of Education in Africa
AIEMS	Action to improve English, Mathematics and Science
CDC	Curriculum Development Centre
CPD	Continuous Professional Development
DEBS	District Education Board Secretary
ECZ	Examinations Council of Zambia
EFA	Education for All
EGR	Early Grade reading
EGRA	Early Grade Reading Assessment
FINNIDA	Finnish International Development Aid
LEA	Language Experience Approach
MDG	Millinium Development Goals
MoE	Ministry of Education
MESVTEE	Ministry of Education, Science, Vocational Training and Early Education
MOGE	Ministry of General Education
NBTL	New Breakthrough To Literacy
NELP	National Early Literacy Panel
NLF	National Literacy Framework
NRC	National Reading Committee
MT	Mother tongue
PA	Phonemic Awareness
PEO	Provincial Education Officer
PLP	Primary Literacy Programme
PRP	Primary Reading Programme
QUESTT	Quality Education Services Through Technology
ROC	Read On Course
RTI	Research Triangular Institute
RTS	Read To Succeed Project
TGMs	Teacher Group Meetings



SACMEQ	Southern African Consortium for Monitoring Education Quality
SITE	Step In To English course
SPRINT	School Programme of In-service for a Term
TESS	Teacher Education and Specialized Services
TGMs	Teacher Group Meetings
UNESCO	United National Education Scientific Organization
USAID	United States Agency for International Development

# **CHAPTER ONE**

## **INTRODUCTION**

### **Overview**

This chapter is an introduction to the study on examining literacy skills acquired by Grade 2 learners in Cinyanja under the revised curriculum with special reference to selected schools in Lusaka District. The chapter gives a background to the study with special reference to the Primary Literacy Programme (PLP) that is anchored on phonics-based approach that focuses on letter-sound knowledge for beginning to read in familiar languages. It looks at why it is important to teach children to learn to read in familiar languages so that they are able to read by the end of Grade 2. The chapter further presents the statement of the problem, the purpose of the study, the objectives and the research questions that were used to address the problem. The chapter also illuminates the significance of the study, the theoretical framework and operational definitions. Finally, the scope and the structure of the dissertation are given at the end of this chapter.

### **1.1 Background**

According to the Ministry of Education (1996), improving early grade reading among learners in primary schools is a major concern. This is because improving competencies in reading is cardinal to both successful learning at school and as an element for active participation in the social, economic, cultural and political life. There is convincing evidence around the world that a second language is learned best when a first language has been learned well (Global Education and Monitoring Report, 2016). Matafwali (2010) states that Children who receive schooling in their mother tongue in early grades have better learning outcomes and improved literacy levels. Such findings have led educationists to advocate the use of children's mother tongues as the initial key language of instruction, with a second language introduced later in carefully managed stages. Using a foreign language in early grades is considered to be a contributory factor to the backwardness of reading shown by many children and fosters rote learning since from the outset the child has difficulties in associating printed words with their real underlying meaning (MOE, 1996). The MOGE is aware that introducing local languages in early grades require additional

efforts such as improving on instructional methods as well as developing more varied teacher training programmes and instructional materials.

The development of PRP was supported by the Ministry of Education (1996) which states, “The fact that initial reading skills are taught in and through a language unfamiliar to the majority of children is believed to be major contributing factor to the backwardness in reading shown by many Zambian children”. This means that it was better for children to start learning initial literacy in their local languages because there was strong evidence that children learn literacy skills more easily in their mother tongue which they transfer to the second language. According to Ministry of Education (1996), successful first language learning is believed to be essential for successful literacy in the first language. This statement does not only support the use of the mother tongue in the initial literacy acquisition but also emphasizes the successful learning of the mother tongue. To enable a successful transfer of skills from the mother tongue learning to second language learning Shroeder (2005) observed that using the mother tongue is of utmost importance because it facilitates children’s development of concepts that enable them to easily acquire knowledge in second language or third language and to further expose the children to cultures of their communities. Investing in increased use of local languages within the education system would help improve the low quality of education and help ensure the right to education for all. Since basic education is the only education that the majority of the children may receive, because two thirds cannot proceed into the junior secondary level (Grades 8 -9), the reading skills acquired in local language will equip children who drop out of school with skills to acquire information that can help to improve their livelihood. However, in Zambia previous research has shown that very few children can read at appropriate grade level.

The Ministry of Education (2008) for example reported that generally, the mean performance by all provinces at grade 5 level in reading in English was 35.3 per cent and 39.4 per cent in Zambian languages with minimal improvement. This showed stagnation in pupils’ performance when compared to the 2006 survey results which had 34.5 per cent in English and 37.79 per cent in Zambian languages. The National Assessment surveys conducted by Examinations Council of Zambia in 2006 and 2008 demonstrated that grade six pupils who participated in the study performed considerably below the levels expected of those in their grades. For instance, the grade six pupils who participated in this study performed within the level expected of grade four

while grade five pupils fell within the performance band expected of grade three levels, where as some grade four pupils in both rural and urban schools fell within the performance band of grade two pupils.

There are many factors that contribute to low achievement levels among Zambian learners. One of the major challenges is that the majority of learners are taught by teachers who are inadequately trained to teach reading (Folotiya, J.J., 2014). Secondly, children in the lower primary level only spend three and half hours in school and therefore the time they spend on tasks in the school is not enough (MOESVTEE, 2013). Further, most of the schools have insufficient relevant instructional materials for teaching reading, coupled with children grappling with the consequences of poverty and diseases. According to the Ministry of Education, Science, Vocational Training and Early Education statistical Bulletin (2014), the national average pupil-book ratio stood at 10.99 in 2012. Parental and community involvement in school affairs and supporting learners is limited to provision of labour or materials rather than to academic support. It is common to find as many as 30% of the learners in a school who are orphans and vulnerable children and face many challenges such as lack of school requisites and food that prevent them from attending school. According to the Sixth National Development Plan (2013), there were 76,776 pupil (39,867 females and 36, 909 males) from grade 1 to 12 who were vulnerable children. Most of the schools are understaffed; especially those located in rural areas while classrooms are over-crowded with as many as eighty children due to limited classrooms. The national teacher: pupil ratio stands at 46.2 (MESVTEE, 2014). According to Sampa (2005) teachers failed to implement the PRP learner-centered methodology due to large class sizes and inadequate pupil-teacher contact time. Finally, findings by Mulenga and Luangala (2015) in their mixed method study indicated that student teachers were not fully prepared for their future job of teaching English language because they had not acquired relevant knowledge and skills since the teacher education curriculum they had followed did not expose them to the skills and knowledge found in the syllabus they had to teach upon graduation..

As a result of the challenges highlighted above, Zambia has continued to record low levels of early grade reading in schools. In order to improve the reading levels, the MoGE has revised the curriculum and implemented a number of interventions. From 1999 to 2013 the Primary Reading Programme (PRP) was introduced in all primary schools. The aim of PRP was to improve

literacy levels among Zambian school children by applying new and more effective approaches to reading throughout the seven years of primary education. This was to be achieved by ensuring that all pupils were taught initial reading skills in a familiar Zambian language in their first year of primary education, introduced to reading skills in English in their second year of primary school and consolidating reading skills in English and Zambian languages from Grades 3-7. When the PRP baseline assessment study was conducted among grade 1 to 6 children in 1999, it revealed that children were reading two grades below what was expected in English and three grades below what was expected in Zambian languages (Kelly, 2000). This was due to the use of ineffective teaching methods used for reading instruction in early grades. For a long time the MOGE has put in place interventions to address the situation such as the Zambia Basic Education Course and the Primary Reading Programme (PRP) introduced from 1999 to 2013 and the Primary Literacy Programme (PLP) introduced from January 2014 in all primary schools under the revised curriculum.

The latest surveys conducted to determine reading levels in Zambia still indicate poor performance. The Southern African Consortium for Monitoring Education Quality (SACMEQ III) of 2010 indicated that among grade 6 learners that were tested in reading in Zambia, only 27.4% were able to read at a basic competency level. According to the National Assessment survey conducted among grade 5 learners in 2012, results of reading test remained low at 35.4% in English and 36.8% in Zambian Languages. In 2013 USAID Read To Succeed (RTS) Project conducted a baseline study among grade two and three children. Out of 2,024 grade 2 learners that were tested in oral passage reading, only 11.07% were able to read something and out of 1,908 grade 3 learners that were tested in oral passage reading only 20.44% able to read at least a word.

Under PRP New Breakthrough To Literacy (NBTL) course was introduced to help children in grade one to learn to read fluently and write clearly as well as accurately in their local language. Overall, the PRP is judged to have revolutionized teaching and contributed to significant improvement in the levels of literacy in schools (Sampa, 2005). The NBTL was followed by a course called Step In To English (SITE), a literacy course that enables learners to read and write fluently and accurately in English in grade 2. With this arrangement learners were building on skills developed in the Zambian Languages in grade 1 (Ministry of Education, 2002). Alongside

NBTL and SITE was Pathway (Oral English Course) for grades 1 and 2, which was a teacher's guide for oral competence in English to equip learners with enough oral vocabulary in English in readiness for the Read on Course (ROC) which was offered in grades 3 to 7 (Ministry of Education, 2001 & 2002). It is also worth noting that changing to a language that is unfamiliar to a child too early, or too abruptly, affects a child's performance in reading. Research suggests that "early exit" mother tongue education may not deliver strong academic benefits in the long term and children may not be successful in learning through either the mother tongue or the dominant language (Global Campaign for Education Policy Brief 2014, 6).

In literacy teaching, the focus is on teaching skills involved in the process of learning to read and write because if children do not learn to read and write early enough in primary school, they cannot learn other subjects properly (Conley, 1992). To successfully build a strong foundation for reading and writing, the mother tongue should be the initial key element language of instruction in education, with a second language introduced later in carefully managed stages. This is because there is convincing evidence that a second language is learnt best when first language has been learnt well (Global Campaign for Education Policy Brief 2014, 4).

In spite of implementing the Primary Reading Programme, reading levels have remained low. According to the National Assessment survey (2012) that was conducted among grade 5 learners, showed that results of reading tests remained relatively low. In 2003, 33.9% of pupils had achieved the expected performance level in English and 31.1% in Zambian local familiar languages. In 2012 the percentages of acceptable reading performance levels had increased to 35.4% in English and 36.8% in Zambian local familiar languages. The South African Consortium for Monitoring Education Quality (SACMEQ III, 2010) indicated that among grade 6 learners that were tested in reading in Zambia, only 27.4% were able to read at a basic competency level. As a comparison, in Finland, 30% of the children already know how to read when they enter Grade 1 (Aro, 2006). This is because they are taught how to read at home. In Zambia, four years of lower primary education has barely been enough for literacy acquisition for equivalent percentage of learners. Under PRP the reading levels were low because the language experience approach used for teaching reading did not give children enough skills for decoding words and fluency in L1. Secondly, the reading levels were still low when learners followed reading instruction in PRP because of the transition period from L1 to L2 was only one

year. Learning to read in local languages or use of mother tongue is more effective when it is used for a period that ranges from 6 to 8 years (Malherbe (1943), Bamgbose (1984), Thomas and Collier (2002). It has been argued that children should not be required to transfer to L2 as language of instruction before they have reached fluency in their first language, which might require up to 6 years to develop (Ball, 2011). Thirdly, under PRP a number of materials were developed in the form of NBTL kits. To carry out the methodology as prescribed by the programme, teachers were supposed to be in possession of the full kit. However, because the kits were expensive, the ministry of education could not replace the kits due to inadequate funding (Kombe & Herman, 2017).

Based on research findings, some of which have been presented above, the Ministry of General Education revised the Primary Reading Programme in 2013 and replaced it with the Primary Literacy Programme (PLP) under the revised curriculum from January 2014. PLP is based on the teaching of five components for learning to read: phonemic awareness, phonics, vocabulary, fluency and comprehension. The goal is to continue to support early literacy in local familiar languages and later introduce literacy in English language. From grade 1 to 4 local familiar languages are used for learning to read as well as for general learning in other subjects (NLF, 2013: 20). In grade 1 and 2, children will learn the four skills of listening, speaking, reading and writing in the 7 local familiar languages. English will be introduced only as oral in grade 2 side by side with learning to read in local familiar languages. From grade 3 and 4, learners will learn to read and write in English language and continue to consolidate their reading skills obtained in grades 1 and 2 in local familiar languages during Zambian language lessons. From grade 5 to 7 Zambian language and English will be taught as subjects and English will be used as medium of instruction for all other subjects. This means that the introduction of English will be delayed by one year and only introduced as oral English from grade 2, unlike in Primary Reading Programme where English was introduced as oral English from grade 1 and reading and writing in English in grade 2. It is hoped that this design of the Primary Literacy Programme will improve the reading levels among primary school-going children.

The fundamental feature of the PRP methodology was a child-centered approach that built on children's experiences, emphasizing learning from known to unknown (LEA) (Kombe &

Herman, 2017). In 2013 the Ministry of General Education developed the National Literacy Framework that introduced a PLP phonics-based approach that emphasizes the teaching of letter-sounds in the first grade.. Unlike New Breakthrough to Literacy in familiar Zambian languages that was taught only for one year, the PLP approach for teaching reading will now be used to teach reading for the first two years. English will only be introduced as oral in to 2. This will give more time to learning to read in familiar languages from grade 1 and 2. English will gradually be introduced from grade 3, but the medium of instruction will be familiar Zambian languages from grades 1 to 4.

PLP approach enables learners to attend to specific letter sounds, and connections between letters and sounds. In this approach learners identify sounds, read syllables, form and read words proficiently with speed & accuracy and understanding. It enables learners to attend to specific letter sounds, that aid them to make connections between letters and sounds and facilitates their reading skills. According to USAID Read To Succeed Project training strategy (2013) all grade 1 to 4 teachers have been trained in how to use the PLP phonics based approach for teaching reading in local language. . If one teacher is promoted or is retired, it is easy to find a replacement. Unlike for PRP, the teaching and learning materials have been reduced to three; the teacher's guide, learners' activity book and teacher created resources such as decodable stories. This has reduced teacher preparation time and the materials are cost effective and comparatively easy to reproduce.

Children's understanding of what is being taught and discussed in class significantly enables them to focus on learning core skills, rather than struggling to learn in a language they do not understand (Global Education and Monitoring Report, 2016). Learning to read is a complex process and it is essential that it happens early. If children are not able to read well by third grade, they are likely to struggle to catch up and may never become fluent and confident readers (Gove & Cvelich, 2011). There is substantial evidence to suggest that mother-tongue education programmes are capable of producing functionally literate readers in 2 to 3 years rather than the 5 reported for many second language medium programmes (Global Campaign for Education Policy Brief 2014, 5).



According to the Ministry of General Education (2013) the revised curriculum has placed emphasis on literacy in a familiar language in early grades and use of phonics-based approach for teaching reading and children will be expected to read in the shortest possible time. As mentioned above, this will be made possible because of use of the key components for learning to read: phonemic awareness, phonics, fluency, vocabulary and comprehension.

*Phonological awareness:* This is the ability to listen to sounds, recognize and manipulate sounds of a language. Activities include sentences, words, rhymes, syllables, onsets and rimes and individual sounds or phonemes. In order to learn to decode and read printed words, children must be aware that spoken words are composed of individual sound parts termed phonemes. Research shows that if children have phonemic awareness skills in their first language, they can often transfer them to learning a second language (Gersten & Geva, 2003).

*Phonics:* Describes the relationship between sounds and letters that make up words. A sound or a set of sounds can be written down in a predictable way so that others can read what it says. It is therefore the connection between graphemes (letter symbols) and sounds. It is the teaching of the relationships between letters and sounds. When learners know letters and their sounds, they can use the letter-sound relationships to decode (sound out) words. This relationship between letters and sounds is called the “alphabetic principle.” Those learners who have broken through to literacy have discovered the alphabetic principle and can transfer this understanding to decoding words in any language which is written in the alphabetic writing system. In Zambian languages, children learn a very consistent system where one letter makes one sound. In other words, as explained in *Effective Practices for Transitioning from Literacy in Zambian language to Literacy in English, Teachers’ Manual*, according to the Ministry of General Education (2016), the orthographies or spelling systems of Zambian languages are *transparent* in that one can tell which sound each letter represents. English is not so transparent; it is actually the best example of an opaque orthography. This means that it is not easy in many cases to tell which sounds letters represent in the language. There are 26 letters in the alphabet which in English represent some 44 phonemes. Therefore, some letters can represent more than one sound and in some cases one sound can be represented by different letters. These inconsistencies can make reading more difficult in English.

*Fluency:* Fluency involves reading accurately, quickly with expression. Fluency is an indicator that learners can decode and comprehend at the same time. It requires automaticity of quick, accurate recognition of letters and words. This is important because when reading is automatic, it frees up cognitive processes for comprehension. Learners need lots of opportunities to do repeated reading activities so that they begin to automatically recognize words and word patterns. This is called “automaticity.” When learners can read with automaticity, their reading rate (words per minute) and accuracy improve (Grabe, 1991; McLaughlin, 1987). Beginning readers need to read in English between 40 to 60 words per minute to be able to understand what they are reading (Abadzi, 2006). Reading rates below this lead to poor comprehension.

*Vocabulary:* Is the degree of knowledge for learners to recognize words based to how they are used in the text. It is when the learners acquire the ability to use the word and understand the general intended meaning and its definition. Vocabulary instruction facilitates better reading comprehension (Beck and McKeown, 1991). When learners decode a word, they need to know what the word means in order to understand what they read.

*Comprehension:* This is an intentional, active and interactive process that involves the act of understanding what learners are reading. This occurs before, during and after a person reads a particular piece of writing. It enables a reader to use prior knowledge as well as knowledge of vocabulary. It is a skill that requires to be reinforcing continually. Teaching reading comprehension is teaching thinking skills. Therefore, each lesson must have teaching points that help learners to develop the thinking skills. There are strategies learners can use before, during, and after reading that can be taught. Teaching comprehension strategies requires explicit teaching. This means that a teacher should carefully model the thinking process by saying aloud what he or she is thinking so that later learners can imitate it. Learners need many opportunities to practice under the teacher’s guidance using strategies in narrative and expository (informational) texts before they can be expected to use the strategies independently.

This study therefore evaluated the levels of reading among grade 2 learners who followed the Primary Literacy Programme from grade 1 in 2015. This study was conducted in order to assess levels of reading skills acquired by learners in Cinyanja by grade 2 before they can be introduced to read and write in English.

## **1.2 Statement of the problem**

Research conducted by the Ministry of Education revealed that the proportion of school achieving even the minimal expected standard of literacy by grade 5 and 6 is exceptionally low. According to Ministry of Education (2010) only 32% of learners attain minimal acceptable mastery of skills and knowledge. Results of research conducted by SACMEQ for 2000 and 2007 in reading in English revealed that while an increase in reading levels was observed in other countries such as Lesotho, Tanzania, Kenya, Namibia and Malawi, between 2000 and 2007, in Zambia the score remained low. It was observed that Zambia was far from the mean score of 500. It is one of the lowest performing countries together with Malawi. Similarly, the EGRA (2012) and MOE (2010) results showed that the performance of learners in reading and comprehension is consistently low among grade 2 and 3 learners.

In order to improve the reading levels, Zambia introduced the Primary Reading Program (PRP) that was implemented from 1999 to 2012. Despite PRP being implemented for a long time, learners did not perform well in literacy even in languages that are familiar to them. According to studies conducted by Mwanza (2012), Matafwali (2010) and Kalindi (2006) one year was not adequate for learners to be able to learn to read and write in local familiar languages. Therefore the MoGE revised the curriculum in 2013 and designed the Primary Literacy Programme (PLP) aimed at improving the levels of reading among early graders. Under the PLP the medium of instruction is local familiar language from grade 1 to 4. However, it is not known how learners at grade 2 perform in reading and writing under the revised curriculum. The current study therefore attempted to establish the levels of reading obtained by learners by grade 2 in local familiar languages, before learners were introduced to learning to read in English language.

## **1.3 Purpose of the study**

The purpose of this study was to assess the levels of reading skills acquired by learners in familiar language Cinyanja by end of grade 2 before they can start to read in English in grade 3.

## **1.4 Objectives of the study**

The main objective of this study was to establish the levels of reading among Grade 2 learners who had been introduced to the programme. The study was guided by the following specific objectives:

1. To compare levels of reading obtained by learners in Cinyanja at the end of grade 1 and the levels of reading obtained by learners in grade 2 by end of the second term.
2. To identify levels of reading obtained by learners from schools located in high density and learners from low density areas. .
3. To establish whether there are variations in performance in reading skills in Cinyanja between boys and girls.
4. To compare similarities of findings of this study with previous EGRA study conducted among grade 2 learners by RTS baseline (2012) and Midline survey, 2014).
5. To assess teachers' impact on children's reading skills

## **1.5 Research questions**

The main research question was: What are the levels of reading skills of Grade 2 learners instructed to read in familiar language Cinyanja? The following were the specific research questions:

1. Is there a difference in levels of reading obtained by learners in Cinyanja at the end of grade 1 and the levels of reading obtained by learners in grade 2?
2. What are the differences in levels of reading skills between learners from schools located in high density and learners from low density areas?
3. Are there variations in performance in reading skills in Cinyanja between boys and girls?
4. Are there similarities in the results between findings of these study and EGRA results obtained by Grade 2 learners in 2012 and 2014 from RTS surveys?
5. What is the teachers' impact on children's reading skills?

## **1.6 Theoretical framework**

This study is based on Stanovich (1986) theory called the “Mathew Effect”. According to this theory acquisition of reading skills in early grades is essential because children who fall below a certain level by the end of grade one stay behind for a long time if measures for remediation are not taken and the gap for such children keeps on widening. Such children may also not perform well in other subjects. The implications of this theory is that in order for children to learn more effectively across the curriculum learners must acquire basic reading skills in the first two years. Children need a good understanding of how words are composed of sounds (phonemic awareness) in order to make sense of alphabetic systems. Children’s rapid development of spelling-to-sound correspondences allows the development of independent reading, high levels of practice, and the subsequent fluency which is critical for comprehension and enjoyment of reading.

## **1.7 Significance of the study**

This study is significant because it gives information about levels of reading skills acquired by the learners in Cinyanja by grade 2 when they prepare to move to English in Grade 3 so as to be aware of progress made in acquisition of reading skills under Primary Literacy Programme as early as possible. In addition to other studies conducted, the findings from the study might also generate information that may be significant to primary school teachers, education officers, colleges of education, the Ministry of General Education and researchers who are promoting improvement of literacy in early grades in primary schools. The findings from the study may also be used in the evaluation of the effectiveness of the Primary Literacy Programme. It is hoped that based on findings of this study, teachers, education officials, colleges of education and the Ministry of General Education will become aware of the levels of reading by Grade 2 so as to put interventions in place by considering recommendations made in the study. The study will contribute to building a strong foundation for early grade reading in Zambia.

## **1.8 Limitations of the study**

The major limitation was that the study was restricted to six selected schools in Lusaka district because of limited time in which to conduct the study. Matters of financial constraints were also unavoidable because coming up with generalizable findings needed a larger sample which this study was unable to have due to limitation in financial resources. Therefore, the findings might not be generalizable to schools in other districts in the Republic of Zambia. Even within Lusaka, the findings might not be generalized to schools which were not part of the study.

## **1.9 Operational definitions of terms**

**Initial literacy** – The official study of learning how to read, write and speak (Grade 1 – 2)

**Letter-sound knowledge** – Knowledge of the letters or groups of letters which represent the individual speech sounds in a language. Letters and letter patterns that represent speech sounds are also called 'graphemes', while the speech sounds of a language are also called 'phonemes'.

**Local familiar language** – One of the 7 lingua francaes spoken in the ten regions of Zambia used in schools for learning.

**Medium of Instruction** – The chosen official language used in teaching and learning.

**Mother tongue** – The first language a child acquires and is competent in it even before entering school.

**Word reading** - Assess learners on the ability to decipher words that follow linguistic rules and exist in Cinyanja.

**Early Grade Reading Assessment (EGRA)** - A test package developed by Research Institute Triangular (RTI) adapted by USAID Read To Succeed Project in Bemba, Cinyanja, Silozi and Kiikaonde. The tests measure five key tasks: letter-sound knowledge, non-word decoding, oral passage reading, reading comprehension and listening comprehension.

## **1.10 Summary**

This chapter has given a background to the study with special reference to the Primary Literacy Program that is anchored on phonics-based approach that focuses on letter-sound knowledge for beginning to read in familiar languages. The chapter covers the statement of the problem, purpose of study, research questions, theoretical framework, significance of the study, limitations and operational definitions of terms.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **Overview**

In this chapter the researcher reviewed some of the relevant literature on levels of reading among children in early grades in other countries and in Zambia. The literature review helps to identify the gaps in the existing knowledge that this study aimed to fill. It outlines the levels of reading among children in early grades and some of the factors that have led to high or low achievements in reading. The researcher also presents some of the studies conducted in sub-Saharan Africa. This is done in order to relate to the current study on the levels of reading skills among grade 2 learners who have been instructed following Primary Literacy Programme in familiar language, Cinyanja. The chapter ends with a summary on the literature that has been reviewed.

#### **2.1 Reading levels in African countries**

In many African countries reading levels are said to be low. Several studies have been conducted to establish reading levels including Zambia. This may be attributed to language policies that favour foreign languages to African languages. Alidou and Mallam Garba Maman (2003) note that when taught in African languages students are much more active than when taught in the national, yet foreign languages. The teaching through mother tongue is more effective and provides for quality learning for students, learning where they can combine existing knowledge with new knowledge.

Studies related to bi/multilingual education in Africa indicate that the use of mother tongues in basic education will produce positive outcomes if carefully implemented. The primary beneficial aspects discussed in the literature are: the improvement of communication and interactions in the classroom and the integration of African cultures and indigenous knowledge systems into formal school curricula. Effective communication leads to more successful learning opportunities in classrooms where languages familiar to both children and teachers are used as LoI at least in the first three years of education (Alidou, 1997; Alidou and Mallam, 2004; Bamgbose, 2005; Brock-Utne, 2000; Brock-Utne et al., 2003; Chekaraou, 2004; Heugh, 2000; IDRC 1997; Traoré, 2001; Ouédraogo, 2003).



In the study on “Pedagogical Renewal and Teacher Development in Sub-Saharan Africa” Dembélé and Miaro-II (2004) stated that “Ecoles Bilingues” in Burkina Faso (Ilboudo, 2003), Ecoles de la Pédagogie Convergente in Mali (Fomba et al. 2003) and Zambian Primary Reading Programme (Sampa et al. 2003) are examples of educational models which have adopted effective teaching practices. They argue that the use of mother tongues as languages of instruction facilitate the implementation of child-centered pedagogy. Teaching in a language familiar to children fosters active pupil-teacher interaction and enable pupils to develop their critical thinking skills which are transferable in all learning experiences even when the first language ceases to be the language of instruction in upper grades (Checkaraou, 2004, p.341).

In this study, the following widespread statistics on pupil reading levels are illustrated with reference to research results provided by the SACMEQ II project (1995 – 2010) among grade 6 pupils in English. This survey included several countries, amongst others Lesotho, Swaziland, Seychelles, South Africa, Tanzania, Malawi, Namibia, Mozambique, Kenya, Mauritius, Zambia and Zimbabwe. The research assessed the reading performance of pupils in several ways. One of these was to classify pupils’ reading skills to a) below “minimum level” or b) “desirable reading level” (Nguyen, Wu and Gillis, 2005).

Studies conducted by SACMEQ II in Kenya, Zimbabwe and Uganda among grade 6 learners were equally low. In Kenya, for example, research findings showed that one out of three (35 per cent) children from a nationally representative sample of primary school pupils in grade 6 failed to achieve even a minimum level of literacy in English, measured as capacity to recognize basic linguistic building blocks such as the alphabet and simple words. . Similarly, research results on reading levels in Zimbabwe revealed that more than half (54 per cent) of grade 6 pupils could not achieve the minimum level of reading in English as expected. Uganda also indicated a similar scenario. The reading achievement of grade 6 pupils at each reading stage is as follows: pre-reading 7.2 percent, emergent reading 18.3 per cent, basic reading 21.8 per cent, reading for meaning 21.5 per cent, interrogative meaning 14.8 per cent inferential reading 8.2 per cent, analytical reading 5.3 per cent and 2.9 per cent in Zimbabwe. . In addition a survey conducted in Namibia by SACMEQ (2004) among grade 6 learners in English also revealed low levels of reading among children tested. The study revealed that from all educational regions included in the study, the majority of learners did not reach the minimum mastery in reading English. At the

overall national level for example, only 16.9 percent of learners reached the minimum level of mastery in reading literacy and a meager 6.7 percent reached the desirable level (Wikan, 2007). The study showed serious gaps in the reading competencies of learners in upper primary phases in English.

A different study from SACMEQ conducted in Uganda by the National Examinations Board (2015) among grade 6 learners in English found that out of all grade 6 pupils assessed in English, just about a fifth (18.9%) were rated advanced. These are pupils who had satisfactorily acquired the competences expected of them at the grade 6 class level. A third of the pupils (33.0%) were rated adequate. This is the minimum desired level of proficiency for a grade 6 pupil. In this category could among other things tell the time on a clock face correctly, write simple sentences from jumbled and use the present continuous tense correctly. Nearly a third of the pupils (32.3%) were rated basic whose performance is below the adequate category and their performance exhibited mere acquisition of elementary skills of literacy in English. Less than a fifth of the pupils were categorized adequate (15.8%) and these are pupils whose performance is a class below the expected grade 6 class performance. This shows that only few learners complete primary education with satisfactory level of reading competencies, even in English. In most African countries children have great difficulties learning in a foreign language simply because they do not understand what the teacher is saying (Dutcher, 2004: 8).

There are many factors that may have contributed to low levels of reading in African languages and English most of which are related to language policies which promote continuation of English only medium but with the most minimal accommodation of an initial introduction to literacy taking place in L1 in the first year of school Muyeeba (2004). In multilingual societies the choice of language of instruction and language policy in schools is critical for effective learning (EFA 2005: 105).

According to Masaila (2008) a study conducted in Botswana, revealed age, absenteeism, repetition, gender, the language of instruction, pupil-teacher ratio, socio-economic status and the regularity of meals as the most important factors that influence pupil achievement among both developed and developing countries. In addition learning resources have also been reported to have an impact on learning achievement. In Kenya for example, the SACMEQ report revealed that pupils who had most learning resources such as pencils, pens, exercise books, notebooks,

erasers and rulers were estimated to achieve better in reading (-8.29, 1.43) than pupils who had hardly any learning materials. Theisen et al. (1983:3) agreed when he said that ‘students who do not have their own texts to study and take home do not do as well as those who have’. This shows that it is important for pupils to have these basic learning materials for improved achievement in reading and mathematics as well as for academic progress in general. Under the Free Primary Education (FPE) programme in Kenya, the government provides these learning materials to pupils, which is a major step towards solving this problem. Before the introduction of FPE programme in 2003 in Kenya, provision of these learning materials was left to parents.

The reading culture among children in most schools in Africa is poor. Some researchers have concluded that in the African continent, the reading habit of children is waning. The cause of this has been traced to some notable factors like non-availability of reading materials (books). As Chouldhurg (1990:87) put it “the reading habit is best formed at a young impressionable age in school, but once formed, it can last one’s life.” Young children acquire reading literacy through a variety of activities and experiences within different contexts. On the same issue of learning resources, Dean (1997) states that in writing materials, we need to remember that the materials produced must be motivating to the learners.. In addition, a rather different use of materials is to use them to provide work matched to individual needs if they are to make the maximum progress in learning. Above all, the teacher needs to select materials which will enable individuals and groups to learn the part of the curriculum appropriate for their age and ability. Speaking in Dar-es-Salaam at the 6th Pan African Reading For All conference (2009), the chairperson of the organizing committee, Mulokozi said that the lack of reading practices among the people was a hindrance to acquiring the needed skills to face the challenges in many African countries. There were more than 800 million people in the world who were not able to read and write. In a related situation, the president for Pan African Reading For All that was held in Tanzania in 2009, Edwards said among people worldwide who cannot read and write 64 per cent are women and children. Edwards further stated that there are many factors leading to that state of affairs but among them are unfriendly environments and lack of strategic and progressive plans towards illiteracy alleviation in the world in general.

Other prior studies have shown that there is a relationship between school context and academic performance explained by mediating factors such as poverty levels. Children in less densely

populated areas attend better schools and earn higher grades and are likely to go to colleges than children in densely populated areas (Rebecca, et.al. 2014). This is because higher quality schools demand more of their students and promote norms that value higher performance and achievement such as devoting time and energy to academic pursuits and that this may spill over to time spent reading outside their classroom (Rebecca, et.al. 2014). According to Ginsborg (2006), socioeconomic factors such as parental education levels, occupational economic deprivation (low family income and poverty), type of housing and high usage of social services also affect academic performance.

A study conducted by Pretorious and Nande (2002) looked at children between the ages of five and half and seven years, whose first language was Setswana to determine what factors might play a role in the literacy and numeracy performance. Results of this study indicated that these children are ill-prepared for formal education: They have inadequate literacy skill, poor sentence construction, poor syntax knowledge and inadequate phonological (sound) development. Comparing schools located in high density areas with schools located in low density areas, while the fact that language may certainly play a role in under-developed literacy skills, there is no doubt that the additional factor of being poor and disadvantaged is also linked to poor cognitive and reading comprehension competency (Gabriela, et. al., 2016).

Another study conducted in South Africa by Marynard (2012) on the effects of socio-economic status on reading comprehension, that can be associated to comparison of schools located in high density areas and schools located in low density areas, examined the differences in reading comprehension performance between learners from a low socio-economic status and those from a high socioeconomic status. The results indicated that learners from a low economic background ( $m=34.9$ ,  $SD=15.3$ ) performed significantly better than those from a high economic background ( $m=30.8$ ,  $SD=14.2$ ),  $t(465)=3.07$ ,  $p<0.001$ ,  $d=0.28$ ) with weak effect size. This illustrates that although socio-economic status between schools located in high density areas and schools located in low density areas play a role in the performance of reading comprehension, it does not play significant a role as that of language, which indicates a moderate size of  $d=0.53$ .

## 2.2 Reading levels in Zambia

For over a decade Zambia has continued to experience low levels of reading among learners in primary schools. A number of studies conducted have revealed poor levels of reading by most of the children in both Zambian languages and English.

Williams' (1993) report on reading in primary schools in Zambia brings the issue of reading levels back to center-stage. Williams attempted to assess the reading proficiency in English of 452 grade 3, 4 and 6 pupils in five schools (2 urban and 3 rural). He also tested reading levels in the local language in order to ascertain whether children were scoring badly in reading test due to the language factor as distinct from the reading problem. If pupils had low scores in English, but high scores in the mother tongue (Cinyanja) it could be inferred that their deficiency was in language ability and not in reading ability. He reports inadequate comprehension in English as having been observed among 85 per cent of grade 3 pupils, 88 per cent of grade 4 pupils and 74 per cent of grade 6 pupils. From these results, William (1993:15) concluded that the policy of instruction in English from grade 1 has a negative effect upon literacy in the mother tongue. He also reports poor reading in Cinyanja, the local language tested.

In 1991 and 1992, research commissioned by the Overseas Development Agency, a project funded by ODA commissioned a researcher, Williams, to look at the reading levels in English in primary schools in both Zambia and Malawi. The study was designed to find out whether pupils in Zambia had an edge over their Malawian counterparts in English proficiency, as a result of starting with English as a medium of instruction from grade 1 compared to Malawians who start English in grade 5 and use Chichewa from grades 1 to 4. Williams tested pupils at grades 3, 4 and 6 in rural schools (three for each) and urban schools (two for each country). After the study, the results showed that reading proficiency was not only very poor in English but also in Chichewa. In fact, the Malawian pupils had not only higher scores than Zambian pupils, but Zambian pupils also showed no clear advantage over their Malawian counterparts' mean scores at all grades, although these results were not statistically significant (Williams, 1998).

The findings of Williams (1993) before the introduction of PRP revealed that between 70.7 percent and 77.6 percent of the children who started to learn to read in English had not reached

the minimum reading levels and between 96.7 percent and 98.75 percent had not reached the desirable levels. This situation was attributed to the language policy Zambia was following. English, at the time, was being used to teach initial literacy from Grade 1.

In support of Williams results, the MOE (1996:39) states that “The fact that initial reading skills are taught in and through a language unfamiliar to the majority of children is believed to be a major contributing factor to the backwardness in reading shown by many Zambian children”. It was therefore, hypothesized that when the Government developed the Primary Reading Programme (PRP) according to which initial literacy instruction should begin in a familiar language before the introduction of English in Grade 2, the reading levels would improve because this would lay the foundation learning to read in familiar language that would eventually help to improve educational standards in all Grades throughout primary and secondary schools. It was also hypothesized that learners will be able to transfer the literacy skills learnt in the familiar language in Grade 1 into English (SITE) in Grade 2. The SITE literacy course was largely concerned about making the transition from Zambian language into English. However, this was thought not to be enough to ensure that all learners continued to improve their literacy skills in both languages, hence the introduction of Read On Course. To the contrary, this was not the case; learners were still unable to read at the expected levels from grade 3 to 7.

Williams’ (1998) findings reflected inadequate comprehension in English among 85 per cent of Grade 3 pupils, 84 per cent of Grade 4 pupils and 74 per cent of Grade 6 pupils that were tested. He also reported poor reading in Chinyanja, the local language. The Malawian pupils at all levels outperformed the Zambians in local language proficiency. Following the results, the scholar recommended that it was better for children to start with local language in grade one to improve the literacy rates. Williams’ findings were further supported by the Southern African Consortium for Monitoring Educational Quality (SACMEQ) survey in (1995) and (1998) which confirmed the low literacy rate in Southern African countries which included Zambia.

In 1995 the Southern Africa Consortium for Measuring of Education Quality (SACMEQ) conducted a survey in 1995 to measure literacy levels among grade 6 pupils in the Southern African countries of Swaziland, Lesotho, Malawi, Zambia, Zimbabwe and South Africa itself. Results for Zambia were that 25 per cent were able to read at minimum levels, 3 per cent were

able to read at desirable levels and Zambia was ranked at the bottom level of the Southern African countries.

One reason for low performance in reading may be that learners in foundation grades have great difficulties learning simply because they do not understand what the teacher is saying (Dutcher 2004: 8). Children taught in a language they do not understand such as English are silent, grave and afraid during most of the lesson. In addition teachers do not know how to effectively monitor and assess students learning. As a result do not acquire even the basic reading skill of the language they speak before they reach upper primary (5-7) and have to become oriented to acquire skill to read English (MoE, 2013). This is an indication that low reading levels have been in existence for over a decade. In cases when the reading levels had been improved, especially after the successful implementation of the Primary Reading Programme, there has been no sustainability to maintain those improved results. In many SACMEQ countries, there is empirical evidence that the use of a foreign language impacts negatively on learners' performance.

UNESCO (2000) revealed that in 1995, the SACMEQ study was sponsored by the Institute of Educational Planning to measure the reading ability of Grade 6 Zambian pupils. After the findings, the results showed that the factors which might have contributed to low reading levels among the learners included the following: short instructional time, Poverty in the homes, low teacher morale, too many untrained teachers, inadequate supply of educational materials and the use of a foreign language; English, in the school instead of their home language.

After the SACMEQ study conducted in 1995, the National Reading Committee (NRC) (1997) instituted another study in four Lusaka primary schools. The study reported poor levels of reading in the sampled primary schools. It was therefore estimated from the findings of this study that approximately sixty percent of pupils leaving school at the end of grade seven had extremely poor reading skills in English and almost completely illiterate in their local language (Kotze and Higgins, 1999).

In 1995 similar results of very poor reading levels were reflected. According to Cooper (1989) a number of solutions must be tried before coming up with one solution. The Ministry of

Education identified lack of books in schools as the root cause of the problem. Consequently though the Finish International Development Aid (FINNIDA) schools were flooded with books under a programme called the “Book Box Project”.

The Book Box Project was evaluated in 1999 in order to assess its impact. Results showed no improvement at all. In the same year, another national survey was conducted among pupils from grades 1 to 6 which revealed that reading levels were equivalent to two grades below actual grade in English and three grades below in Zambian languages. This survey identified language policy as a cause of the problem and recommended the use of a familiar language (MT) for initial literacy. It was out of the findings of this national survey in 1999 that Primary Reading Programme (PRP) was born that comprised three courses, New Breakthrough To Literacy (NBTL), Step In To English (SITE) and Read On Course (ROC).

After the introduction of PRP, studies reflecting low literacy levels in basic schools are included in studies conducted by Cathal (2001), Cathal, et al (2002), the Ministry of Education (2008), Sampa (2003 and 2005) and the Ministry of Education (2006), Ministry of Education (2008) which have provided information on the reading levels among Zambian children who were following NBTL, SITE and ROC.

Another study had been done in line with language of initial literacy was the one by Matafwali (2010) who had observed that even if the use of mother tongue as the initial language of instruction was introduced in 2000, the reading levels of the majority of Zambian children were regrettably still low by 2005, especially in Lusaka province. Specifically, she wanted to know how level of proficiency in the language of instruction explains difficulties in becoming a conventional reader in a Zambian language and English. The study further sought to evaluate the progress made by children in grade one and two. The findings revealed that due to the cognitive relationship that exists between language and thought the NBTL in which children are taught initial literacy in a familiar language could be effective. The study revealed that lack of proficiency in the initial language of instruction was hall mark for the poor reading and writing skills observed in the majority of Zambian children. Matafwali observed that when deficits in



oral language converge with deficits in cognitive skills, children are at a substantial risk of developing reading difficulties.

Matafwali's study also revealed that there is a strong correlation between familiarity of language of initial literacy instructions and the progress in reading words. For instance, when learners are familiar with the language of initial literacy instructions, they make more progress in reading. Fufanwa (1975) also echoes this statement when he reported that foreign language use as a medium of instruction constitutes barriers to effective teaching and learning. The use of a foreign language as medium of instruction distorts the accumulated vocal and verbal facility, thought process and cognitive equilibrium and this accounted for a good proportion of primary school dropouts in Nigeria and in India (Mohalnlal, 2001) reported in Inyamu et al (2005).

Kelly (2000) also reported that another study on the low literacy levels in Zambia was conducted in the 1990s. After the study, it was observed that the literacy levels among pupils in the lower school grades were exceptionally poor.

For Zambia, the latest literature from the FNDP Mid-term Review has revealed that there has been a drop in pupil/teacher ratios and one would hope that this trend would improve learner achievement. The drop in the pupil-teacher ratios was attributed to the teacher recruitment targets for the year 2007 was to have 98% of qualified teachers for both primary and secondary. The actual numbers of teachers recruited were 84% and 96% of the teachers had appropriate qualifications to teach grades 1 to 9 and 10 to 12 respectively (FNDP Mid-term Review, 2009).

The results have not been impressive because learners have been taught with a method that does not adequately support learning phonics which should be the basis of literacy instruction in transparent orthographies. Ball and McDiarmid (2010) reported that research which focused on the ways in which teachers and teacher candidates understood the subjects that they taught, revealed that teachers often had gaps in knowledge and skills similar to those of their pupils. For literacy, as Collins et al. (2012) report, teachers have not had training on using phonics in Zambian languages. This is why so few of them master this beginning step towards basic reading skill. When these learners were in grade one, schools were following the Primary Reading Programme, New Breakthrough To Literacy course (NBTL) and the Language Experience

Approach was not effective enough to allow learners to decode words and read. A large portion of learners could not perform well in letter-sound knowledge because the method applied for reading instruction failed to promote learners to acquire the basic decoding skills.

As a result of the above situation of low levels of reading in early grades, in 2013, the Ministry of General Education (MOGE) with support from cooperating partners revised the Primary Reading Programme (PRP) and replaced it with the Primary Literacy Programme (PLP) phonics-based approach. This is because a curriculum rooted in a child's own language, culture and environment, with appropriate and locally developed reading and curriculum materials, is crucial for early learning success (Global Campaign for Education Policy Brief (2014:5). According to Pang et al. (1986), the process of learning to read is based on the key principles of provision of oral language, phonological and phonemic awareness, fluency, vocabulary, prior knowledge, comprehension, motivation and purpose, and integrated reading and writing, choice of text of the right difficulty and interest level, assessment to provide feedback, cultural factors and practice. Therefore, in terms of having an effective approach for teaching reading, the Ministry of General Education reviewed the Primary Reading Programme (PRP) and realized the need to first have a National Literacy Framework. In March 2013, with support from USAID/Zambia Read To Succeed project, the Ministry of General Education developed a draft National Literacy Framework for grade 1 to 7 that establishes the roadmap for literacy teaching in primary schools.

The Early Grade Reading Assessment tests conducted in four languages (Cinyanja, Icibemba, Silozi, Kiikaonde) in 2012 as baseline survey and in 2014 as midline survey in six districts by USAID Read To Succeed Project among grade 2 learners that were learning to read following the current PLP phonics-based approach being implemented under the revised curriculum, show some improvement between the two tests as shown in Table 2.1 (USAID Midline Survey Report, 2015):

Table 2.1: 2012 and 2014 EGRA mean percentage scores for Grade 2

EGRA Subtasks	Grade 2		
	Total raw scores	Baseline – 2012	Midline – 2014
Orientation to print	3	1.85	2.36
Letter sound knowledge	100	3.10	8.84
Non-word reading	100	0.98	4.30
Oral reading passage	56	1.32	5.67
Reading comprehension	5	0.09	0.44
Listening comprehension	5	1.58	3.04
English vocabulary	20	5.91	7.96

The results shown in Table 2.1 are based on performance of learners in a sample of selected school in rural districts. This study looks at learners in urban setting of Lusaka district. Secondly, RTS study included the reading of non-words in order to test learners' decoding skills while this study assessed learners in reading of real words. However, both the RTS EGRA study and this study assess reading levels of learners at grade 2. The difference between the two studies is in the design. Although the results in Table 1 below show a slight improvement between the baseline and midline study, the results are still below expectations.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **Overview**

This chapter discusses the methodology used in the study. It represents and discusses the research design, the population, sample size and sampling techniques, data collection instruments, data collection procedures, data analysis and ethical issues. Finally the chapter highlights some of the ethical issues that were taken into account during the research.

#### **3.1 Research design**

The research was a longitudinal study conducted with the same children for a period of nine months (Robson, 1995). The research utilized a mixed methods approach which involved collection and analysis of qualitative and quantitative data into empirical study (Mulenga, 2015). The mixed methods approach was used employing a convergent parallel design to integrate the strengths of both qualitative and quantitative methods in order to explain the levels of reading among grade 2 learners. The weight of the design was mainly on the quantitative methods with qualitative paradigm offering a supportive role (Creswell, 2009).

#### **3.2 Target population**

The population comprised all grade 2 children learning to read in a local familiar language in Cinyanja in Lusaka following the revised curriculum implemented from January 2014. The teachers teaching Grade 2 classes where learners were sampled for this study represented the population of all teachers teaching Cinyanja in grade 2.

#### **3.3 Study sample**

Lusaka district in Lusaka province was the site for this study. The sample size of this study consisted of 6 primary schools that were implementing the revised curriculum and teaching reading in Cinyanja in grade 2. Out of these schools 3 schools were located in low density areas

and 3 schools were located in high density areas, according to Lusaka context. At each of the 6 primary schools, the target was 16 Grade 2 children (8 boys and 8 girls) sampled from the same class. The total sample of learners was 98 (48 boys and 50 girls). I chose to test a sample of grade 2 learners because the children had been introduced to initial literacy in Cinyanja for two years in grade 1 and 2. Even though they were introduced to oral English in grade 2, before they were introduced to reading and writing in English in Grade 3. It is by grade 2 when learners should learn sufficient skills to enable them transfer reading skills to English. Therefore, this is a transition period from learning to read in Cinyanja to English. In addition, at each school one teacher teaching the class from which learners were sampled was also interviewed. In total 98 learners (48 boys and 50 girls) were assessed and 6 teachers were interviewed.

### **3.4 Sampling procedures**

Cinyanja is the language used in Lusaka district for literacy. According to Ministry of General Education National Policy on Education, Educating Our Future (1996), officially English will be used as the language of instruction, but the language used for initial literacy learning in Grades 1 – 4 will be one that seems best suited to promote meaningful learning by children. Based on this policy learners from Grade 1 to 2 in Lusaka district are taught to read and write in Cinyanja, which is the language of this study. In this study a simple random sampling procedure was used to select a sample of learners and schools. The simple random sampling is a procedure in which all the individuals in the defined population have an equal and independent chance of being selected as a member of the sample (Kombo & Tromp, 2006:79). Therefore, a simple random sampling procedure was used to select schools. A list of schools located in low density areas and a list of schools located in high density areas were written down. Then each school located in low density area and each school located in high density area was written on a piece of paper. First, the pieces of paper on which the schools located in low density areas were written was mixed and 3 schools were randomly selected. The same procedure was repeated to pick 3 schools located in high density areas.

The selection of learners was done by intervals using a class register from which 8 boys and 8 girls were selected. For example a class that had 20 boys, every 4<sup>th</sup> boy was picked for the

sample. The same procedure was repeated for selecting a sample of girls. The procedure was repeated for all 6 schools. Teachers to be interviewed were selected on the criteria that they teach that particular class where learners were sampled.

### **3.5 Data collection procedures**

To begin with permission was sought from the District Education Board Secretary (DEBS) to carry out research in schools. The researcher later went into the field to conduct the research. The purpose was to test learners in four reading variables, letter-sound knowledge, word reading oral passage reading and reading comprehension. After obtaining consent from the head teacher, teacher and learner respectively, the process of administering individual tests and teacher interviews were conducted. After completion of individual assessment tests and oral teacher interviews, the researcher thanked the respondents and bid farewell.

### **3.6 Data collection instruments**

The design of the test variables and timing were based on the RTS EGRA tests conducted in 2012 and 2014. An assessment test instrument for assessing learners' reading levels in letter-sound knowledge, word reading, oral passage reading and comprehension were developed as follows:

*Letter sound knowledge (phonics):* Learners were given one minute in which to sound out 10 letter sounds (not letter names) presented in both lower and upper case: *a, T, i, F, k, E, U, t, J, L*. Zero score was earned if the child gave no answer or a wrong sound.

*Word Reading:* The test was aimed at assessing learners on the ability to read 5 words correctly within 60 seconds. The words were *ana, galu, atate, tsiku* and *bwera*. The words were arranged from simple to complex and tested learners' decoding skills. The test carried a total of 5 marks.

*Oral passage reading:* The test was given to assess learner's reading fluency by reading a connected text. The learner was assessed according to the number of words read correctly out of 30 words within 60 seconds. Each word read correctly carried 1 mark.

*Reading comprehension:* In order to assess whether learners read the words correctly or not (fluency), learners were asked to read aloud a short passage and to answer questions. This test assessed the learner's ability to understand what was read by answering questions. After reading a short passage, a learner was asked 5 questions just after completing oral passage reading in Cinyanja. The wh-questions (*what, who, how*) were asked to test learners' basic understanding of the story. A learner was given 2 minutes to read the short passage answer the question asked by the test administrator.

Apart from assessment tests for the learners, a questionnaire for oral interviews for collecting data from teachers teaching grade 2 learners included in the sample was also developed. Teachers were asked about their qualifications, number of years they have taught (experience), how long they had taught that particular class, materials available for teaching Cinyanja and few questions about teaching in a local familiar language Cinyanja.

### **3.7 Validity**

The tests for this study were adapted from EGRA to suit the curriculum content for familiar languages. EGRA has been used in more than 65 countries and in over 100 languages (Dubeck & Gove, 2015). The theoretical framework for EGRA allows for it to be adapted to other languages relatively quickly (Dubeck & Gove, 2015). To test the validity of the tests, pilot tests were conducted as part of training at nine Government schools in Lusaka in Cinyanja and feedback from pilot tested questionnaires for Cinyanja version was used for the final questionnaire editing before teams were deployed to the field (RTI, 2013). The EGRA assessors had five days training in test administration.

### **3.8 Reliability**

EGRA results from the previous test versions are available online and since the test items have changed from 2012 to 2014, the test results from different years are not comparable. During the piloting of the revised EGRA adaptations for assessment in 2014, reliability tests were conducted based on Cronbach's alpha values. The reliability scores for each instrument by language were:

Chitonga .74, Cinyanja .82, Icibemba .80, Kiikaonde .80, Lunda .87, Luvale .75 and Silozi .82 (RTI, 2015). An alpha score over 0.70 is acceptable and a value over 0.80 is considered to be very good. In addition, construct validity was assessed by examining the item hierarchy, or the ordering of items within a subtask from easy to difficult that result from an item level analysis during the Rasch measurement (RTI, 2015).

### **3.9 Data analysis procedures**

Data were analyzed using SPSS version 20 to run frequencies and means. In order to have a statistical description of the data, histograms were used. The data for learners' responses were statistically analyzed by descriptive statistics to determine the frequencies for which paired sample t-tests were used to test whether there were any significant differences in learner performance in all variables and a one way analysis of variance (ANOVA) was conducted to establish whether there were any significant differences in learner performance across the six schools. LSD post-hoc tests were conducted to compare performance by schools. To establish differences in the learner performance by gender independent t-tests were used. The results were also compared with EGRA results conducted earlier by Read To Succeed Project. The teachers' responses were analyzed, interpreted and described.

### **3.10 Ethical considerations**

On conducting research, the researcher observed ethical principles. The researcher explained the purpose of the research and made assurance about confidentiality and explained that a respondent was free to withdrawal if one felt to do so at any time during the test or interview. This was important because in educational research matters of ethics are particularly significant since the researcher studies the behaviour of human beings. The following were the ethical issues considered by the researcher in this study:

1. The respondents were informed about the purpose of the research and consent was obtained from respondents to take part in the research, explanation and briefing before and after the study about the purpose of this research was made and respondents were informed about their rights to withdrawal any time if they wished to do so.



2. During data collection a conducive environment was created for physical and psychological protection of respondents from harm and participants' privacy was highly upheld during data collection, analysis and publication of this study.
3. The researcher assured respondents about confidentiality of information and results and created good rapport with participants that resulted in openness and honesty in the process of collecting data.

At the school level the head teacher gave consent for children and teachers to participate and the aim of the study was clearly explained to the children before commencement of the children.

### **3.11 Summary**

This chapter has explained the methodology of the research. It has highlighted on the research design, the population, sample size and sampling techniques, data collection instruments and data collection procedures, and data analysis. The chapter has also outlined the ethical issues observed during the research. The next chapter presents the findings of the study.

## **CHAPTER FOUR**

### **PRESENTATION OF FINDINGS**

#### **Overview**

This chapter presents research findings based on the objectives and research questions of the study. Information has been presented under themes derived from the research objectives and questions that were formulated for this study. These objectives and corresponding research questions related to comparison of levels of reading skills by test, comparison of levels of reading skills by schools, comparing learner performance in literacy by gender and comparison of similarities with EGRA findings. It has also presented findings about teachers' impact on children's reading skills.

#### **4.1 Demographic characteristics of respondents**

##### **4.1.1 Learners' gender**

Table 4.1 below shows the distribution of the respondents who participated in the study from both schools located in low density areas and schools located in high density areas schools:

Table 4.1: Distribution of Respondents according to percentage and frequency

	Males	Females	Total
	Percentage	Frequency	Percentage
Test 1	48	50	98
Test 2	42	43	85
Test 3	32	33	65
Teachers	0	6	6

### 4.1.2 Learners' residence by gender

In terms of school location the learners were classified as coming from schools located in low density areas ( school D, school E and school A) and schools located in high density areas (school B, school C and school F). N=24 (24.5%) boys and N-25 (25.5%) girls) indicated coming from schools located in low density areas. N=24 (24.5%) boys and N- 25 (25.5%) girls) indicated coming from schools in high density areas.

### 4.1.3 Demographic characteristics of teachers

During the study background information was collected from teachers who were teaching learners that were assessed for the research. The information collected was about their qualifications, teaching experience, number of sessions they teach and home language. Table 4.2 below shows the information collected about teachers by percentage:

Table 4.2: Information about teachers

		N	Percentages
Qualifications	Bachelor of Arts degree	1	17
	Primary Diploma	2	33
	Diploma – Special Educ.	1	17
	Primary certificate	2	33
Total			100
Teaching experience	5 – 10	3	50
	10 – 15	1	16.6
	15 – 20	1	16.6
	20 – 25	1	16.6
Total			99.8
No. of teaching sessions	1	3	50
	2	3	50
Total			100
Home language	Icibemba	1	16.6
	Chitonga	1	16.6
	Silozi	1	16.6
	Luvale	1	16.6
	Nsenga	1	16.6
	Ngoni	1	16.6
Total			99.6

## 4.2 Comparison of levels of reading skills obtained by learners in Cinyanja at the end of grade 1 and the levels of reading skills obtained by learners in grade 2

In line with objective 1, this study compared levels of reading obtained by learners in Cinyanja at the end of Grade 1 and the levels of reading obtained by learners in Grade 2, results revealed that the learners obtained mean 22.96 (SD=18.408) in test 1, 26.48 (SD=18.601) in Test 2, and 35.25 (SD=16.593) in Test 3.

Firstly the researcher wanted to establish whether there were any significant differences in the performance of the learners in Test 1, Test 2, and Test 3; the null hypothesis being that there was no significant difference in the performance of the learners across the tests ( $H_0: \mu_{t1}=\mu_{t2}=\mu_{t3}$ ). A paired samples t test was conducted to test this hypothesis, at a significant level of 0.05. The results are summarized in Table 4.3 and were significant in all cases.

Table 1.3: Paired Samples Test in the three tests – paired differences

							t	df	Sig. (2-tailed)
		Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Test 1 - Test 2	-2.647	9.418	1.022	-4.679	-.616	2.591	84	.011
Pair 2	Test 1 - Test 3	-5.615	12.137	1.505	-8.623	-2.608	3.730	64	.001
Pair 3	Test 2 - Test 3	-5.083	8.359	1.079	-7.243	-2.924	4.710	59	.001

Learners performed better in Test 2 than in Test 1 ( $t(df=84) = -2.591$ ,  $p=0.011$ ); learners performed better in Test 3 than in Test 2 ( $t(df=59) = -4.710$ ,  $p=0.001$ ); likewise, learners performed better in Test 3 than in Test 1 ( $t(df=64) = -3.730$ ,  $p=0.001$ ).

## 4.3 Comparison of levels of reading skills obtained by learners by schools

In relation to objective 2, further analyses were conducted to establish mean learner performance by school. Table 4.4 present summary results of mean learner performance by school in the three tests. For test 1, school E had highest mean score while school A obtained the lowest mean score. For test 2 again school E obtained the highest mean score while school C obtained the lowest mean score. For test 3 school E obtained the highest mean score while school F obtained

the lowest mean score. Overall, the mean scores for all the schools were higher in test 3 than in test 2, higher in test 2 than in test 1. Please, note that school A did not participate in Test 3.

Table 4.4: Summary statistics of learner performance in the six selected schools

		N	Mean	SD	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Test 1	A	16	9.88	11.529	3.73	16.02	0	37
	B	16	29.25	17.295	20.03	38.47	0	50
	F	17	21.29	16.282	12.92	29.67	1	47
	C	17	10.94	12.959	4.28	17.60	0	45
	D	16	22.94	16.563	14.11	31.76	8	49
	E	16	44.31	12.037	37.90	50.73	14	50
	Total	98	22.96	18.408	19.27	26.65	0	50
Test 2	A	16	22.50	14.119	14.98	30.02	4	47
	B	15	28.40	16.940	19.02	37.78	5	48
	F	13	20.69	18.080	9.77	31.62	3	47
	C	14	10.29	14.943	1.66	18.91	0	43
	D	11	27.64	19.658	14.43	40.84	1	50
	E	16	46.75	4.919	44.13	49.37	36	50
	Total	85	26.48	18.601	22.47	30.49	0	50
Test 3	A	-	-	-	-	-	-	-
	B	15	35.33	15.536	26.73	43.94	6	50
	F	14	22.14	20.183	10.49	33.80	3	49
	C	8	24.50	15.712	11.36	37.64	6	46
	D	12	41.17	8.664	35.66	46.67	24	50
	E	16	47.56	3.794	45.54	49.58	38	50
	Total	65	35.25	16.593	31.13	39.36	3	50

A one-way Analysis of variance (ANOVA) was conducted to establish whether there were any significant differences in learner performance across the six schools (Table 4.5) in the three tests at a significant level of 0.05. The results were significant in all the three tests: Test 1 ( $F(5, 92) = 12.303, p = .001$ ); Test 2 ( $F(5, 79) = 9.627, p = .001$ ); Test 3 ( $F(4, 60) = 8.094, p = .001$ ). These results reveal that there were statistically significant differences in the learner performance among the schools.

Table 4.5: ANOVA test results in the three tests

		df	F	Sig.
Test 1	Between Groups	5	12.303	.001
	Within Groups	92		
	Total	97		
Test 2	Between Groups	5	9.627	.001
	Within Groups	79		
	Total	84		
Test 3	Between Groups	4	8.094	.001
	Within Groups	60		
	Total	64		

### 4.3.1: Test 1: Comparison by school

An LSD post-hoc test in test 1 (Table 4.6) revealed learner performance in the six schools were statistically significant. School E performed highest [E-A ( $p=.001$ ); E-B ( $p=.005$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ ); E-D ( $p=.001$ )]. School B performed better than school A ( $p=.001$ ) and school C ( $p=.001$ ). There were no statistically significant differences between school B and school F ( $p=.122$ ), school B and school D ( $p=.226$ ), school A and school C ( $p=.835$ ), and school F and school D ( $p=.748$ ).

Table 4.6: Multiple Comparisons - school performance in Test 1

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
A	B	-19.375 <sup>*</sup>	.001	-29.65	-9.10
	F	-11.419 <sup>*</sup>	.027	-21.54	-1.30
	C	-1.066	.835	-11.19	9.06
	D	-13.063 <sup>*</sup>	.013	-23.34	-2.79
	E	-34.438 <sup>*</sup>	.001	-44.71	-24.16
B	A	19.375 <sup>*</sup>	.001	9.10	29.65
	F	7.956	.122	-2.17	18.08
	C	18.309 <sup>*</sup>	.001	8.19	28.43
	D	6.313	.226	-3.96	16.59
	E	-15.063 <sup>*</sup>	.005	-25.34	-4.79
F	A	11.419 <sup>*</sup>	.027	1.30	21.54
	B	-7.956	.122	-18.08	2.17
	C	10.353 <sup>*</sup>	.042	.39	20.32
	D	-1.643	.748	-11.77	8.48
	E	-23.018 <sup>*</sup>	.001	-33.14	-12.90
C	A	1.066	.835	-9.06	11.19
	B	-18.309 <sup>*</sup>	.001	-28.43	-8.19
	F	-10.353 <sup>*</sup>	.042	-20.32	-.39
	D	-11.996 <sup>*</sup>	.021	-22.12	-1.87
	E	-33.371 <sup>*</sup>	.001	-43.49	-23.25
D	A	13.063 <sup>*</sup>	.013	2.79	23.34
	B	-6.313	.226	-16.59	3.96
	F	1.643	.748	-8.48	11.77
	C	11.996 <sup>*</sup>	.021	1.87	22.12
	E	-21.375 <sup>*</sup>	.001	-31.65	-11.10
E	A	34.438 <sup>*</sup>	.001	24.16	44.71
	B	15.063 <sup>*</sup>	.005	4.79	25.34
	F	23.018 <sup>*</sup>	.001	12.90	33.14
	C	33.371 <sup>*</sup>	.001	23.25	43.49
	D	21.375 <sup>*</sup>	.001	11.10	31.65

### 4.3.2 Test 2: Comparison by school

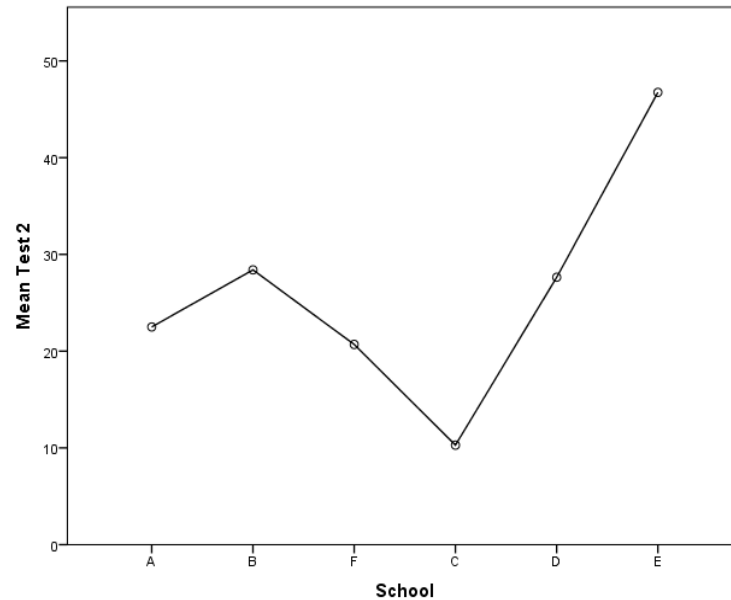
An LSD post-hoc test in test 2 (Table 4.7 and Figure 4.1) revealed learner performance in six schools were statistically significant. School E performed better than all the other five schools [E-A ( $p=.001$ ); E-B ( $p=.001$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ ); E-D ( $p=.002$ )]. School B performed better than school C ( $p=.002$ ) while school D performed better than school C ( $p=.006$ ). There were no statistically significant differences between school B and school A ( $p=.281$ ), school B and school F ( $p=.182$ ), school B and school D ( $p=.899$ ), school F and school A ( $p=.750$ ), school F and school C ( $p=.078$ ), school F and school D ( $p=.266$ ), and school A and school D ( $p=.388$ ).

Table 4.7: Multiple Comparisons school performance in Test 2

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
A	B	-5.900	.281	-16.72	4.92
	F	1.808	.750	-9.43	13.05
	C	12.214*	.030	1.20	23.23
	D	-5.136	.388	-16.92	6.65
	E	-24.250*	.000	-34.89	-13.61
B	A	5.900	.281	-4.92	16.72
	F	7.708	.182	-3.70	19.11
	C	18.114*	.002	6.93	29.30
	D	.764	.899	-11.18	12.71
	E	-18.350*	.001	-29.17	-7.53
F	A	-1.808	.750	-13.05	9.43
	B	-7.708	.182	-19.11	3.70
	C	10.407	.078	-1.19	22.00
	D	-6.944	.266	-19.27	5.39
	E	-26.058*	.001	-37.30	-14.82
C	A	-12.214*	.030	-23.23	-1.20
	B	-18.114*	.002	-29.30	-6.93
	F	-10.407	.078	-22.00	1.19
	D	-17.351*	.006	-29.48	-5.22
	E	-36.464*	.000	-47.48	-25.45
D	A	5.136	.388	-6.65	16.92
	B	-.764	.899	-12.71	11.18
	F	6.944	.266	-5.39	19.27
	C	17.351*	.006	5.22	29.48
	E	-19.114*	.002	-30.90	-7.33
E	A	24.250*	.001	13.61	34.89
	B	18.350*	.001	7.53	29.17
	F	26.058*	.001	14.82	37.30
	C	36.464*	.001	25.45	47.48
	D	19.114*	.002	7.33	30.90



Figure 4.1: Mean school in Test 2



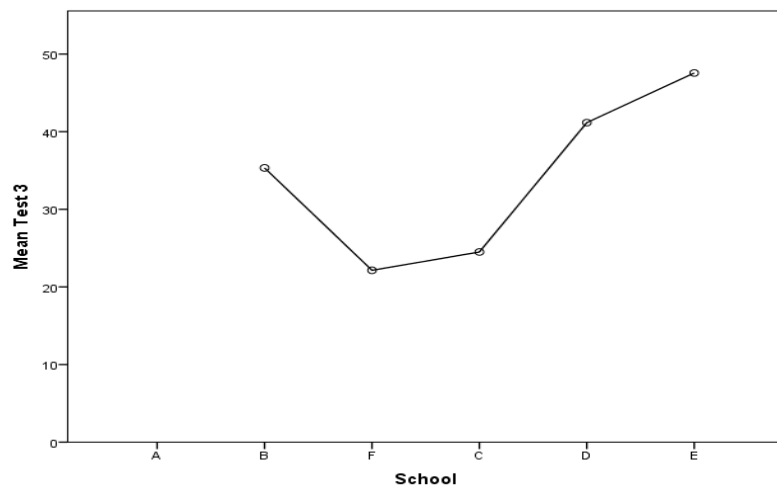
### 4.3.3 Test 3: Comparison by school

An LSD post-hoc test in test 3 (Table 4.8 and Figure 4.2) revealed learner performance in six schools were statistically significant. School E performed better than three schools [E-B ( $p=.017$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ ). School B performed better than school F ( $p=.013$ ) while school D performed better than school F ( $p=.001$ ) and school C ( $p=.010$ ). There were no statistically significant differences between school B and school C ( $p=.078$ ), school B and school D ( $p=.280$ ), school F and school C ( $p=.702$ ), and school E and school D ( $p=.230$ ).

Table 4.8: Multiple Comparisons - school performance in Test 3

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
B	F	13.190*	.013	2.92	23.46
	C	10.833	.078	-1.26	22.93
	D	-5.833	.280	-16.53	4.87
	E	-12.229*	.017	-22.16	-2.30
F	B	-13.190*	.013	-23.46	-2.92
	C	-2.357	.702	-14.60	9.89
	D	-19.024*	.001	-29.89	-8.16
	E	-25.420*	.001	-35.53	-15.31
C	B	-10.833	.078	-22.93	1.26
	F	2.357	.702	-9.89	14.60
	D	-16.667*	.010	-29.28	-4.06
	E	-23.063*	.000	-35.02	-11.10
D	B	5.833	.280	-4.87	16.53
	F	19.024*	.001	8.16	29.89
	C	16.667*	.010	4.06	29.28
	E	-6.396	.230	-16.95	4.15
E	B	12.229*	.017	2.30	22.16
	F	25.420*	.001	15.31	35.53
	C	23.063*	.001	11.10	35.02
	D	6.396	.230	-4.15	16.95

Figure 4.2: Mean school performance across in Tests



### 4.3.4 School Performance in Letter Sound

The results revealed that in letter sound learners obtained mean 6.15 (SD=3.096) in test 1, 6.75 (SD=3.000) in Test 2, and 7.94 (SD=2.242) in Test 3. A paired samples t test was conducted to test whether there were any significant differences in learner performance in letter sound the three tests, at a significant level of 0.05. The results were significant in all cases (Table 4.9). Learners performed better in Test 2 than in Test 1 ( $t(df=84) = -2.029$ ,  $p=0.046$ ); learners performed better in Test 3 than in Test 2 ( $t(df=59) = -2.557$ ,  $p=0.013$ ); likewise, learners performed better in Test 3 than in Test 1 ( $t(df=64) = 3.178$ ,  $p=0.002$ ).

Table 4.9: Paired Samples Test in Letter Sound

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Letter Sound 1 - Letter Sound 2	-.600	2.726	.296	-1.188	-.012	-2.029	84	.046
Pair 2	Letter Sound 2 - Letter Sound 3	-.717	2.171	.280	-1.278	-.156	-2.557	59	.013
Pair 3	Letter Sound 3 - Letter Sound 1	.908	2.303	.286	.337	1.478	3.178	64	.002

One-way ANOVA was conducted to establish whether there were any significant differences in the performance of schools in the letter sound across the three tests. The results were significant: Test 1 ( $F(5, 92) = 14.261$ ,  $p = .001$ ); Test 2 ( $F(5, 79) = 19.928$ ,  $p = .001$ ); Test 3 ( $F(4, 60) = 10.539$ ,  $p = .001$ ). These results (Table 4.10) reveal that there was a statistically significant difference in the learner performance among the schools.

Table 4.10: Summary statistics of learner performance in the six selected schools

		N	Mean	SD	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Letter Sound 1	A	16	4.44	3.224	2.72	6.16	0	10
	B	16	6.50	2.828	4.99	8.01	0	10
	F	17	5.94	2.331	4.74	7.14	1	10
	C	17	3.24	2.333	2.04	4.43	0	9
	D	16	6.38	1.586	5.53	7.22	5	9
	E	16	9.63	.806	9.20	10.05	8	10
	Total	98	5.99	3.017	5.38	6.59	0	10
Letter Sound 2	A	16	7.38	1.893	6.37	8.38	4	10
	B	15	7.40	1.882	6.36	8.44	5	10
	F	13	5.23	2.315	3.83	6.63	3	9
	C	14	2.71	2.367	1.35	4.08	0	8
	D	11	7.55	2.945	5.57	9.52	1	10
	E	16	9.75	.683	9.39	10.11	8	10
	Total	85	6.75	3.000	6.11	7.40	0	10
Letter Sound 3	A	-	-	-	-	-	-	-
	B	15	8.40	1.682	7.47	9.33	5	10
	F	14	6.14	2.316	4.81	7.48	3	10
	C	8	6.00	1.773	4.52	7.48	4	8
	D	12	8.33	2.188	6.94	9.72	4	10
	E	16	9.75	.577	9.44	10.06	8	10
	Total	65	7.94	2.242	7.38	8.49	3	10

#### 4.3.3.1 Test 1: Letter sound

LSD post-hoc tests were conducted and the results are summarized in Table 4.11. In Test 1, school E performed better than all the other five schools [E-A ( $p=.001$ ); E-B ( $p=.001$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ ); E-D ( $p=.001$ )]. School B performed better than school A ( $p=.014$ ) and school C ( $p=.001$ ). School F performed better than school C ( $p=.001$ ). School D performed better than school A ( $p=.021$ ), school B ( $p=.001$ ), and school C ( $p=.001$ ). There were no statistically significant differences between school A and school F ( $p=.067$ ), school A and school C ( $p=.141$ ), school B and school F ( $p=.492$ ), school F and school D ( $p=.594$ ), school A and school C ( $p=.835$ ), and school B and school D ( $p=.879$ ).

Table 4.11: Multiple Comparisons - School performance in letter sound in Test 1

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
A	B	-2.063 <sup>*</sup>	.014	-3.70	-.43
	F	-1.504	.067	-3.11	.10
	C	1.202	.141	-.41	2.81
	D	-1.938 <sup>*</sup>	.021	-3.57	-.30
	E	-5.188 <sup>*</sup>	.001	-6.82	-3.55
B	A	2.063 <sup>*</sup>	.014	.43	3.70
	F	.559	.492	-1.05	2.17
	C	3.265 <sup>*</sup>	.001	1.66	4.87
	D	.125	.879	-1.51	1.76
	E	-3.125 <sup>*</sup>	.001	-4.76	-1.49
F	A	1.504	.067	-.10	3.11
	B	-.559	.492	-2.17	1.05
	C	2.706 <sup>*</sup>	.001	1.12	4.29
	D	-.434	.594	-2.04	1.17
	E	-3.684 <sup>*</sup>	.001	-5.29	-2.08
C	A	-1.202	.141	-2.81	.41
	B	-3.265 <sup>*</sup>	.001	-4.87	-1.66
	F	-2.706 <sup>*</sup>	.001	-4.29	-1.12
	D	-3.140 <sup>*</sup>	.001	-4.75	-1.53
	E	-6.390 <sup>*</sup>	.001	-8.00	-4.78
D	A	1.938 <sup>*</sup>	.021	.30	3.57
	B	-.125	.879	-1.76	1.51
	F	.434	.594	-1.17	2.04
	C	3.140 <sup>*</sup>	.001	1.53	4.75
	E	-3.250 <sup>*</sup>	.001	-4.88	-1.62
E	A	5.188 <sup>*</sup>	.001	3.55	6.82
	B	3.125 <sup>*</sup>	.001	1.49	4.76
	F	3.684 <sup>*</sup>	.001	2.08	5.29
	C	6.390 <sup>*</sup>	.001	4.78	8.00
	D	3.250 <sup>*</sup>	.001	1.62	4.88

#### 4.3.3.2 Test 2: Letter sound

LSD post-hoc tests were conducted to compare the performance of the schools in letter sound in test 2 and the results are summarized in Table 4.12. In Test 2, school E performed better than all the other five schools [E-A ( $p=.002$ ); E-B ( $p=.002$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ ); E-D ( $p=.008$ )]. School B performed better than school F ( $p=.007$ ) and school C ( $p=.001$ ). School F performed better than school C ( $p=.002$ ). School D performed better than school A ( $p=.021$ ), school B ( $p=.001$ ), and school C ( $p=.001$ ). School A performed better than school F ( $p=.007$ ) and school C ( $p=.001$ ). There were no statistically significant differences between school A and school B ( $p=.973$ ), school A and school D ( $p=.833$ ), school B and school D ( $p=.859$ ). School C performed least than any school.

Table 4.12: Multiple Comparisons - school performance in letter sound in Test 2

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
A	B	-.025	.973	-1.50	1.45
	F	2.144*	.007	.62	3.67
	C	4.661*	.001	3.16	6.16
	D	-.170	.833	-1.77	1.43
	E	-2.375*	.002	-3.82	-.93
B	A	.025	.973	-1.45	1.50
	F	2.169*	.007	.62	3.72
	C	4.686*	.001	3.16	6.21
	D	-.145	.859	-1.77	1.48
	E	-2.350*	.002	-3.82	-.88
F	A	-2.144*	.007	-3.67	-.62
	B	-2.169*	.007	-3.72	-.62
	C	2.516*	.002	.94	4.09
	D	-2.315*	.007	-3.99	-.64
	E	-4.519*	.000	-6.05	-2.99
C	A	-4.661*	.000	-6.16	-3.16
	B	-4.686*	.000	-6.21	-3.16
	F	-2.516*	.002	-4.09	-.94
	D	-4.831*	.000	-6.48	-3.18
	E	-7.036*	.000	-8.53	-5.54
D	A	.170	.833	-1.43	1.77
	B	.145	.859	-1.48	1.77
	F	2.315*	.007	.64	3.99
	C	4.831*	.000	3.18	6.48
	E	-2.205*	.008	-3.81	-.60
E	A	2.375*	.002	.93	3.82
	B	2.350*	.002	.88	3.82
	F	4.519*	.001	2.99	6.05
	C	7.036*	.001	5.54	8.53
	D	2.205*	.008	.60	3.81

#### 4.3.3.3 Test 3: Letter sound

LSD post-hoc tests were conducted to compare the performance of schools in letter sound in test 3 and the results are summarized in Table 4.13. School A did not take part in test 3. School E performed better than all the other four schools [E-B ( $p=.038$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ ); E-D ( $p=.041$ )]. School B performed better than school F ( $p=.001$ ) and school C ( $p=.003$ ). School D performed better than school F ( $p=.003$ ) and school C ( $p=.005$ ). There were no statistically significant differences between school D and school B ( $p=.923$ ), school F and school C ( $p=.856$ ).

Table 4.13: Multiple Comparisons school performance in letter sound in Test 3

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
B	F	2.257 <sup>*</sup>	.001	.94	3.58
	C	2.400 <sup>*</sup>	.003	.85	3.95
	D	.067	.923	-1.31	1.44
	E	-1.350 <sup>*</sup>	.038	-2.63	-.07
F	B	-2.257 <sup>*</sup>	.001	-3.58	-.94
	C	.143	.856	-1.43	1.72
	D	-2.190 <sup>*</sup>	.003	-3.59	-.79
	E	-3.607 <sup>*</sup>	.000	-4.91	-2.31
C	B	-2.400 <sup>*</sup>	.003	-3.95	-.85
	F	-.143	.856	-1.72	1.43
	D	-2.333 <sup>*</sup>	.005	-3.95	-.71
	E	-3.750 <sup>*</sup>	.001	-5.29	-2.21
D	B	-.067	.923	-1.44	1.31
	F	2.190 <sup>*</sup>	.003	.79	3.59
	C	2.333 <sup>*</sup>	.005	.71	3.95
	E	-1.417 <sup>*</sup>	.041	-2.77	-.06
E	B	1.350 <sup>*</sup>	.038	.07	2.63
	F	3.607 <sup>*</sup>	.001	2.31	4.91
	C	3.750 <sup>*</sup>	.001	2.21	5.29
	D	1.417 <sup>*</sup>	.041	.06	2.77

Figure 4.3 shows that at the end of grade 1 in November, 2015 when the first test was conducted, out of 98 children, 6(6.12%) children had zero scores and 18(18.4%) children had the maximum score, 10 in letter-sound knowledge task.

Figure 4.3: Letter sound- Test 1

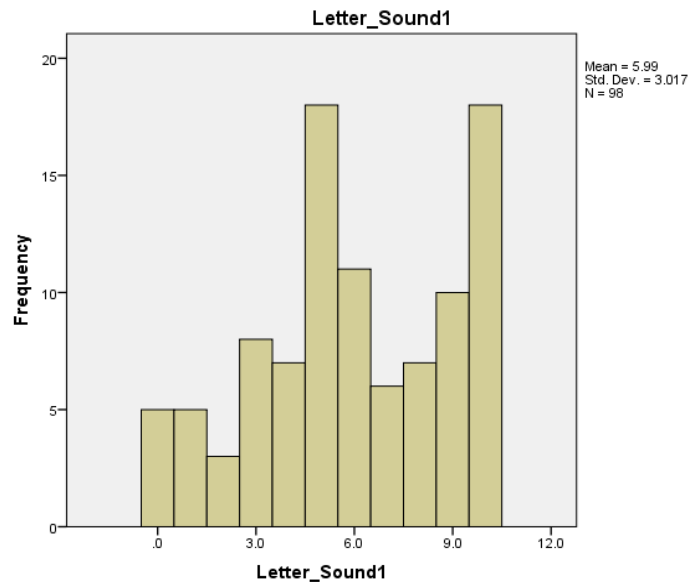
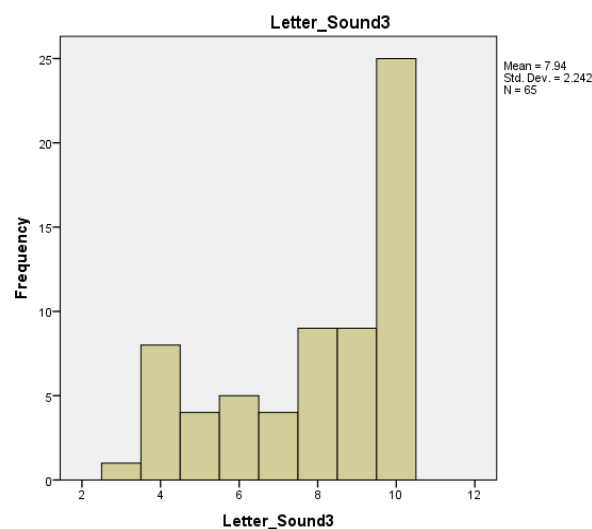


Figure 4.4 shows that during test 3 conducted at the beginning of the second term in May 2016, out of 65 children 3(4.6%) had zero scores and 25(38.5%) children obtained the maximum score, 10 in letter-sound knowledge task.

Figure 4.4: Letter sound – Test 3





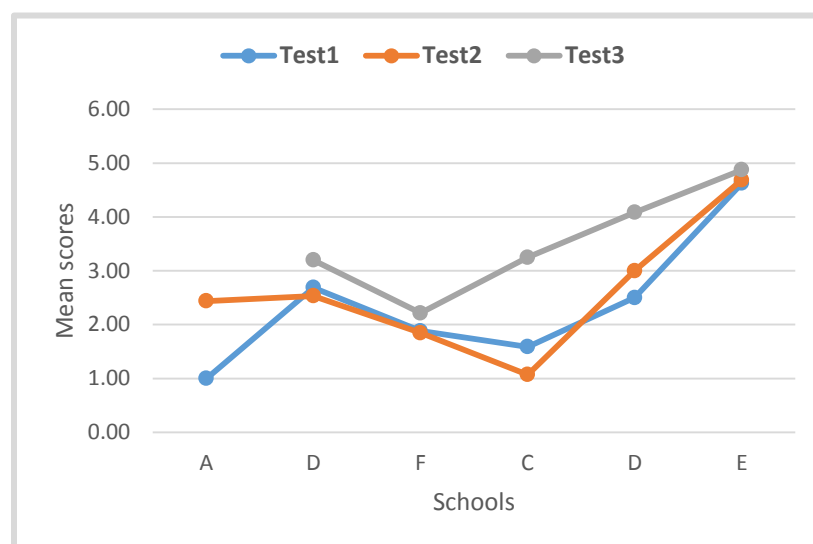
### 4.3.5 School Performance in Word Reading

The results revealed that in word reading learners obtained mean 2.37 (SD=2.017) in test 1, 2.64 (SD=2.005) in Test 2, and 3.57 (SD=1.759) in Test 3. A paired samples t test was conducted to test whether there were any significant differences in learner performance in word reading in three tests, at a significant level of 0.05. Table 4.14 and Figure 4.5 present the results. There was no significant difference between test 1 and test 2 ( $t(df=84)=-1.861$ ,  $p=.066$ ). Learners performed better in Test 3 than in Test 2 ( $t(df=59)=-3.907$ ,  $p=0.001$ ); likewise, learners performed better in Test 3 than in Test 1 ( $t(df=64)=3.182$ ,  $p=0.002$ ).

Table 4.14: Paired Samples Test in word reading

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Word Reading 1 - Word Reading 2	-.247	1.224	.133	-.511	.017	-1.861	84	.066
Pair 2	Word Reading 2 - Word Reading 3	-.617	1.223	.158	-.932	-.301	-3.907	59	.001
Pair 3	Word Reading 3 - Word Reading 1	.554	1.403	.174	.206	.902	3.182	64	.002

Figure 4.5: Mean school performance in word reading



A one-way Analysis of variance (ANOVA) was conducted to establish whether there were any significant differences in learner performance across the six schools (Table 4.15) in the three tests at a significant level of 0.05. The results were significant in all the three tests: Test 1 ( $F(5, 92) = 8.798, p = .001$ ); Test 2 ( $F(5, 79) = 7.837, p = .001$ ); Test 3 ( $F(4, 60) = 6.372, p = .001$ ). These results reveal that there was a statistically significant difference in the performance among the schools.

Table 4.15: ANOVA test results in the three tests

		Df	F	Sig.
Word Reading 1	Between Groups	5	8.798	.001
	Within Groups	92		
	Total	97		
Word Reading 2	Between Groups	5	7.837	.001
	Within Groups	79		
	Total	84		
Word Reading 3	Between Groups	4	6.372	.001
	Within Groups	60		
	Total	64		

#### 4.3.4.1 Test 1: word reading

LSD post-hoc tests were conducted to compare the performance of the schools in word reading in test 1 and the results are summarized in Table 4.16. School E performed better than all the other five schools [E-A ( $p=.001$ ); E-B ( $p=.002$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ ); E-D ( $p=.001$ )]. School B performed better than school A ( $p=.006$ ). There were no statistically significant differences between school A and school F ( $p=.140$ ), school A and school C ( $p=.324$ ), school B and school F ( $p=.178$ ), school B and school C ( $p=.067$ ), school B and school D ( $p=.756$ ), school F and school C ( $p=.616$ ), school F and school D ( $p=.301$ ), school D and school C ( $p=.128$ ), and school B and school D ( $p=.756$ ).

Table 4.16: Multiple Comparisons -school performance in word reading in Test 1

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
A	B	-1.688 <sup>*</sup>	.006	-2.88	-.49
	F	-.882	.140	-2.06	.30
	C	-.588	.324	-1.77	.59
	D	-1.500 <sup>*</sup>	.015	-2.70	-.30
	E	-3.625 <sup>*</sup>	.001	-4.82	-2.43
B	A	1.688 <sup>*</sup>	.006	.49	2.88
	F	.805	.178	-.37	1.98
	C	1.099	.067	-.08	2.28
	D	.188	.756	-1.01	1.38
	E	-1.938 <sup>*</sup>	.002	-3.13	-.74
F	A	.882	.140	-.30	2.06
	B	-.805	.178	-1.98	.37
	C	.294	.616	-.87	1.45
	D	-.618	.301	-1.80	.56
	E	-2.743 <sup>*</sup>	.001	-3.92	-1.56
C	A	.588	.324	-.59	1.77
	B	-1.099	.067	-2.28	.08
	F	-.294	.616	-1.45	.87
	D	-.912	.128	-2.09	.27
	E	-3.037 <sup>*</sup>	.000	-4.22	-1.86
D	A	1.500 <sup>*</sup>	.015	.30	2.70
	B	-.188	.756	-1.38	1.01
	F	.618	.301	-.56	1.80
	C	.912	.128	-.27	2.09
	E	-2.125 <sup>*</sup>	.001	-3.32	-.93
E	A	3.625 <sup>*</sup>	.001	2.43	4.82
	B	1.938 <sup>*</sup>	.002	.74	3.13
	F	2.743 <sup>*</sup>	.001	1.56	3.92
	C	3.037 <sup>*</sup>	.001	1.86	4.22
	D	2.125 <sup>*</sup>	.001	.93	3.32

#### 4.3.4.2 Test 2: Word reading

LSD post-hoc tests were conducted to compare the performance of the schools in word in test 2 and the results are summarized in Table 4.17. School E performed better than all the other five schools [E-A ( $p=.001$ ); E-B ( $p=.001$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ ); E-D ( $p=.013$ )]. School B performed better than school C ( $p=.023$ ). School D performed better than school C ( $p=.006$ ). School A performed better than school C ( $p=.030$ ). There were no statistically significant differences between school A and school B ( $p=.875$ ), school A and school F ( $p=.352$ ), school A and school D ( $p=.398$ ), school B and school F ( $p=.287$ ), school B and school D ( $p=.489$ ), school F and school C ( $p=.238$ ), and school F and school D ( $p=.100$ ).

Table 4.17: Multiple Comparisons - school performance in word reading in Test 2

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
A	B	-.096	.875	-1.31	1.11
	F	.591	.352	-.66	1.85
	C	1.366	.030	.13	2.60
	D	-.563	.398	-1.88	.76
	E	-2.250	.001	-3.44	-1.06
B	A	.096	.875	-1.11	1.31
	F	.687	.287	-.59	1.96
	C	1.462	.023	.21	2.71
	D	-.467	.489	-1.80	.87
	E	-2.154	.001	-3.36	-.94
F	A	-.591	.352	-1.85	.66
	B	-.687	.287	-1.96	.59
	C	.775	.238	-.52	2.07
	D	-1.154	.100	-2.53	.22
	E	-2.841	.001	-4.10	-1.59
C	A	-1.366	.030	-2.60	-.13
	B	-1.462	.023	-2.71	-.21
	F	-.775	.238	-2.07	.52
	D	-1.929	.006	-3.28	-.57
	E	-3.616	.001	-4.85	-2.38
D	A	.563	.398	-.76	1.88
	B	.467	.489	-.87	1.80
	F	1.154	.100	-.22	2.53
	C	1.929	.006	.57	3.28
	E	-1.688	.013	-3.01	-.37
E	A	2.250	.001	1.06	3.44
	B	2.154	.001	.94	3.36
	F	2.841	.001	1.59	4.10
	C	3.616	.001	2.38	4.85
	D	1.688	.013	.37	3.01

#### 4.3.4.3 Test 3: Word reading

LSD post-hoc tests were conducted to compare the performance of schools in word reading in test 3 and the results are summarized in Table 4.18. School A did not take part in test 3. School E performed better than three schools [E-B ( $p=.003$ ); E-F ( $p=.001$ ); E-C ( $p=.017$ )]. School D performed better than school F ( $p=.003$ ). There were no statistically significant differences between school D and school E ( $p=.178$ ), school B and school F ( $p=.086$ ), school B and school C ( $p=.940$ ), school B and school D ( $p=.139$ ), school F and school C ( $p=.130$ ), and school C and school D ( $p=.235$ ).

Table 4.18: Multiple Comparisons- school performance in word reading in Test 3

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
B	F	.986	.086	-.15	2.12
	C	-.050	.940	-1.38	1.28
	D	-.883	.139	-2.06	.30
	E	-1.675*	.003	-2.77	-.58
F	B	-.986	.086	-2.12	.15
	C	-1.036	.130	-2.38	.31
	D	-1.869*	.003	-3.07	-.67
	E	-2.661*	.000	-3.77	-1.55
C	B	.050	.940	-1.28	1.38
	F	1.036	.130	-.31	2.38
	D	-.833	.235	-2.22	.56
	E	-1.625*	.017	-2.94	-.31
D	B	.883	.139	-.30	2.06
	F	1.869*	.003	.67	3.07
	C	.833	.235	-.56	2.22
	E	-.792	.178	-1.95	.37
E	B	1.675*	.003	.58	2.77
	F	2.661*	.001	1.55	3.77
	C	1.625*	.017	.31	2.94
	D	.792	.178	-.37	1.95

Figure 4.6 shows that at the end of grade 1 in November, 2015 when the first test was conducted, out of 98 children tested, 31(3.63%) had zero scores and 24(18.4%) children had the maximum score, 5 in word reading task.

Figure 4.6: Word reading – Test 1

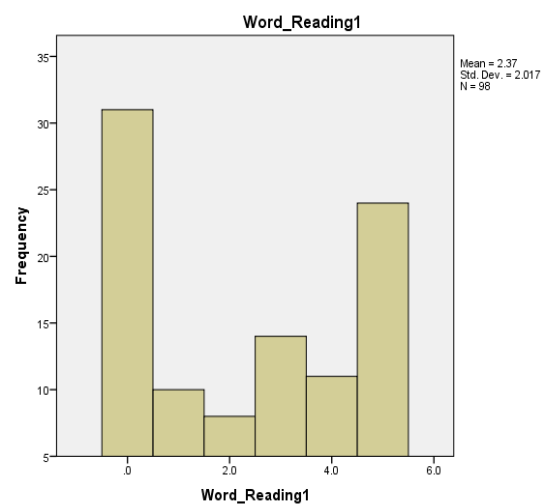
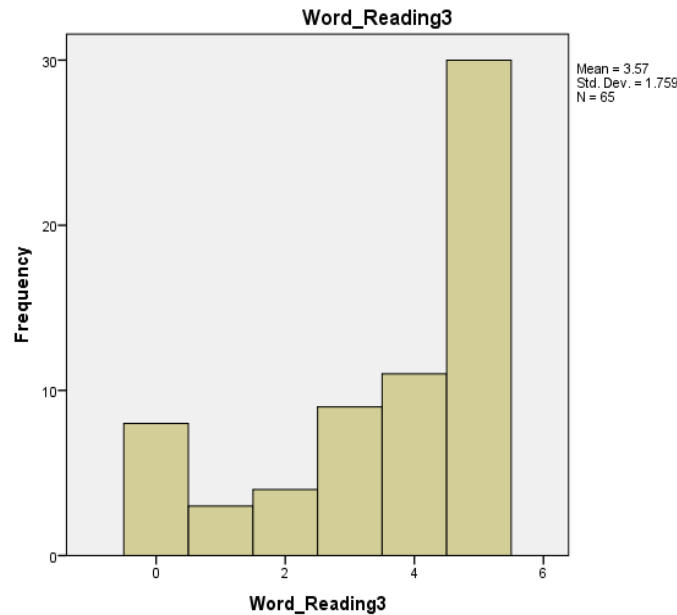


Figure 4.7 shows that during test 3 conducted at the beginning of the second term in May 2016, out of 65 children 8(12.31%) had zero scores and 30(46.2%) children obtained the maximum score, 5 in word reading task.

Figure 4.7: Word reading – Test 3



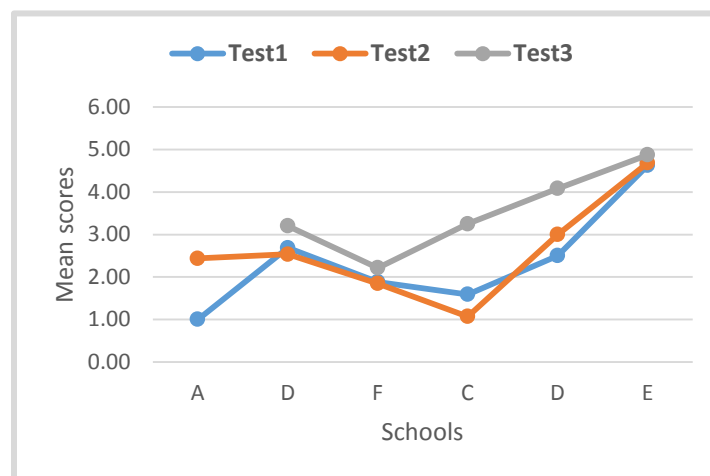
### 4.3.5 School Performance in Oral Reading

The results revealed that in oral reading learners obtained mean 13.12 (SD=12.537) in test 1, 15.14 (SD=12.353) in Test 2, and 21.03 (SD=11.515) in Test 3. A paired samples t test was conducted to test whether there were any significant differences in learner performance in oral reading in the three tests, at a significant level of 0.05. The results are presented in Table 4.19 and Figure 4.8. There was no significant difference between test 1 and test 2 ( $p=.061$ ). Learners performed better in Test 3 than in Test 2 ( $t(df=59) = -4.255$ ,  $p=0.001$ ); likewise, learners performed better in Test 3 than in Test 1 ( $t(df=64) = 2.930$ ,  $p=0.005$ ).

Table 4.19: Paired Samples Test in oral reading

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Oral Reading 1 - Oral Reading 2	-1.482	7.197	.781	-3.035	.070	-1.899	84	.061
Pair 2	Oral Reading 2 - Oral Reading 3	-3.433	6.250	.807	-5.048	-1.819	-4.255	59	.001
Pair 3	Oral Reading 3 - Oral Reading 1	3.538	9.736	1.208	1.126	5.951	2.930	64	.005

Figure 4.8: Mean school performance in oral reading



#### 4.3.5.1 Test 1: oral reading

LSD post-hoc tests were conducted to compare the performance of the schools in oral reading in test 1 and the results are summarized in Table 4.20. School E performed better than all the other five schools [E-A ( $p=.001$ ); E-B ( $p=.039$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ ); E-D ( $p=.001$ )]. School B performed better than school A ( $p=.001$ ) and school C ( $p=.001$ ). School F performed better than school A ( $p=.027$ ) while school D performed better than school A ( $p=.031$ ). There were no statistically significant differences between school A and school C ( $p=.665$ ), school B and school F ( $p=.103$ ), school F and school C ( $p=.068$ ), school F and school D ( $p=.978$ ), school D and school C ( $p=.076$ ), and school B and school D ( $p=.102$ ).

Table 4.20: Multiple Comparisons school performance in oral reading in Test 1

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
A	B	-14.125*	.000	-21.42	-6.83
	F	-8.162*	.027	-15.35	-.97
	C	-1.574	.665	-8.76	5.62
	D	-8.063*	.031	-15.36	-.76
	E	-21.813*	.001	-29.11	-14.51
B	A	14.125*	.001	6.83	21.42
	F	5.963	.103	-1.23	13.15
	C	12.551*	.001	5.36	19.74
	D	6.063	.102	-1.24	13.36
	E	-7.688*	.039	-14.99	-.39
F	A	8.162*	.027	.97	15.35
	B	-5.963	.103	-13.15	1.23
	C	6.588	.068	-.49	13.67
	D	.099	.978	-7.09	7.29
	E	-13.651*	.001	-20.84	-6.46
C	A	1.574	.665	-5.62	8.76
	B	-12.551*	.001	-19.74	-5.36
	F	-6.588	.068	-13.67	.49
	D	-6.489	.076	-13.68	.70
	E	-20.239*	.001	-27.43	-13.05
D	A	8.063*	.031	.76	15.36
	B	-6.063	.102	-13.36	1.24
	F	-.099	.978	-7.29	7.09
	C	6.489	.076	-.70	13.68
	E	-13.750*	.001	-21.05	-6.45
E	A	21.813*	.001	14.51	29.11
	B	7.688*	.039	.39	14.99
	F	13.651*	.001	6.46	20.84
	C	20.239*	.001	13.05	27.43
	D	13.750*	.001	6.45	21.05



### 4.3.5.2 Test 2: oral reading

LSD post-hoc tests were conducted to compare the performance of the schools in oral reading in test 2 and the results are summarized in Table 4.21. School E performed better than all the other five schools [E-A ( $p=.001$ ); E-B ( $p=.002$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ ); E-D ( $p=.001$ )]. School B performed better than school C ( $p=.006$ ). School D performed better than school C ( $p=.056$ ). There were no statistically significant differences between school A and school B ( $p=.166$ ), school A and school F ( $p=.862$ ), school A and school C ( $p=.134$ ), school A and school D ( $p=.562$ ), school B and school F ( $p=.252$ ), school B and school D ( $p=.491$ ), school F and school C ( $p=.122$ ), and school F and school D ( $p=.692$ ), and school C and school D ( $p=.056$ ).

Table 4.21: Multiple Comparisons school performance in oral reading in Test 2

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
A	B	-5.171	.166	-12.53	2.19
	F	-.668	.862	-8.31	6.98
	C	5.705	.134	-1.79	13.20
	D	-2.347	.562	-10.37	5.67
	E	-17.000 <sup>*</sup>	.001	-24.24	-9.76
B	A	5.171	.166	-2.19	12.53
	F	4.503	.252	-3.26	12.26
	C	10.876 <sup>*</sup>	.006	3.27	18.49
	D	2.824	.491	-5.30	10.95
	E	-11.829 <sup>*</sup>	.002	-19.19	-4.47
F	A	.668	.862	-6.98	8.31
	B	-4.503	.252	-12.26	3.26
	C	6.374	.112	-1.51	14.26
	D	-1.678	.692	-10.07	6.71
	E	-16.332 <sup>*</sup>	.001	-23.98	-8.69
C	A	-5.705	.134	-13.20	1.79
	B	-10.876 <sup>*</sup>	.006	-18.49	-3.27
	F	-6.374	.112	-14.26	1.51
	D	-8.052	.056	-16.30	.20
	E	-22.705 <sup>*</sup>	.001	-30.20	-15.21
D	A	2.347	.562	-5.67	10.37
	B	-2.824	.491	-10.95	5.30
	F	1.678	.692	-6.71	10.07
	C	8.052	.056	-.20	16.30
	E	-14.653 <sup>*</sup>	.001	-22.67	-6.63
E	A	17.000 <sup>*</sup>	.001	9.76	24.24
	B	11.829 <sup>*</sup>	.002	4.47	19.19
	F	16.332 <sup>*</sup>	.001	8.69	23.98
	C	22.705 <sup>*</sup>	.001	15.21	30.20
	D	14.653 <sup>*</sup>	.001	6.63	22.67

### 4.3.5.3 Test 3: oral reading

LSD post-hoc tests were conducted to compare the performance of schools in word reading in test 3 and the results are summarized in Table 4.22. A did not take part in test 3. School E performed better than three schools [E-B ( $p=.018$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ )]. School B performed better than school F ( $p=.016$ ) while school D performed better than school F ( $p=.001$ ) and school C ( $p=.013$ ). There were no statistically significant differences between school D and school B ( $p=.254$ ), school B and school C ( $p=.107$ ), school F and school C ( $p=.643$ ), and school E and school D ( $p=.269$ ).

Table 4.22: Multiple Comparisons - school performance in oral reading in Test 3

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
B	F	8.933*	.016	1.74	16.13
	C	6.933	.107	-1.54	15.41
	D	-4.317	.254	-11.82	3.18
	E	-8.442*	.018	-15.40	-1.48
F	B	-8.933*	.016	-16.13	-1.74
	C	-2.000	.643	-10.58	6.58
	D	-13.250*	.001	-20.87	-5.63
	E	-17.375*	.000	-24.46	-10.29
C	B	-6.933	.107	-15.41	1.54
	F	2.000	.643	-6.58	10.58
	D	-11.250*	.013	-20.09	-2.41
	E	-15.375*	.001	-23.76	-6.99
D	B	4.317	.254	-3.18	11.82
	F	13.250*	.001	5.63	20.87
	C	11.250*	.013	2.41	20.09
	E	-4.125	.269	-11.52	3.27
E	B	8.442*	.018	1.48	15.40
	F	17.375*	.001	10.29	24.46
	C	15.375*	.001	6.99	23.76
	D	4.125	.269	-3.27	11.52

Figure 4.9 shows that at the end of grade 1 in November, 2015 when the first test was conducted, out of 98 children tested, 28(29%) had zero scores and 24(25%) children had the maximum score, 30 in oral passage reading task.

Figure 4.9: Oral reading – Test 1

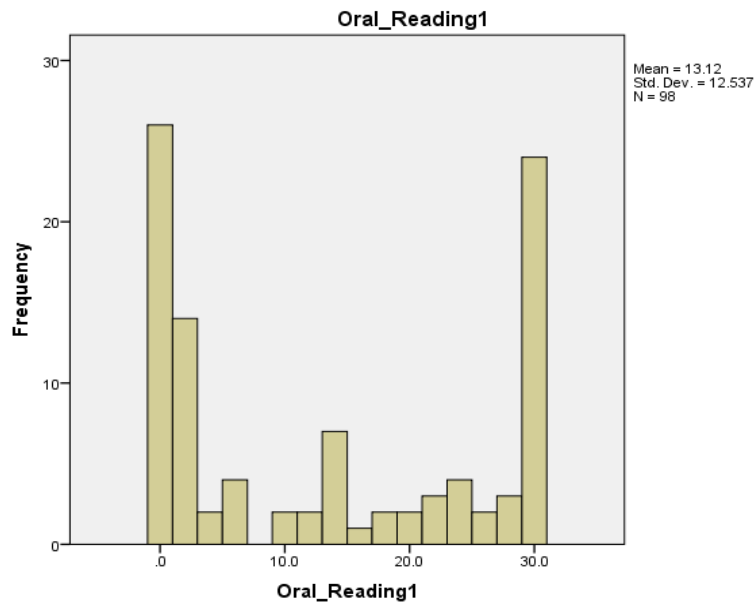
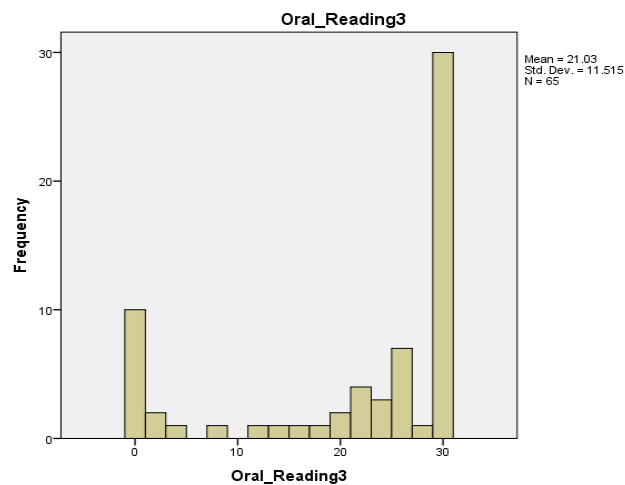


Figure 4.10 shows that during test 3 conducted at the beginning of the second term in May 2016, out of 65 children 10(15.4%) had zero scores and 30(46%) children obtained the maximum score, 30 in oral passage reading task.

Figure 4.10: Oral reading – Test 3



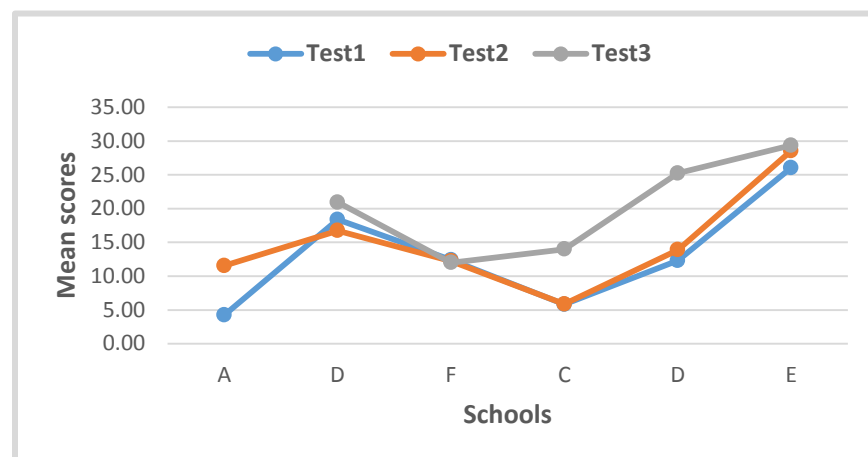
### 4.3.7 School Performance in Reading Comprehension

The results revealed that in reading comprehension learners obtained mean 1.48 (SD=2.022) in test 1, 1.85 (SD=2.062) in Test 2, and 2.75 (SD=2.031) in Test 3. A paired samples t test was conducted to test whether there were any significant differences in learner performance in letter sound the three tests, at a significant level of 0.05. The results are presented in Table 4.23 and Figure 4.11. The results were significant in all cases. Learners performed better in Test 2 than in Test 1 ( $t(df=84) = -2.024$ ,  $p=0.046$ ); learners performed better in Test 3 than in Test 2 ( $t(df=59) = -3.236$ ,  $p=0.002$ ); likewise, learners performed better in Test 3 than in Test 1 ( $t(df=64) = 3.886$ ,  $p=0.001$ ).

Table 4.23: Paired Samples Test in reading comprehension

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Reading Comprehension 1 - Reading Comprehension 2	-.212	.965	.105	-.420	-.004	-2.024	84	.046
Pair 2	Reading Comprehension 2 - Reading Comprehension 3	-.483	1.157	.149	-.782	-.184	-3.236	59	.002
Pair 3	Reading Comprehension 3 - Reading Comprehension 1	.662	1.372	.170	.321	1.002	3.886	64	.001

Figure 4.11 Oral reading – Test 3



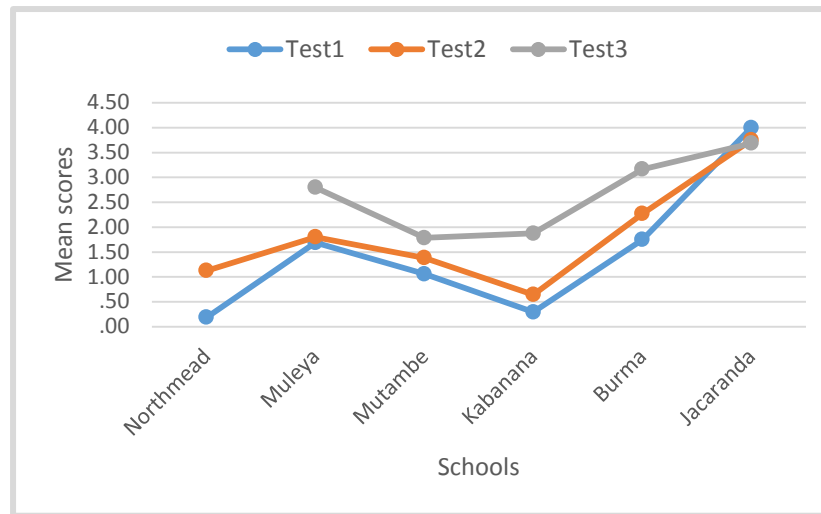
#### 4.3.6.1 Test 1: Reading comprehension

LSD post-hoc tests were conducted to compare the performance of the schools in reading comprehension in test 1 and the results are summarized in Table 4.24. School E performed better than all the other five schools [E-A ( $p=.001$ ); E-B ( $p=.001$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ ); E-D ( $p=.001$ )]. School B performed better than school A ( $p=.010$ ) and school C ( $p=.015$ ) while school D performed better than school A ( $p=.007$ ) and school C ( $p=.011$ ). There were no statistically significant differences between school A and school F ( $p=.124$ ), schools B and school F ( $p=.266$ ), school B and school D ( $p=.913$ ), school F and school C ( $p=.170$ ), school F and school D ( $p=.222$ ), and school C and school A ( $p=.850$ ).

Table 4.24: Multiple Comparisons-school performance in reading comprehension in Test 1

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
A	B	-1.500 <sup>*</sup>	.010	-2.63	-.37
	F	-.871	.124	-1.99	.24
	C	-.107	.850	-1.22	1.01
	D	-1.563 <sup>*</sup>	.007	-2.70	-.43
	E	-3.813 <sup>*</sup>	.001	-4.95	-2.68
B	A	1.500 <sup>*</sup>	.010	.37	2.63
	F	.629	.266	-.49	1.74
	C	1.393 <sup>*</sup>	.015	.28	2.51
	D	-.063	.913	-1.20	1.07
	E	-2.313 <sup>*</sup>	.001	-3.45	-1.18
F	A	.871	.124	-.24	1.99
	B	-.629	.266	-1.74	.49
	C	.765	.170	-.33	1.86
	D	-.691	.222	-1.81	.42
	E	-2.941 <sup>*</sup>	.001	-4.06	-1.83
C	A	.107	.850	-1.01	1.22
	B	-1.393 <sup>*</sup>	.015	-2.51	-.28
	F	-.765	.170	-1.86	.33
	D	-1.456 <sup>*</sup>	.011	-2.57	-.34
	E	-3.706 <sup>*</sup>	.001	-4.82	-2.59
D	A	1.563 <sup>*</sup>	.007	.43	2.70
	B	.063	.913	-1.07	1.20
	F	.691	.222	-.42	1.81
	C	1.456 <sup>*</sup>	.011	.34	2.57
	E	-2.250 <sup>*</sup>	.001	-3.38	-1.12
E	A	3.813 <sup>*</sup>	.001	2.68	4.95
	B	2.313 <sup>*</sup>	.001	1.18	3.45
	F	2.941 <sup>*</sup>	.001	1.83	4.06
	C	3.706 <sup>*</sup>	.001	2.59	4.82
	D	2.250 <sup>*</sup>	.001	1.12	3.38

Figure 4.12: Mean school performance in reading comprehension



#### 4.3.6.2 Reading comprehension

LSD post-hoc tests were conducted to compare the performance of the schools in reading comprehension in test 2 and the results are summarized in Table 4.25. School E performed better than all the other five schools [E-A ( $p=.001$ ); E-B ( $p=.004$ ); E-F ( $p=.001$ ); E-C ( $p=.001$ ); E-D ( $p=.043$ )]. School D performed better than school C ( $p=.030$ ). There were no statistically significant differences between school A and school B ( $p=.309$ ), school A and school F ( $p=.706$ ), schools A and school C ( $p=.475$ ), school A and school D ( $p=.114$ ), school B and school F ( $p=.305$ ), school B and school C ( $p=.093$ ), school B and school D ( $p=.518$ ), school F and school C ( $p=.297$ ), and school F and school D ( $p=.241$ ).

Table 4.25: Multiple Comparisons - school performance in reading comprehension in Test 2

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
A	B	-.675	.309	-1.99	.64
	F	-.260	.706	-1.62	1.10
	C	.482	.475	-.85	1.82
	D	-1.148	.114	-2.58	.28
	E	-2.625 <sup>*</sup>	.001	-3.92	-1.33
B	A	.675	.309	-.64	1.99
	F	.415	.552	-.97	1.80
	C	1.157	.093	-.20	2.51
	D	-.473	.518	-1.92	.98
	E	-1.950 <sup>*</sup>	.004	-3.26	-.64
F	A	.260	.706	-1.10	1.62
	B	-.415	.552	-1.80	.97
	C	.742	.297	-.66	2.15
	D	-.888	.241	-2.38	.61
	E	-2.365 <sup>*</sup>	.001	-3.73	-1.00
C	A	-.482	.475	-1.82	.85
	B	-1.157	.093	-2.51	.20
	F	-.742	.297	-2.15	.66
	D	-1.630 <sup>*</sup>	.030	-3.10	-.16
	E	-3.107 <sup>*</sup>	.001	-4.44	-1.77
D	A	1.148	.114	-.28	2.58
	B	.473	.518	-.98	1.92
	F	.888	.241	-.61	2.38
	C	1.630 <sup>*</sup>	.030	.16	3.10
	E	-1.477 <sup>*</sup>	.043	-2.91	-.05
E	A	2.625 <sup>*</sup>	.001	1.33	3.92
	B	1.950 <sup>*</sup>	.004	.64	3.26
	F	2.365 <sup>*</sup>	.001	1.00	3.73
	C	3.107 <sup>*</sup>	.001	1.77	4.44
	D	1.477 <sup>*</sup>	.043	.05	2.91

#### 4.3.6.3 Test 3: Reading comprehension

LSD post-hoc tests were conducted to compare the performance of schools in reading comprehension in test 3 and the results are summarized in Table 4.26. School A did not take part in test 3. School E Primary School performed better than schools E-F ( $p=.010$ ) and school C ( $p=.036$ ). There were no statistically significant differences between school B and school F ( $p=.167$ ), school B and school C ( $p=.284$ ), school B and school D ( $p=.630$ ), school B and school E ( $p=.211$ ), school F and school C ( $p=.918$ ), school F and school D ( $p=.077$ ), school C and school D ( $p=.152$ ), and school D and school E ( $p=.488$ ).

Table 4.26: Multiple Comparisons school performance in reading comprehension in Test 3

(I) School	(J) School	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
B	F	1.014	.167	-.44	2.47
	C	.925	.284	-.78	2.63
	D	-.367	.630	-1.88	1.15
	E	-.888	.211	-2.29	.52
F	B	-1.014	.167	-2.47	.44
	C	-.089	.918	-1.82	1.64
	D	-1.381	.077	-2.92	.16
	E	-1.902	.010	-3.33	-.47
C	B	-.925	.284	-2.63	.78
	F	.089	.918	-1.64	1.82
	D	-1.292	.152	-3.07	.49
	E	-1.813	.036	-3.50	-.12
D	B	.367	.630	-1.15	1.88
	F	1.381	.077	-.16	2.92
	C	1.292	.152	-.49	3.07
	E	-.521	.488	-2.01	.97
E	B	.888	.211	-.52	2.29
	F	1.902	.010	.47	3.33
	C	1.813	.036	.12	3.50
	D	.521	.488	-.97	2.01

Figure 4.13 shows that at the end of grade 1 in November, 2015 when the first test was conducted, out of 98 children tested, 54(51.15%) had zero scores and 18(18.14%) children had the maximum score, 5 in reading comprehension.

Figure 4.13: Reading Comprehension – Test 1

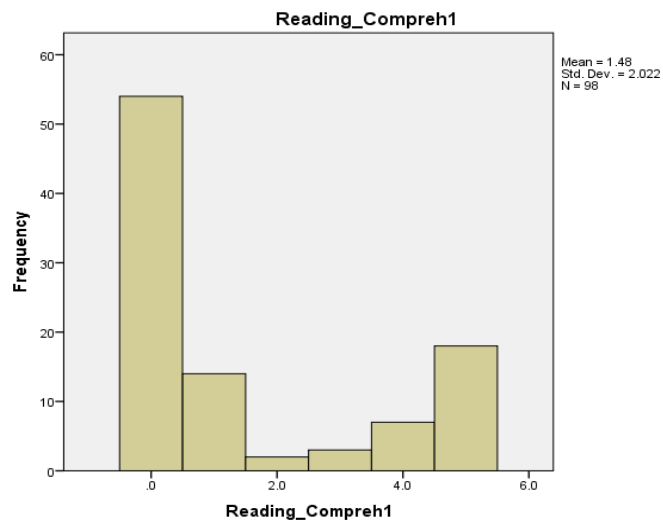
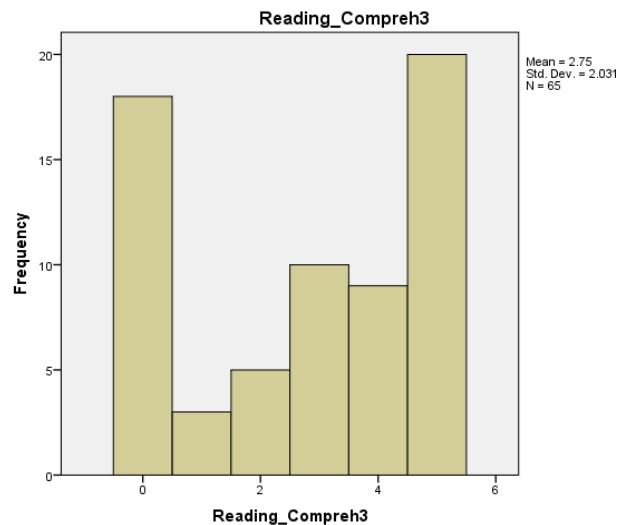




Figure 4.14 shows that during test 3 conducted at the beginning of the second term in May 2016, out of 65 children 18(27.7 %) had zero scores and 20(31%) children obtained the maximum score, 5 reading comprehension.

Figure 4.14: Reading Comprehension – Test 3



#### 4.4 Difference in reading skills in Cinyanja between boys and girls

Another objective of this study was to compare learner performance in literacy by gender. Table 4.27 presents average learner performance in literacy by gender in the various tests. The results showed that, on average, girls performed better than boys in all the literacy tests. Independent Samples T Tests were conducted to establish whether these differences in the learner performance by gender were statistically significant ( $\alpha=0.05$ ). The results are summarized in Table 4.28. The results were only significant in the Reading Comprehension Test 1; girls performed better than boys by 0.90.

Table 4.27: Average learner performance in literacy by gender

	Sex	N	Mean	Std. Deviation
Test 1	Girl	48	25.81	19.884
	Boy	50	20.22	16.610
Test 2	Girl	42	28.33	19.183
	Boy	43	24.67	18.056
Test 3	Girl	32	36.88	16.842
	Boy	33	33.67	16.450
Letter sound 1	Girl	48	6.42	3.181
	Boy	50	5.58	2.822
Letter sound 2	Girl	42	6.93	3.165
	Boy	43	6.58	2.856
Letter sound 3	Girl	32	8.13	2.136
	Boy	33	7.76	2.359
Word reading 1	Girl	48	2.60	2.111
	Boy	50	2.14	1.917
Word reading 2	Girl	42	2.88	2.074
	Boy	43	2.40	1.929
Word reading 3	Girl	32	3.72	1.727
	Boy	33	3.42	1.803
Oral reading 1	Girl	48	14.83	13.406
	Boy	50	11.48	11.539
Oral reading 2	Girl	42	16.25	12.690
	Boy	43	14.05	12.053
Oral reading 3	Girl	32	21.72	11.756
	Boy	33	20.36	11.418
Reading comprehension 1	Girl	48	1.94	2.216
	Boy	50	1.04	1.726
Reading comprehension 2	Girl	42	2.26	2.264
	Boy	43	1.44	1.777
Reading comprehension 3	Girl	32	3.09	2.115
	Boy	33	2.42	1.92

Table 4.28: Independent Samples' T Test Results on Gender

Test	t statistic	df	p value	Comment
Test 1	1.508	91.622	.135	Not significant
Test 2	.906	83	.368	Not significant
Test 3	.777	63	.440	Not significant
Letter Sound 1	1.379	96	.171	Not significant
Letter Sound 2	.531	83	.597	Not significant
Letter Sound 3	.658	63	.513	Not significant
Word Reading 1	1.140	96	.257	Not significant
Word Reading 2	1.118	83	.267	Not significant
Word Reading 3	.672	63	.504	Not significant
Oral Reading 1	1.325	92.669	.189	Not significant
Oral Reading 2	.825	83	.412	Not significant
Oral Reading 3	.471	63	.639	Not significant
Reading Comprehension 1	2.231	88.788	.028	Significant
Reading Comprehension 2	1.855	77.718	.067	Not significant
Reading Comprehension 3	1.337	63	.186	Not significant

#### 4.5 Comparing similarities of findings of this study with previous RTS EGRA tests

In order to relate findings of this study to other similar studies conducted earlier, comparison of results was made with EGRA study that was conducted by RTS in 2012 and 2014. This was done in order to establish whether levels of reading among Grade 2 learners improved before transitioning to read English language. For EGRA study, conducted by USAID Read To Succeed Project, results show that mean scores for grade 2 in 2014 were higher than mean scores for baseline conducted for grade 2 in 2012. The increase was in letter-sound knowledge (1.85<2.36), non-word reading (3.10<8.84), oral passage reading (0.98<4.30) and reading comprehension (0.09<0.44). Comparing results of this study for grade 2 learners in 2016 with EGRA, results show that learners in this study obtained higher mean scores than in EGRA tests, except in word reading, with letter-sound knowledge (2.36<7.94), word reading (8.84>3.57), oral passage reading (4.30<21.03) and reading comprehension (0.44<2.75).

#### 4.4 Assessing teachers' impact on children's reading skills

As shown in Table 4.29, teachers' responses revealed that out of 6 teachers teaching children included in the sample of this study, only 6 were trained in PLP phonics-based methodology. In addition 5 (40.4%) out of 6 had adequate materials for teaching PLP. Apparently no teachers' home language was the same as the language of instruction, Cinyanja.

Table 4.29: Teacher responses

	N	Percentages
Adequate materials	2	33.3
Inadequate materials	4	66.6
Home language EQ to language of instruction	0	0
Home language NOTEQ language of instruction	6	100
Trained in PLP	4	66.6
Not trained in PLP	2	33.3

Considering the effect of teachers on reading skills, there were no differences in reading skills obtained by teachers with higher certificates and those with lower certificates except for school E. Results obtained from this study shows that learners who were taught by a teacher who has a primary certificate and was oriented in PLP for school E had learners with higher mean scores than learners taught by those who held degrees and diplomas. One teacher said:

*"It was not training that we received, it was orientation.  
We were only introduced to the course for three days. That was all!"*

Learners taught by teachers at school E and school B, who expressed to have no materials for PLP, obtained higher mean scores in all the three tests than other schools. On availability of materials one teacher said:

*"One good thing about materials is that during the orientation we were  
Shown how to write decodable stories for children to read and how to  
Create other materials to enable us teach. Materials were distributed by  
the Ministry long after we had begun to teach. These learners' books are not,  
even enough for the number of children I have in my class!"*

Although teachers spoke different home languages from the language of instruction Cinyanja learners from school E and school B had better reading skills than learners from other schools. Learners from school F who were taught by a teacher whose language, Cicewa is closest to Cinyanja obtained lower mean scores than other four schools.

#### **4.5 Summary**

This chapter has presented the research findings in line with research objectives and questions that guided the whole investigation. Information has been presented by themes and sub-themes generated from the research questions and objectives. It has presented findings about levels of reading skills obtained by learners in Cinyanja by end of grade 2 in relation to the levels of reading skills by tests, levels of reading skills by schools, learner performance in literacy by gender, comparison of similarities with EGRA findings and teachers' impact on children's reading skills. It has also presented findings about teachers' views on children's reading skills. The next chapter presents a discussion of these findings, draws conclusions to the study and proposes recommendations for further development.

## **CHAPTER FIVE**

### **DISCUSSION OF FINDINGS**

#### **Overview**

This chapter discusses the findings based on the objectives of the study related to levels of reading among grade 2 learners by end of grade 2 in Cinyanja in Lusaka district. The chapter presents a discussion of findings of levels of reading skills by test, by gender and discussion of similarities of findings of this study with RTS EGRA findings. This is because the RTS EGRA tests and tests for this study were designed the same, except for non-word reading verses word reading. It has also presented findings about teachers' impact on children's reading skills. The main objective of the study was to establish whether the most recently implemented Primary Literacy Programme (PLP) is an optimal programme to produce better levels of reading skills in Cinyanja as learners move from grade 1 to 2, before transitioning to learning to read in English language from grade 3.

#### **5.1 Levels of reading skills obtained by learners in Cinyanja**

The aim of this study was to establish whether the most recently implemented Primary Literacy Programme (PLP) is an optimal programme to produce better levels of reading skills in Cinyanja as learners move from grade 1 to 2, before transitioning to learn to read in English language. The study aimed at assessing levels of reading skills acquired by learners by Grade 2 by establishing whether there were significant differences in the performance of the learners in Test 1, Test 2, and Test 3. This assessment was done in order to establish whether the PLP programme was in the right direction to improve reading skills in the familiar language Cinyanja in early grades. This is because previous research findings (e.g. Matafwali & Bus (2013), Banda, et. al. (2012), Read To Succeed Report (2012) & Kanyika, (2000)) reveal very low levels among children in early grades under PRP.

Results of this study show that there is an improvement in the reading levels among grade 2 learners under the revised curriculum. Comparing the levels of reading skills for children at the end of grade 1 with results of levels of reading skills when the same children were in grade 2 at the beginning of term 2, results were significant in all cases. Learners performed better in test 2

than test 1, better in test 3 than in test 2 and better in test 3 than in test 1. In addition levels of reading improved in all the four research variables. As shown in Table 2.1, results of this study support the findings made by USAID Read To Succeed Project midline survey conducted among grade 2 learners in 2014 which showed improvement in mean scores among grade 2 learners, from baseline study of 2012 to midline survey in 2014. The findings further imply that the PLP phonics based approach is helping learners to read in their familiar language. This is also in line with Stenovich's (1986) of Mathew Effect which supports the findings that children should catch up in reading because children who fell below a certain level by the end of grade one will lag behind and the gap widens as they progress to higher grades. Results of this study showed improvement in learner performance from grade 1 to grade 2 under PLP.

## **5.2 Levels of reading skills obtained by learners by schools**

In response to objective number 2 of the research analysis of the data collected, the results of this study show that although all schools have been introduced to PLP, the levels of reading are not the same in all schools. For example while learners at school E obtained higher scores in all three tests, other schools performed lower and with different level of performance. At the end of grade 1 during test 1 the school with higher mean score was school E and the school with the lower mean score than other schools was school A. At the beginning of term 2 of grade 2 the school with higher mean score was school E and the school with lower mean score than other schools was school F. These results are an indication that qualification of teachers did not affect performance of schools. The PLP methodology depended more on the training that teachers received through continuing professional development. This may be because the methodology was not introduced in colleges of education and teachers' effectiveness in PLP depended on the orientation they had received. The variations of performance by schools may also depend on teacher creativity and effectiveness of teacher group meetings aimed at strengthening teaching skills. This may be interpreted to mean that some schools need support after orientation. Continuous professional development even after teachers were trained is required through zone or school-based training.

The differences between schools show significant differences in learner performance across all six schools included in the study. This shows that although training was conducted in PLP for all

schools each school faces its own challenges that may affect the performance of learners in reading. Results show that among schools located in high density areas and schools located in low density areas, in test 1 there were significant differences between school B and school F (both schools located in high density areas), school B (located in high density area) and school D (located in low density area), school A (located in high density area) and school C (located in high density area). In test 2, school E performed significantly better than all five schools, school B performed better than school C and school D performed better than school C. In test 3, school E located in low density area significantly performed better than school B, school F and school C which are located in high density areas. School D located in low density area significantly performed better than school F and school C located in high density areas. Overall schools located in low density areas performed better than schools located in high density areas.

This study shows differences in levels of reading skills attained by the learners among the six schools included in the sample of study. Comparing learner performance in reading by schools in each variable, school E performed significantly better than all five schools in letter-sound, word reading, oral reading and reading comprehension. In letter sound school B performed significantly better than school A and school C in test 1, better than school F and school C in tests 2 and 3. School F performed significantly better than school F and school C in tests 1 and 2; school F significantly better than school C in tests 1 and 2 and significantly better than school A and school C in tests 1 and 2. School D performed significantly better than school A and school C in tests 1 and 2, better than school B in test 2 and better than school F in test 3. In word reading school B performed significantly better than school A and school C in tests 1 and 2, school D performed significantly better than school C in test 2 and significantly better than school F in test 3 and school A performed significantly better than school F in test 3. In oral reading, in test 1 school B performed significantly better than school A and school C, school F and school D performed significantly better than school A. In test 2 school D performed better than school C. In test 3 school B performed significantly better than school A and school D and school A and school D performed better than school F and school C. In reading comprehension school B and school D performed significantly better than school A and school C. The interpretation of these results is that since these differences in learner performance exist among schools, the Ministry of General Education by conducting monitoring visits could be able to



identify areas that may require support for each school. This is in agreement with the views expressed by Fordham (1992) that supervision of teachers is critical for any programme designed to improve the quality of education. The two critical determiners of effective teaching are supervision and support. Based on Fordham's observation, the MOGE should make sure that effective and frequent monitoring is conducted in schools to ensure education quality. By conducting monitoring issues could be identified. For example, schools located in high density areas may be over crowded because they are highly populated. This may make it difficult for a teacher to conduct remedial work for struggling learners or individual learners lagging behind.

However, a closer look at the way learners performed in each test, shows that mean scores were higher in all the three tests in oral passage reading. This is a dramatic finding because it shows that although some of the learners were not able to identify letter-sounds and were not able to read single words, they were able to read words in context in a text. This may suggest that some learners may have been applying different methods of reading such as those used in learning experience approach as was used in PRP. The reading of whole word may also be as a result of automaticity as a result frequent reading and exposure to the words. By reading a word or two they would anticipate the next word in a sentence, rather than reading single words. This may be learners who may have been exposed to reading at home. This may mean that reading requires communication in context and therefore to promote development of reading skills learners require a variety, appropriate and interesting materials to read.

### **5.3 Levels of reading in Cinyanja between boys and girls**

In response to objective number 3, consideration was made to establish the levels of reading skills for boys and girls because a good literacy programme must benefit both boys and girls. Comparing learner performance by gender, on average girls performed better than boys in all literacy tests but the difference was significant in reading comprehension in test 1. This may be interpreted to mean that PLP methodology by grade 2 favours girls compared to boys. These findings are in line with Kulpoo (1998) who found that in Mauritius girls tended to perform slightly better than boys in reading. Similarly in Botswana girls out performed boys in both Mathematics and reading while the UNESCO Report (1994) pointed that there was no gender

difference in reading in Zimbabwe (Keitheile and Mokubung, 2005). This finding is important because Zambia also aims to provide equal access to quality education for both boys and girls. According to the Gender Statistical Bulletin of July 2012, the dropout rate for females was at 2.71 percent compared to 1.88 per cent for males. Zambia Daily Mail (April, 3 2015) carried a story about one of Zambia's 73 districts, Solwezi, where pupil drop out was 2,246 in 2014 out of whom 1, 396 were girls and 846 were boys. In rural areas there are more boys than girls that attend school. This dropout rate is due to cultural norms and practices and many girls are challenged by basic social services such as lack of water in schools or sanitary conditions. Child marriages are still rampant and many girls still travel long distances to schools. Acquiring reading skills can motivate both boys and girls to remain in school and equip them with knowledge for protecting themselves from abuse and to improve their lives. A study conducted by UNICEF in 2010 indicates that educated girls become women. Investment in girls' education benefits the whole of society. Educated women are more likely to be healthy, have small families and educated sons and daughters.

#### **5.4 Similarities of findings of this study with previous RTS EGRA tests**

Considering how learners performed in EGRA tests conducted by RTS with results of this study (Table 2.1 vs. Table 4.5), results of this study show that there is an improvement in levels of reading skills even earlier than end of grade 2 (by middle of the year). Except in non-word reading where learners in 2014 performed better than in 2016. The same passage used in this study was also used for RTS EGRA test and learners in this study performed exceptionally better in oral passage reading. This may suggest that PLP approaches are increasingly becoming more effective as teachers grasp the methodology for teaching reading. The PLP approach by focusing on decoding of words is effective. This is in agreement with Pang (et al., 1986) who argues that the process of learning to read is based on the key competencies of reading which are also the bases for learning to read in PLP which are phonics, phonemic awareness, fluency, vocabulary and comprehension.

## **5.5 Teachers' impact on children's reading skills**

In line with objective 5, the study established that learners taught by teachers who said they did not to have adequate materials for teaching PLP, obtained higher mean scores than those taught by teachers who claimed to have adequate materials. Learners taught by a teacher who used a linguistically closest language to Cinyanja, Cicewa, from school F obtained lower mean scores than teachers for schools B and E with higher mean scores.

Improving levels of reading skills for any literacy programme can only be achieved if support and enabling school environment in which teachers are both able and motivated to adopt effective instructional practices and professional behaviors are provided. One aspect of the roll out of PLP under the revised curriculum was to ensure that teachers were oriented in the phonics-based approach for teaching reading. In this study out of 6 teachers teaching children in PLP in grade 2 that were included in the sample of this study, 4 were trained in PLP phonics-based methodology. However, basing on information collected in this study, teachers who were oriented in PLP and teachers who were not oriented did not show differences in children's reading skills. For example, learners taught by teachers at schools B and F who were not oriented in PLP, produced learners with higher mean scores than learners taught by a teacher at school C who was oriented to PLP methodology.

Learning from this statement one would suggest that the implementation of the PLP programme required continuous professional development through school-based programmes such as School Programme of In-service for a Term (SPRINT) that promotes Teacher Group Meetings (TGMs). This is necessary for all schools because results also show that having higher qualification of teachers did not have an effect on improving levels of reading among learners since a teacher with primary certificate produced learners with higher mean scores than teachers with higher qualifications. Research has established that one of the most important factors influencing students' learning is the teacher. Results from the study conducted by Zuzovsky (2003) reviewed no significant relationship between teacher variables such as teaching experience and training in subject matter and learning achievement. Regardless of whether or not a significant relationship is established there is no doubt that qualifications are a formal indication of the kind

of content knowledge an individual possesses. Qualifications are not necessarily an established indicator of quality or quantity of teacher knowledge. Equally in this study teacher qualification did not make a difference. For PLP to work well, it required all teachers to be introduced to the programme despite their qualifications. It may have been expected that teachers holding degrees would not teach grade 2 children, but in primary schools teachers may be assigned to teach any class without considering their qualifications. That is why all teachers should be oriented.

In addition, teachers require continuous monitoring so that problems teachers face could be identified as early as possible and appropriate support could be given. Peer monitoring would enable weak teachers to learn from teachers with good practices who are performing well. Internal monitoring by the Head Teacher, Deputy Head Teacher and senior teachers may also help teachers to improve so that they can apply correct methods of teaching to improve learners' reading skills. This monitoring would improve time on task and enable school administration to provide the right materials required by the teacher and motivate teachers to work hard and improve the reading skills. External monitoring conducted by the zone, district, province and national teams could also help to disseminate good practices of teaching reading from one school to another and identify the teachers' needs for action by the Ministry of General Education and all stakeholders.

Reading instruction requires that sufficient materials are provided for both teachers and learners. Surprisingly learners taught by teachers who expressed not to have adequate materials for teaching PLP, obtained higher mean scores than those taught by teachers who expressed to have adequate materials. This means that under the revised curriculum PLP may not depend so much on provision of materials, but may depend more on teacher innovation or creativity.

It is an advantage for this programme if teachers will not depend on only materials provided by MOGE. If children and community members can write stories for the children then the levels of reading will improve because learners will have materials to read in local language that is based on their experiences. This will motivate them to read more stories. On the same issue of learning materials Dean (1997) noted that materials produced must be motivating to the learners, and not be too easy that there is no challenge. In addition, a rather different use of materials is to use

them to provide work matched to individual needs if they are to make the maximum progress in learning. Above all, the teacher needs to select materials which will enable individuals and groups to learn the part of the curriculum appropriate for their age and ability. In the study, school E has demonstrated that children can improve by relying on teacher created materials. The children's levels of reading improved from test 1 at the end of grade 1 to the beginning of term 2 of grade 2. This is a demonstration of classroom management, and student support in provision of skills to address the full range of children's learning needs within local context.

Considering teachers' language of instruction, all teachers in the sample used a different home language from the language used for reading instruction, Cinyanja. Therefore, no teacher used Cinyanja whose levels of reading skills obtained by children could be compared with in this study. Learners taught by a teacher who used a linguistically closest language to Cinyanja, Cicewa, from school F obtained lower mean scores than teachers for school D, school B and school E Who obtained higher mean scores in test 1. It is generally argued that teachers whose home language is the same as language of instruction in local language can produce better results than if the home language was different from language of instruction. This was difficult to prove in this study since all teachers used a home language different from language of instruction.

## **5.6 Summary**

The objectives of the research were the source of themes used in this chapter to discuss and analyze the research findings from the field. It has presented findings about levels of reading skills obtained by learners in Cinyanja by end of grade 2 in relation to the themes; levels of reading skills by test, levels of reading skills by schools, learner performance in literacy by gender and comparison of similarities with EGRA findings. It has also presented findings about teachers' impact on children's reading skills. The next chapter presents summary of the conclusions and recommendations proposed by this study.

## **CHAPTER SIX**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **Overview**

This chapter presents the summary, the conclusion and the recommendations drawn from this study for possible policy development and further research.

#### **6.1 Summary**

This study is set to establish the levels of reading skills among grade 2 learners who followed reading instruction in Cinyanja in Lusaka District for Primary Literacy Programme. The objectives of the research were used in this chapter to discuss and analyze the research findings about levels of reading among grade 2 learners in the familiar language. The key findings of this study were that the levels of reading obtained by learners in this study were better for test 3 than test 2, and better for test 2 than test 1. Also, the levels of reading were not the same in all schools. There were no significant differences between boys and girls, except in test 1 where girls obtained significantly higher mean scores than boys. In tests 2 and 3, girls obtained higher mean scores than boys though results were not significant. The results of this study are similar to RTS EGRA assessment tests that showed a slight improvement from grade 1 to grade 2 in familiar language. Results of this study also showed that Learners taught by teachers who had inadequate materials for teaching PLP obtained higher mean scores than those taught by teachers who had adequate materials. Results of this study overall show that PLP under the revised curriculum is in the right direction towards improving learner performance in reading in schools. In the next section conclusion, recommendations for policy development and further research are presented.

#### **6.2 Conclusion**

The aim of this study was to assess the development of levels of reading skills in familiar language as learners progressed from grade 1 to 2 before they could be introduced to English language in grade 3. Previous studies indicate that majority of learners in the previous literacy

programmes did not breakthrough as required by the curriculum. Comparing the levels of reading skills for children at the end of grade 1 with results of levels of reading skills when the same children were in grade 2 at the beginning of term 2, results show improvement in PLP. This study shows that as learners progressed from grade 1 to grade 2, their levels of reading skills significantly improved better in test 2 than test 1, better in test 3 than test 2 and test 3 than test 1. This is a sign that Primary Literacy Programme that is based on phonics-based approach, is promising to improve the low levels the country has experienced for a long time. This could be to the integration of the five key components of learning to read; phonemic awareness, phonics, fluency, vocabulary and comprehension. However, learners in the sample of this study demonstrated better reading skills in oral passage reading than in other three tasks, letter-sound knowledge, word reading and comprehension. This shows that the PLP programme under the revised curriculum require a lot of effort for improving reading instruction in early grades in familiar language.

In response to objective number 2 of the research, the results of this study show that although all schools have been introduced to PLP, the levels of reading were not the same in all schools. Therefore performance depended on the commitment and orientation teachers received through continuing professional development (CPD). The good practices can be identified through monitoring visits and used to plan to improve learner performance in literacy in the other schools.

The other thing to learn from this study is that girls performed better than boys in all literacy tests with significant difference in reading comprehension in test 1. This means that the literacy programme under the revised curriculum is appropriate for girls and can serve as a motivation for girls to remain in school.

Considering how learners performed in EGRA tests conducted by RTS with results of this study, both studies showed that PLP approaches were increasingly becoming more effective as teachers grasped the methodology for teaching reading. The PLP approach by focusing on decoding of words is more effective than the PRP Language Experience Approach.

Findings of this study also showed that teacher qualification did not impact on the performance of learners in reading. The PLP methodology depended more on the training that teachers received through continuing professional development, and not on skills acquired by teachers during pre-service because the methodology was not introduced in colleges of education. Performance depended on effectiveness of school-based training.

## **6.3 Recommendations**

### **6.3.1 Recommendations for Policy Development**

The question raised here is: How can MoGE make implementation of Primary Literacy Programme more effective and address some of the issues raised in this study? The following are the recommendations for consideration:

- a) In order to learn to read, learners depend on teachers' ability to teach. Therefore, efforts must be made to strengthen the teaching skills of teachers through teachers' group meetings (TGMs). Through this meetings can learn about *Teaching and Learning Using Locally Available Resources (TALULAR)*.
- b) There is need for teachers to focus more on teaching skills that can enable learners to identify sounds, syllables and read words. Therefore, an integrated approach for teaching reading is required to strengthen capacity for PLP so that apart from reading words only in passage, learners can read letters, syllables and words that they come cross.
- c) In order to sustain reading skills acquired from Grade 1 in Grade 2, there is need to continue to provide support for both boys and girls with practice in reading by providing reading materials that are favorable to both so that they are motivated to learn together and share knowledge and reading skills.
- d) Teachers' literacy skills vary significantly because most of them teach a familiar language in which they are not familiar and may have difficulties in letter-sound correspondence, even though they teach early grades. Teachers need to be informed about the differences between the phonics of English and the phonics of Zambian languages so that they do not continue teaching English letter-names during literacy instruction in familiar language.



- e) Schools need exciting reading materials for children in early grades for developing their reading fluency and comprehension. Mobile technology can now be used for dissemination of reading materials in affordable and accessible way. For example materials stored on teachers' cell phones, iPad, big screens and radios. These can support both teachers and learners.
- f) By following the Primary Literacy Programme (PLP) under the revised curriculum children by end of grade 2 can do very well. However, there is need to promote use of correct teaching methods and engaging schools in sharing and implementing new knowledge and approaches for developing reading skills and writing skills in schools.
- g) Higher institutions of learning and colleges of education must play a role in improving levels of reading among children in early grades by engaging in research activities to provide information for improving Primary Literacy Programme (PLP) under the revised curriculum.
- h) As expressed by teachers in this study, in order to strengthen the programme zones and schools must focus on providing orientation meetings so that all schools, located in high density areas or located in low density areas, rural or urban can understand the teaching methodologies to benefit all children on equal basis. Through school-based training teachers and schools with good practices to promote reading can share ideas with other teachers and schools.
- i) As a way forward, generally the Ministry of General Education must continue to strengthen and support the PLP that uses the phonics-based approach that places a lot of emphasis on teaching letter-sounds, which is the basis for beginning to learn read, so that children can be able to read fluently in their own familiar languages before being introduced to English language.

### **6.3.2 Recommendations for further research**

Areas of improvement can only be identified if the Ministry of General Education continued to invest and promote research. The following are suggestions for further research:

- a) The Ministry of General education should form a research committee that can embrace representatives from different institutions and organizations that can promote research agendas for improving reading among learners in primary schools.

- b) The MoGE must engage universities and colleges of education in research for effective methods for reading instruction in familiar language.
- c) The MoGE must strengthen monitoring and evaluation systems and enhance evidence based systems for improving learner performance in reading.

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## APPENDICES

### Appendix 1: Interview Guide for Grade 2 teachers

Dear Respondent,

I am a student at University of Zambia pursuing a Master of Education Degree in Literacy and Language. I am conducting a research on level of reading skills among grade 2 learners in Cinyanja. According to Ministry of education policy, you are following the revised curriculum to learn to read and write. You have been teaching the children I assessed today. I therefore ask you to participate fully in this interview. Please be assured that the information you will provide will be treated with utmost confidentiality and that it is meant solely for academic purposes.

1. For how long have you been teaching? \_\_\_\_\_YEARS\_\_\_\_\_MONTHS
2. For how long have you been teaching this class?  
\_\_\_\_\_YEARS\_\_\_\_\_MONTHS.
3. What is your highest qualification? \_\_\_\_\_
4. Which is your:
  - a) First language (MT)\_\_\_\_\_
  - b) Second language:\_\_\_\_\_
  - c) Third language:\_\_\_\_\_
  - d) Fourth language:\_\_\_\_\_
5. What language is your mother tongue? \_\_\_\_\_
6. Which method are you using for teaching learners in Cinyanja?
  1. PLP      2. PRP – SITE      3. Other \_\_\_\_\_
7. Have you been trained in PLP phonics-based approach?    YES                  NO
8. How do you think your learners are performing in Cinyanja?
  1. Excellently 2. Very well 3. Good 4. Poor 5. Very poor
9. How do you scale your fluency in Cinyanja?
  1. Excellently 2. Very well 3. Good 4. Poor 5. Very poor
10. Do you have sufficient materials for teaching in Cinyanja?    YES                  NO

11. How many grades do you teach? 1      2      3      4
12. In which language would you feel comfortable to teach literacy? \_\_\_\_\_
13. Is time sufficient for you to teach using local language, Cinyanja, as medium of instruction? YES                      NO
14. How often are you monitored to teach use of Cinyanja as medium of instruction? YES  
NO
15. Who monitors you? \_\_\_\_\_
16. How often do you assess learners in Cinyanja? \_\_\_\_\_
17. What suggestions do you have for improving teaching in Cinyanja?
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Thank you very much for your participation and please you are free to ask any question about what has been discussed.

## Appendix 2: Observation checklist

The following observation checklist will be used to help in recording the observations made by the teacher.

ACTIVITY AREA	EXPECTED OUTCOMES	REMARKS		
		Good	Satisfactory	Unsatisfactory
Lesson preparation	Lesson plan			
	Teaching and learning aids			
Classroom organization	Sitting arrangement in order			
	Cleanliness			
	Learners work in Cinyanja displayed on walls			
Materials	Availability of learner books and teachers' guide			
Lesson procedure	Correct methodology			
Management	Class control			
	Involvement of learners – learner-centered			
	Time management throughout the lesson			
Language of instruction	Code switching – teacher using Cinyanja and English for difficult terms			
	Fluency in Cinyanja			
Teacher-learner relationship	Rapport with pupils			
	Interaction between learner and teacher in Cinyanja			
Assessment	Teacher assessment records			
	Learners' work in exercise books			
Class library	Availability of library			
	Books and other materials in Cinyanja available			
	Teacher and learner-created materials			
Gender	Girls and boys equally involved in class activities			
	Teacher comments and materials gender neutral			
Special Education Needs	Involvement of learners with SEN			

### Appendix 3: Assessment test for Grade 2

#### INSTRUCTIONS FOR RESEARCHER - 50 marks

##### 1. Letter sound identification (60 seconds) : (10 marks)

**Instructions:** Pano ndili ndi tsamba limene liri ndi malembo a alifabeti ya muchingerezi. Coonde ndiuze MVEKERO za malembo a alifabeti amene udziwa. Usanene maina ake. Koma mvekero zake.

Tiye tiyeserere: ndiuze mvekero la lembo ili: o M

Cabwino, mvekero la lembo ili ndi /o/  
Mvekero la lembo ili ndi /M/

Ndikanena kuti “tiyambe”, uyambire apa ndi kupitiriza mopingasa tsamba ili. Lata pa lembo lirilonse ndipo ndiuze mvekero la lembo limenelo mmau okweza. Uwerenge mwamsanga ndiponso modekha. Ngati wafika pa lembo limene sudziwa, pitiriza kupita ku lembo lotsatira. Ika cala cako pa lembo loyamba. Wakonzeka? Yamba.

A	T	i	F	K	E	U	t	J	L
---	---	---	---	---	---	---	---	---	---

Marks: 1 – Correct                      0 – Incorrect                      x - No response

##### 2. Word reading (60 seconds): (5 marks)

**Instructions:** Ndifuna kuti uwerenge mau amene ungakwanitse kuwerenga, Uwerenge mau awa osati masipelingi.

Tiye tiyeserere: conde werenga liu ili: mwana.

**Wacita bwino. Liu ili ndi “mwana”**

Ndikanena kuti “yamba” uyambire pano ndipo uwerenge mopingasa patsamba ili. Lata liu lirilonse ndipo uliwerenge mokweza. Uwerenge mofulumira ndi mosamala mmene

ungakwanitsire. Ngati wapeza liu limene sudziwa, pita ku liu lotsatira. Ika cala cako pa liu loyamba. Wakonzeka? Yamba:

Ana	Galu	atate	tsiku	bwereka
-----	------	-------	-------	---------

Marks: 1 – Correct                      0 – Incorrect                      x - No response

### 3. Oral passage reading: (3 minutes) (30 marks):

**Instructions:** Pano pali ka nthano kakafupi. Ndifuna kuti uwerenge mokweza, mofulumira komanso mosamala. Ukatsiriza kuwerenge, ndizakufunsa mafunso onena za nkhani imene wawerenge. Ndikanena kuti “ yamba,” uwerenge bwino kwambiri mmene ungakwanisire. Ngati wapeza liu limene sudziwa, pita ku liu lotsatira. Ika cala cako pa liu loyamba. Wakonzeka? Yamba.

Amai anapita kumusika m’masana tsiku lina.	6
Anasiya mwana ndi mkulu wake Dolika.	6
Anzake a Dolika anabwera kudzamtega pamodzi ndi mwanayo. Dolika ndi anzake anaphunzitsa mwana kuyimba. Anamuphunzitsa nyimbo ya alifabeti.	18
<b>Total:</b>	<b>30</b>

Marks: 1 – Correct                      0 – Incorrect                      x - No response

### 4. Reading comprehension: (2 minutes) (5 marks)

Ndani anapita kumsika? (Amai)	1	0	x
Mwana anatsala ndi ndani? (Dolika)	1	0	x
Ndani anabwera kumtega Dolika?	1	1	
Kodi mwana anaphunzitsiwa ciani? (Kuyimba)	1	0	x
Kodi mwana anadziwa bwanji kuyimba nyimbo ya alifabeti? (Dolika ndi anzake anamphunzitsa)	1	0	x

Marks: 1 – Correct                      0 – Incorrect                      x - No response

#### Appendix 4: Learner's stimulus

### LEARNERS' STIMULUS:

1.

A	T	i	F	k	E	U	t	J	L
---	---	---	---	---	---	---	---	---	---

2.

Ana	Galu	atate	tsiku	bwereka
-----	------	-------	-------	---------

3

Amai anapita kumusika m'masana tsiku lina. Anasiya mwana ndi mkulu wake Dolika. Anzake a Dolika anabwera kudzamtenga pamodzi ndi mwanayo. Dolika ndi anzake anaphunzitsa mwana kuyimba. Anamuphunzitsa nyimbo ya alifabeti.



## Appendix 5: Learner's Answer Sheet

SCHOOL: \_\_\_\_\_

CLASS: \_\_\_\_\_

ID NUMBER OF PUPIL: \_\_\_\_\_ GENDER: Boy\_\_\_ Girl\_\_\_

DATE: \_\_\_\_\_

### 1. Letter sounds - Slash wrong answer ( / ) (1 minute - 5 marks)

A	T	i	F	k	E	U	t	J	L
---	---	---	---	---	---	---	---	---	---

### 2. Word reading - Slash wrong answer ( / ) – (50 seconds) 5 marks

Ana	Galu	atate	tsiku	bwereka
-----	------	-------	-------	---------



### 3. Oral passage reading: Slash word read incorrectly – 30 words/ 30 marks

Amai anapita kumusika m' masana tsiku lina.	6
Anasiya mwana ndi mkulu wake Dolika.	6
Anzake a Dolika anabwera kudzamtega pamodzi ndi mwanayo. Dolika ndi anzake anaphunzitsa mwana kuyimba. Anamuphunzitsa nyimbo ya alifabeti.	18
<b>Total:</b>	<b>30</b>

**Reading comprehension: (2 minutes) (5 marks) - Tick: 1 – Correct 0 – Incorrect X - No response**

Ndani anapita kumsika? (Amai)	1	0	x
Mwana anatsala ndi ndani? (Dolika)	1	0	x
Ndani anabwera kumtega Dolika?	1	0	x
Kodi mwana anaphunzitsiwa ciani? (Kuyimba)	1	0	x
Kodi mwana anadziwa bwanji kuyimba nyimbo ya alifabeti? (Dolika ndi anzake anamuphunzitsa)	1	0	x

## Appendix 6: DEBS' permission

<i>All correspondence should be addressed to the District Education Board Secretary Telephone: 0211-240250 / 240249 / 0955 623749 E-mail: desbsisk@yahoo.co.uk</i>		<i>In reply please quote:</i> <b>DEB/LSK/101/1/1</b>
<p style="text-align: center;"><b>REPUBLIC OF ZAMBIA</b> <b>MINISTRY OF EDUCATION, SCIENCE, VOCATIONAL TRAINING AND EARLY EDUCATION</b> <b>DISTRICT EDUCATION BOARD SECRETARY</b> <b>P.O. BOX 50297</b> <b>LUSAKA</b></p>		
<p>16<sup>th</sup> November, 2015</p>		
<p>The University of Zambia Assistant Dean post Graduate Studies - School of Education <b>LUSAKA DISTRICT</b></p>		
<p style="text-align: center;"><b>RE: FIELD WORK FOR MASTERS/PHD STUDENTS</b></p>		
<p>Reference is made from your letter dated 11<sup>th</sup> November, 2015 in which you wish to undertake a Research project in Education.</p>		
<p>I am pleased to inform you that my office has no objection to your request and authority has been granted for you to conduct your research in some selected schools in Lusaka District.</p>		
<p style="text-align: center;"> Vincent Zgambo (Mr.) <b>DISTRICT EDUCATION BOARD SECRETARY</b> <b>LUSAKA DISTRICT</b></p>		
<p>lk*</p>		

## Appendix 7: UNZA Introductory letter



### THE UNIVERSITY OF ZAMBIA SCHOOL OF EDUCATION

Telephone: 291381  
Telegram: UNZA, LUSAKA  
Telex: UNZALU ZA 44370

PO Box 32379  
Lusaka, Zambia  
Fax: +260-1-292702

Date: 01/02/2016

#### TO WHOM IT MAY CONCERN

Dear Sir/Madam

#### **RE: FIELD WORK FOR MASTERS/ PhD STUDENTS**

The bearer of this letter Mr./Ms. JOSEPHINE C. MUTALE.....Computer number...5.1.4.700.646.....is a duly registered student at the University of Zambia, School of Education.

He/She is taking a Masters/PhD programme in Education. The programme has a fieldwork component which he/she has to complete.

We shall greatly appreciate if the necessary assistance is rendered to him/her/.

Yours faithfully

Daniel Ndhlovu (Dr)  
ASSISTANT DEAN POSTGRADUATE STUDIES- SCHOOL OF EDUCATION

Cc: Dean-Education  
Director-DRGS

## Appendix 8: Sample Head Teacher's consent

### CONSENT FORM FOR HEAD TEACHER:

Name of school: \_\_\_\_\_

Location of the school: \_\_\_\_\_

Name of Grade: 02

Name of Teacher: \_\_\_\_\_

Date of assessment: 02-02-2016

Consent by the school to conduct research on reading levels among a sample of 16 learners in Cinyanja in Grade 2.

1. I confirm that I have understood what this research is about and have had opportunity to ask questions.
2. I understand the importance of this research and information it will bring in order to understand where our learners are in reading in Cinyanja. Results may help us to reflect and improve on teaching in our school.
3. Since the assessment will take place within the school and part of the school teaching, on behalf of the learners who cannot make a decision and on behalf of their guardians, I agree that the assessment should be conducted.
4. I understand that the participation by learners should be voluntary and that a learner is free to withdrawal before or during the assessment process if he or she feels not well or prefers not to continue.
5. I understand that any personal information learnt about individual learners tested in the research will remain anonymous and private and must be kept confidential.
6. On behalf of the Ministry of General and Early Education, I consent to this research.

Name of Head Teacher

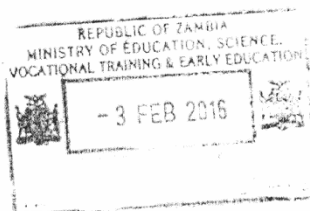
Date

Signature

JOSEPHINE C. MUTALE  
Name of Researcher

02/02/2016  
Date

[Signature]  
Signature



## Appendix 9: Sample Teacher's consent

### CONSENT FORM FOR THE TEACHER

Name of school: \_\_\_\_\_

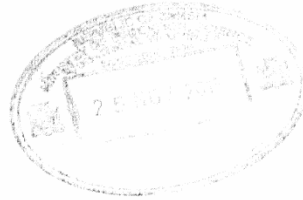
Location of the school: URBAN

Name of Grade: ONE

Name of Teacher: \_\_\_\_\_

Gender: FEMALE

Date of assessment: 25<sup>TH</sup> NOVEMBER, 2015



1. I confirm that I have understood what this research is about and have had opportunity to ask questions.
2. I understand the importance of this research and information it will bring in order to understand where my learners are in reading in Cinyanja. Results may help me to reflect and improve on my teaching.
3. I agree that the assessment should be conducted.
4. I understand that the participation in this interview is voluntary and that I am free to withdrawal before or during the interview process if I do not feel well or prefer not to continue.
5. I understand that any personal information learnt about individual learners tested in my class and answers to my interview will remain anonymous and private and will be kept confidential.
6. I therefore agree to be interviewed.

\_\_\_\_\_  
Name of Teacher

25/11/2015  
Date

\_\_\_\_\_  
Signature

J. C. MUTALE  
Name of Researcher

25/11/2015  
Date

[Signature]  
Signature