

**IDENTIFICATION OF READING DISABILITIES  
AND TEACHER-ORIENTED CHALLENGES IN  
TEACHING READING TO STANDARD FIVE  
LEARNERS IN NYERI AND NAIROBI DISTRICTS,  
KENYA**

**BY**

**MARY N. RUNO**

**E83/11229/06**

**A Research Thesis Submitted in Fulfilment of the  
Requirements for the Degree of Doctor of Philosophy  
in Special Education of Kenyatta University**

**MARCH 2010**

**DECLARATION**

This thesis is my original work and has not been presented for a degree in any other university OR any other award.

Signature ..... Date .....

**MARY N. RUNO**

This thesis has been submitted with our approval as university supervisors.

Signature ..... Date .....

**DR. GEOFFREY KARUGU**  
Senior Lecturer  
Department of Special Education  
Kenya University

Signature ..... Date .....

**DR. JOHN MUGO**  
Lecturer  
Department of Special Education  
Kenya University

## **DEDICATION**

To my former supervisor the late Professor Shashi Bali who taught me perseverance, my parents Esther Wanjiku and late Andrew Runo who believed in me. And to my children Andrew, Leonard and Esther, my daughter in-law Hellen and my granddaughter Charleane who stood with me during this time.

## ACKNOWLEDGEMENTS

This road would not have come to an end if the following persons were not part of my life and if they did not actively participate to see me through the various challenges.

I am extremely and humbly indebted to the late Professor Shashi Bali who within the first encounter said she saw something special in me and requested that she becomes my second supervisor when I had almost given up on this study. Her great belief in me as a mature student made me change my perspective about life at the university. Special thanks go to Dr. G. K. Karugu who has always been there for me no matter the discouragement. He kept saying “Mary you can do it and I am proud of you,” His words kept me going. I am equally grateful to Dr. John Mugo who agreed to become my second supervisor after the demise of Professor Bali and gave me all the support I needed. My very special thanks go to my colleague and friend Dr. Franciscah Wamocho, and to my other colleagues in the department of Special Education at Kenyatta University who never got tired of giving me their moral support.

I am grateful to Kenyatta University for according me the opportunity to do my PhD and giving me the support I needed to complete the study. Special thanks particularly go to Professor Olive Mugenda, the Vice Chancellor of Kenyatta University, for severally encouraging me to focus on my study and also to the Dean School of Education Dr. J. Ogeno who kept reminding me that I must graduate before his tenure in office as a dean is over. Moreover the

Dean, through the school of education did support me financially. My sincere thanks also go to Mr. Stephen Mwaura from Kenya Institute of Special Education who kept challenging me to complete my study. In addition I am grateful to my family members who inspired me all through my study time.

My gratitude greatly falls upon the research assistants, who tirelessly worked with me for many days, sometimes as late as up to midnight, arranging the tests for children. Very special thanks go to the teachers and children in the 16 schools from which I collected data in both Nyeri and Nairobi Districts. They were very patient with me. May the Almighty God bless them all.

Finally, I wish to specially acknowledge my three children (Andrew, Leonard and Esther) and my daughter in law – Hellen and my sweet granddaughter (Charlene) for being there for me and particularly allowing me to be away from them and not meeting their needs as a mother during the time taken up by the study.

Many thanks to all friends, colleagues, pastors and family members whom I have not mentioned by name; kindly know you are highly appreciated. Special thanks go to Ms. A. Chadamba for typing the whole thesis, Mr. Menya and Mr. N. Mukolwe for helping in keying in data and Dr. M. Njoroge for his editorial input. Finally, I would like to give God all the glory for enabling me to work and to have given me the strength to move on even when the road seemed rough.

## TABLE OF CONTENTS

Declaration	ii
Dedication	iii
Acknowledgements	iv
Table of Contents	vi
List of Figures	xiii
List of Tables	xvi
Abbreviations and Acronyms	xvii
Abstract	xviii

## CHAPTER ONE: INTRODUCTION

1.0	Introduction	1
1.1	Background of the Study	1
1.2	Statement of the Problem	7
1.2.1	Purpose of the Study	10
1.3	Objectives of the Study	10
1.4	Research Questions	11
1.5	Significance of the Study	11
1.6	Delimitation and Limitations of the Study	12
1.7	Assumptions of the Study	13
1.8	Conceptual Framework	13
1.9	Theoretical Framework	16
1.10	Operational Definitions of Terms	17

**CHAPTER TWO: REVIEW OF RELATED LITERATURE**

2.0	Introduction	20
2.1	Reading and Reading Disabilities	20
2.2	Stages of Reading Development	21
2.2.1	Stages of Cognitive Development	23
2.2.2	Reading Readiness	24
2.3	Reading Disability and Dyslexia	25
2.3.1	Types of Reading Errors	26
2.3.2	Relationship Between Reading and Language	26
2.3.3	Relationship Between Reading and Learning Disabilities	27
2.3.4	Prevalence of Reading Disabilities	28
2.3.5	Gender Differences in Reading	29
2.4	Factors Which May Cause Reading Problems in Learners	30
2.4.1	Perceptual Factors	31
2.4.1.1	Visual Perception in Reading Disabilities	32
2.4.1.2	Auditory Perception in Reading Disabilities	33
2.4.2	Phonological Awareness	33
2.4.3	Neurological Factors	34
2.4.3.1	Lateral Dominance	35
2.4.4	Cognitive and Language Factors	35
2.4.5	Intrinsic Motivation	37
2.4.6	Extrinsic Motivation	39
2.4.7	Socio-Economic Factors	40
2.4.8	Educational Factors	43
2.5	Effective Teacher Training on Methods of Reading	44

2.6	Diagnostic Assessment in Reading	45
2.6.1	Methods of Assessing Reading	47
2.7	Methods of Teaching Reading	49
2.7.1	The Alphabetic Method	49
2.7.2	The Phonics Method	50
2.7.3	Whole Word Method	51
2.8	Remediation of Reading Disabilities	52
2.8.1	Summary on Reading Disabilities	54
2.9	Research Hypotheses	54

### **CHAPTER THREE: RESEARCH METHODOLOGY**

3.0	Introduction	56
3.1	Research Design	56
3.1.1	Study Variables	57
3.1.1.1	Independent Variables	57
3.1.1.2	Dependent Variables	57
3.2	Location of the Study	58
3.3	Target Population	59
3.4	Sampling and Sample Techniques	59
3.4.1	Sampling Techniques	59
3.4.2	Sample Size	64
3.5	Research Instruments	65
3.5.1	Teachers' Questionnaires	66
3.5.2	Learners Questionnaires	69
3.5.3	Training Research Assistants	71

3.6	Pilot Study	72
3.6.1	Validity	73
3.6.2	Reliability	74
3.7	Data Collection Procedures	75
3.8	Data Analysis	76
3.9	Logistical and Ethical Considerations	77

## **CHAPTER FOUR: PRESENTATION AND DISCUSSION OF FINDINGS**

4.0	Introduction	78
4.1	Section One: Demographic Data	78
4.1.1	Demographic Characteristics of Learners	79
4.1.2	Demographic Characteristics of Teachers	82
4.2	Section Two: Reading Abilities and Disabilities	83
4.2.1	Reading Rates in Reading Levels 1 and 4	84
4.2.2	Identification of Specific Learners' Reading Problems: Teachers' Opinions against Actual Reading Assessment	86
4.2.3	Analysis of Individual Learner's Scores on 10 Learner Cases against the Teachers' Prediction	89
4.2.4	Gender difference in Reading Disabilities in Kenya	95
4.2.4.1	Teachers' Opinions	95
4.2.4.2	Gender of Learner and Reading Ability as per Learners' Data	96
4.3	Methods of Reading Assessment	97
4.3.2	Proportion of Non-readers in Class 5 according to Teachers	99
4.3.3	Methods Teachers use to Assess Learners' Reading Abilities	101

4.3.4	Teachers' Perception of Good and Poor Readers in Class 5	102
4.4	Effects of Reading Disabilities on English Comprehension, Writing Composition and Other Subjects as per Teachers' Opinion	104
4.5	Causes of Reading Disabilities	106
4.5.1	Causes of Reading Disabilities according to Teachers	106
4.5.2	Focus Group on Causes of Reading Disabilities	108
4.5.3	Causes of Reading Disabilities according to Learners	111
4.6	Methods and Materials Used in Teaching Reading	120
4.6.1	Methods of Teaching Reading Taught in College	121
4.6.2	Teachers' Preferred Methods of Teaching Reading	123
4.6.3	Materials Teachers Use While Teaching Reading	124
4.6.4	Use of Supplementary Materials for Teaching Reading in Schools	125
4.7	Challenges in Teaching Reading	126
4.8	Intervention Strategies Used against Reading Disabilities	128
4.8.1	Interventional Strategies Used by Teachers and those that worked	129
4.8.2	Help Given to Teachers on How to Assist Learners with Reading Disabilities by Frequency in Percentage	131
4.8.3	Suggestions by Teachers on How to Improve Reading in Class 5 in schools.	132
4.9	Section Three: Analysis of Hypotheses	133

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

5.0	Introduction	139
5.1	Summary of the Findings	139

5.1.1	Demographic Characteristics of Respondents	139
5.1.2	Reading Abilities and Disabilities	140
5.1.3	Methods of Reading Assessment	141
5.1.4	Effects of Reading and Performance	142
5.1.5	Causes of Reading Disabilities	142
5.1.6	Methods and Materials Used in Teaching Reading	143
5.1.7	Challenges in Teaching Reading	144
5.1.8	Intervention Strategies Used against Reading Disabilities	144
5.1.9	Testing of Hypotheses	145
5.2	Conclusion	146
5.3	Recommendations	147
5.3.1	General Recommendation	147
5.3.2	Ministry of Education	148
5.3.3	Kenya Institute of Education	149
5.3.4	Directorate of Quality Assurance and Standards and Teacher Advisory Centre (TAC) Tutors	149
5.3.5	Parents and Other Stakeholders	149
5.4	Areas for Further Research	150
	<b>REFERENCES</b>	151
	<b>APPENDICES</b>	
	Appendix A: Questionnaire for Teachers on Identification of Learners with Reading Disabilities	163
	Appendix B: Checklist on Reading Errors	169
	Appendix C: Reading Attitude Survey	170
	Appendix D: Wordlist Levels 1-5	174

Appendix E (i): Reading Passage Level 1	175
Appendix E (ii): Reading Passage Level 2	176
Appendix E (iii): Reading Passage Level 3	177
Appendix E (iv): Reading Passage Level 4	179
Appendix F: Tables Containing More Findings	181
Appendix G: Ten Cases of Learners who Could Read at Independent Level in Class 4	182
Appendix H (i): Summary of Attitude Scores for Nyeri District Pupils	182
Appendix H (ii): Summary of Attitude Scores for Nairobi District Pupils	183
Map of Kenya Showing Districts of Study	184
Research Authorization Letter	185

### LIST OF FIGURES

Figure 4.1	Gender distribution per district	80
Figure 4.2	Number of siblings by districts and gender	81
Figure 4.3	Ordinal birth positioning of respondents by districts	83
Figure 4.4	Teacher qualifications by level of training	83
Figure 4.5 (a)	Reading rates in level 1 passage	84
Figure 4.5 (b)	Reading rates in level 4 passage by minutes and frequency	85
Figure 4.6(a)	Identification of reading errors from teachers' opinion versus actual learners' assessment score in Nairobi district	86
Figure 4.6 (b)	Identification of reading errors in teachers' opinion versus actual learners' assessment score in Nyeri district	88
Figure 4.7:	Analysis of individual learners scores on 10 learner cases by frequency and teachers' general prediction	90
Figure 4.8:	Distribution of non readers by gender and frequency from teachers' data in Nyeri and Nairobi Districts	95
Figure 4.9 (a)	Indication of whether teachers assess learners' reading ability	98
Figure 4.9 (b)	Frequency of continuous assessment tests in reading to Learners	98
Figure 4.10	Proportion of non-readers in class 5 according to Teachers	100
Figure 4.11	Methods used by teachers in assessing learners' reading ability in Nyeri and Nairobi	101

Figure 4.12	Poor reader characteristics and frequency as identified by teachers for Class 5 learners	102
Figure 4.13	Good reader characteristics and frequency as identified by teachers for Class 5 learners	103
Figure 4.14 (a)	Effects of reading disabilities on English comprehension by percentage	104
Figure 4.14 (b)	Effects of reading disabilities on writing composition by percentage	105
Figure 4.14 (c)	Effects of reading disabilities on other subjects by percentage	105
Figure 4.15	Availability of electricity at home and its effects on reading ability in Nyeri and Nairobi districts	111
Figure 4.16	Number of correct words level 3 versus availability of reading table at home for Nyeri and Nairobi districts	112
Figure 4.17	Child's preferred language at home and wordlist at level 3 – Nairobi and Nyeri districts and frequency	114
Figure 4.18	Nyeri and Nairobi districts child's preferred language at school by frequency	115
Figure 4.19	Child's preferred language at school and wordlist at level 3 by frequency	115
Figure 4.20	The school of study and level of reading difficulty and level 3 wordlist for learners by frequency	117
Figure 4.21	Teachers' level of confidence when teaching reading	121
Figure 4.22	Teachers' preferred methods of teaching reading	123
Figure 4.23	Difficulties experienced by teachers while teaching reading	126

Figure 4.24	Difficulties experienced by teachers in teaching reading in Class 5	127
Figure 4.25	Interventional strategies used by teachers	128
Figure 4.26	Interventional strategies used by teachers in remediating reading used and those that worked	129
Figure 4.27	Help obtained from other professionals	131

**LIST OF TABLES**

Table 3.1:	Sample size	64
Table 3.2:	Likert Scale showing reading errors	68
Table 4.1:	Gender Distribution per district	79
Table 4.2:	Age distribution of learners by years and districts	80
Table 4.3:	Distribution of non readers by gender and frequency from teachers' data in Nyeri and Nairobi districts	96
Table 4.4:	Most common causes of reading difficulties in class 5 pupils and percentage	107
Table 4.5:	Nyeri and Nairobi Child's preferred language at home by percentage	113
Table 4.6:	Total attitude score and wordlist score level 3 for Nairobi and Nyeri districts	119
Table 4.7:	Methods used by teachers in teaching reading	120
Table 4.8:	Methods of reading taught in college	122
Table 4.9:	Books teachers use when teaching reading	125

**ABBREVIATIONS AND ACRONYMS**

<b>C</b>	-	Cognitive
<b>E</b>	-	Educational
<b>EF</b>	-	External Factors
<b>EFA</b>	-	Education For All
<b>EM</b>	-	Extrinsic Motivation
<b>FPE</b>	-	Free Primary Education
<b>IF</b>	-	Internal Factors
<b>IM</b>	-	Intrinsic Motivation
<b>IQ</b>	-	Intelligence Quotient
<b>KCPE</b>	-	Kenya Certificate of Primary Education
<b>LC</b>	-	Language Culture
<b>LD</b>	-	Learning Difficulties
<b>LOI</b>	-	Language of Instruction
<b>KIE</b>	-	Kenya Institute of Education
<b>PD</b>	-	Perceptual Deficits
<b>QASO</b>	-	Quality Assurance and Standards Officers
<b>RD</b>	-	Reading Difficulties/ Disabilities
<b>SE</b>	-	Socio – economic
<b>TAC</b>	-	Teacher Advisory Centre
<b>UPE</b>	-	Universal Primary Education
<b>U.S.A</b>	-	United States of America

## ABSTRACT

The study aimed at finding out whether teachers can identify the causes of reading disabilities in learners. It intended to establish whether teachers have adequate knowledge of identifying learners with reading disabilities, determine the proportion of non-readers in class five. It also investigated the existing methods and materials teachers use in teaching and remediating reading including the difficulties teachers encounter when teaching. Finally, the study aimed at finding out the correlation/relationship between gender and reading disabilities among learners. This study adopted both qualitative and quantitative research approaches where mixed method design was used for collecting and analyzing data for both teachers and learners. The study embarked on interviews for learners by use of structured interview schedule. Learners were also assessed to determine the level of reading ability. The study also used semi-structured questionnaires for teachers. A focus group interview was also held with teachers sampled for the study. The study was conducted in Central and Nairobi provinces where Nyeri and Nairobi districts respectively were used. Purposive sampling was used to select the provinces, districts, divisions, primary schools, populations and the target groups, in this case of the teachers and learners. This was based on KCPE results analysis for 2006. The division that performed best overall in Nairobi and the poorest performing division in Nairobi from KCPE results, 2006 were used as locations for the study. Nyeri District was representative of rural primary schools and therefore, the municipality and one rural division were selected. In this case Nyeri municipality division and Othaya division were selected. There were 4 schools sampled from each of the 4 divisions, giving a total of 16 schools from both Nairobi and Nyeri. In each school, 15 pupils were purposively selected from the list of those learners scoring 250 marks and below from their end of standard 5 examinations. Where learners were more than 15 scoring 250 marks and below, the researcher used random sampling. A total of 240 learners were sampled for the study. Eighteen teachers who taught English to class 5 learners in 2006 were selected for the study. Sixteen class teachers were also included in the study, making a total of 34 teachers. There were 5 types of instruments namely: questionnaires for teachers and learners, assessment tools for reading – word list A to E, passage 1 to 4; checklist on reading errors and learners' reading attitude survey. There was also a focus group discussion with teachers in the study. Statistical Package for Social Sciences (SPSS) was used to analyze quantitative data from the assessment tools, questionnaires for learners, and reading attitude survey. All the hypotheses were tested at  $p < 0.05$ . Pearson product moment correlation coefficient was used to measure the strength and direction of the relationship between different variables. Chi-square test was also used. Teachers questionnaire was analysed quantitatively. The results were obtained based on the objectives, questions and hypotheses of the study. It emerged that teachers assessed their learners reading ability but they did not use proper methods of assessment; teachers were able to identify children who could not read at class level as non-performers but were not able to identify the specific reading difficulties. Non-readers ranged from 0 to 27.1% for Nairobi and 0 to 53.6% in Nyeri districts respectively. Almost half of the teachers in the study neither taught reading nor did they know the methods to use in teaching reading. The

study indicated that there were more boys (103) than girls (78) who could not read. The study concluded that teacher training syllabus on reading whether in mother tongue, Kiswahili or English be adequately developed to cater for individual learners and equip the teachers with methods for teaching reading proficiently. More time should be given to teaching reading, assessing reading and remediating reading disabilities both at the primary teacher education colleges and at primary schools; reading is an ongoing process and therefore it is recommended that reading should be taught as a subject throughout the primary levels (standard 1 to 8) but be within the developmental states of reading; reading readiness curriculum should be developed for early childhood and at primary levels. Such policy should ensure smooth transition of learners' movement from home, preschool and primary schools. Finally, the study recommended that for adequate development of teacher training syllabus on reading in mother tongue, English or Kiswahili be given more time.



## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Introduction**

Presented in this chapter are background to the study, statement of the problem, purpose of the study, objectives, research questions, significance of the study, limitations and delimitations, assumptions of the study, conceptual framework, theoretical framework and operational definitions of terms.

#### **1.1 Background to the Study**

Reading disability is an area of concern to many educators both locally and globally. The term “Reading disabilities” in this study is defined as severe or significant discrepancies between potential and present achievement, for example, a child being delayed in development/acquisition of reading skills more than 2 years as compared to his/her age mates. According to Kirk, Gallagher & Anastasiow (2003), becoming a skilled reader is very important in the society and one who is not skilled in reading is at a great disadvantage, both in school and at the workplace. Reading in English is taught at primary school level (pre-unit to class 8) as a basic skill, in addition to listening, speaking and writing (KIE 2002) syllabus. However, for unexplained reasons, a number of learners are unable to use reading as a tool for learning, getting new information, ideas, attitudes and values from standard 4 upwards (Lerner, 2006). Even after learners have been taught, it is quite unfortunate that a large number (17.5%) of them are not able to read efficiently at higher class levels (Lerner, 2006). In Kenya, (Kirigia,1991) found that a large number of KCPE

graduates lacked sufficient knowledge in English reading comprehension and also had difficulty comprehending difficult English words.

According to Mercer & Mercer (2001), between 10% and 15% of school going learners have reading difficulties. Such learners do not use their reading skills as a tool to gather information and to improve their academic skills. It is also important to note that learners' entire development stages such as cognitive, personality, emotional and social are positively influenced by having better reading ability levels which, in turn, give them a good understanding of various domains of knowledge in life. Reading experiences strongly influence a learner's self-image and feeling of competency; furthermore, reading failure can lead to misbehaviour, anxiety and lack of motivation (Mercer & Mercer, 2001:288). Teachers should, therefore, be in a position to identify a learner's problems including those related to reading from a holistic point of view in order to help such a learner manage academically in school (Dreikrurs, Grunwald, & Pepper, 1998).

The assessment data used for identification of non-readers often lack classroom relevance and therefore, the learners' reading disabilities are not arrested (Mercer, 1983). This may mean that teachers don't know why learners lag behind in class because the tests they give to pupils are not meant to identify a specific problem. Such learners who experience reading difficulties in school should be identified early for remediation but teachers lack the know-how. According to Chall (1989), learners below 9 years, that is,

pre-school to standard 3, are in the early stages of learning to read. After 9 years of age, which in Kenya places them in standard 4, the learners are expected to learn all the subjects in the school curriculum without any difficulties. Information about the stages of reading development indicates that learners starting at this level should be reading to learn, where they use reading as a tool for acquiring new knowledge (Mercer & Mercer, 2001). Where proper foundation in reading is not given to learners at lower primary to learn and read, such learners continue experiencing problems in upper primary and probably in their lifetime. Kang'ethe (1998) states that as children grow older they make more errors in reading because they tend to rely on visual clues rather than decoding the word and therefore deteriorate in acquiring appropriate reading skills.

The school curriculum is an on-going review process in Kenya in order to improve learning materials and standards for learners. The Ministry of Education, through the government of Kenya, has continuously made efforts to put in place mechanisms for improving learners' performance in the classroom. At any rate, the standard of education at primary level has not greatly impacted on schoolwork due to poor reading culture which has remained a mysterious phenomenon to many stakeholders. Reading disabilities among school-going children should be considered as a serious handicap in life in that children who do not learn to read may not succeed in life (Lerner, 2006). It is critical that teachers identify children with reading problems early and provide them with appropriate early interventions rather

than practising the policy of *wait-and-fail* method (Lerner, 2006). At the end of each school examination term, report forms are released by schools to parents where learners are ranked from the best to the poorest performer. For instance, the best learners in a class may score over 400 marks while the poorest in class may barely manage 100 marks in all the 5 subjects. These learners who perform poorly in classwork and at the end of the term or the end of the year examinations may be doing so because teachers do not have adequate knowledge of identifying learning difficulties of such learners.

Research indicates that there is a significant gender effect on ability to read (Lerner, 2006). The issue of gender differences in reading disabilities may be significant and may require to be addressed. According to Lerner (2006), clinics and schools in USA identify four times as many boys as girls who have learning disabilities. Reading disability is a major characteristic comprising 80% of learners showing evidence of serious reading disabilities. In addition, Malatesha and Aaron (1982) claim that more male brains are prone to excessive imbalance in information processing strategies than female brains. This study was set to find out whether there are differences among boys and girls in manifestations of reading disabilities.

Some of the problems that do affect learners' reading abilities can be eliminated or ameliorated and such learners can greatly improve in their reading abilities. But where there are no efforts or knowledge to improve their reading abilities, the impact of reading difficulties is felt by learners, teachers

and parents. Learners, for example, may not be confident in themselves, teachers may not enjoy teaching and parents may be confused and frustrated. The school in a certain region where students do not perform well academically may become a concern to the entire community and may lack societal support. This study was designed to investigate whether standard 5 primary school teachers are able to identify learners with reading disabilities and the procedures they use to remediate such problems. It also attempted to establish how learners with reading disabilities evaluate themselves and the attitude they have towards reading. Reading disability in schools is an issue that should be given greater attention by teachers, parents and the society at large because, when learners fall out of the school system due to failure to read, they are not only a problem to their parents but to the whole society.

In Kenya, where so much emphasis is placed on passing examinations, quite a number of learners may be disadvantaged especially if they are poor readers. A number of learners may become reading disabled due to lack of appropriate instructional methods and opportunity to learn. According to Republic of Kenya (2005) Sessional Paper No. 1 of 2005 on policy framework for education, training and research, over the last one decade, the cumulative dropout rate in primary education has been as high as 37% and the repetition rate of 27% were reported in Republic of Kenya, (1999). Kenya National Development Plan 2002 – 2008: Republic of Kenya (2005) Sessional Paper goes further to say that the survival rate at the primary level has been as low as 40%. This is not a new phenomenon as Republic of Kenya (1988), also known

as Kamunge report, raised the same concern and recommended that research be undertaken on the problem of dropouts, mass repetition and poor retention rate which had been persistent in Kenyan schools. The Republic of Kenya's (1999) Koech Report of inquiry into the education system of Kenya asserts that the high dropout of pupils in primary schools was because pupils were expected to buy learning materials and pay for examinations and other levies). Ministry of Education Science and Technology (2001) Education for all (EFA) recognizes that there are serious quantitative and qualitative growth problems in primary education despite the introduction of Universal Primary Education (UPE). UNESCO (2005) Education for All (EFA), asserts that decreasing school dropout rates will be the major issue in achieving UPE in Africa.

According to the Ministry of Education (2003) report of the task force on the implementation of UPE in January 2003, the Kenya Government declared Free Primary Education (FPE) and therefore, the issue of lack of fees hopefully is no more a significant factor. There are other pertinent problems such as large classes, inadequate resources, lack of preparation on the teacher's part which are making the learners stay out of school. This study was set out to find out how teachers identify learners with reading disabilities and how they may minimize the rate of dropout and pupils' repetition in upper classes (5-8) where reading is taken seriously. It found the possible causes of reading disabilities and what teachers ascribe to as the cause of such disabilities.

A study conducted in Kenya by Arasa (2004) highlights some factors causing poor reading among learners in the slums. Some of these include lack of reading materials due to poverty, lack of pre-school education before joining class 1, lack of parental involvement and interest in their children's schoolwork and incompetence of teachers in teaching reading. Another study conducted in Botswana by Abosi (2007) relates reading problems to poor school reforms, poor classroom management, lack of effective teachers in schools, negative attitude among teachers and lack of student motivation. These two studies represent the state of affairs in a number of African countries being that the countries may have almost the same characteristics and education of learners seems to suffer across the board. The study by Arasa (2004) was carried out in the slums of Nairobi, where problems are unique because of the nature of the environment. The present study addressed non-slum schools to find out whether the teachers can identify individual learners with reading disabilities and whether they know how to provide intervention skills for such problems. The study also set out to find out what specific tools are used by teachers in identifying such learners with reading disabilities and the challenges teachers faced in assessing and teaching reading.

## **1.2 Statement of the Problem**

Reading difficulties are the principal cause of failure in school (Carnine, Silbert & Kameenui, 1997). Reading experiences strongly influence learner's self-image and feeling (Lerner, 2006). Furthermore, reading failure could lead

to misbehaviour, anxiety and lack of motivation (Carnine et al., 1997). It could also lead to failure in the academic arena and hence failure in academic achievement at school.

A few studies conducted in Kenya; (Chege, 1999, Kirigi, 1991, and Njoroge 2000) are all in agreement that learners with problems in reading English, have problems in school performance in general. English performance continue to decline due to inadequacy of basic resources used for teaching and learning English (Njoroge, 2000). Recent research done in Kenya found that inadequacy in English literacy at primary school, left learners ill-prepared to face life outside the classroom (Gathumbi, 2009). The Nyeri and Nairobi primary schools (2006) result analysis reports confirm that English performance was low (Ministry of Education, 2008). The sixteen schools in the study had a range of 40.57% to 77.02% with majority ranging in 40s and 60s. The poor performance in English at primary level could be attributed to poor reading skills since the skill is needed to read and interpret examination questions and even to comprehend what the questions require for an answer.

In Nairobi slums, teachers could easily identify poor readers and explain factors contributing to poor reading (Arasa, 2004). This study aimed at finding out whether such a result applied to the general Kenyan learner in both urban and rural schools.

Even though there are many factors contributing to repetition and school drop-out in Kenya, a good number of learners are repeating classes and dropping out due to reading difficulties resulting to frustrations and lack of motivation. According to the Republic of Kenya's (1999) Kenya National Development Plan, (2002-2008), repetition rate in primary tier was 14% for males and 13% for females, a total percentage of 27% which is quite high. Factors such as school absenteeism or lack of encouragement and interest in the child's academic work by the parents, poor reading facilities both at home and school, poor teaching methods, lack of motivation, poor cognitive development and poor language development are among the main causes of reading difficulties in the learners. These factors may also lead to repetitions of non-performing learners in several classes. According to Mercer & Mercer (2001), between 10% and 15% of school-going learners have reading disabilities. Lerner (2006) claims that more than 17.5% of learners have reading disabilities. With free primary education in place in Kenya since January 2003, about 8.6 million (Ruto, Ongwenyi & Mugo, 2009) learners are attending primary schools and of course an increase in the number of learners per class to be taught by one teacher. Taking the estimates of Mercer & Mercer (2001) of 10% to 15% and Lerner (2006) of 17.5%, Kenya with a population of about 8.6 million of primary school children could have staggering figures of learners with reading disabilities ranging from 860,000 to 1.29 million or 1.5 million on the higher estimates. The study was focussed on identifying learners with reading disabilities and learners' level of reading abilities. It also

aimed at finding out how teachers go about intervening on learners' reading disabilities in order to produce good readers at school.

### **1.2.1 Purpose of the Study**

The purpose of this study was to find out whether teachers are able to identify learners with reading disabilities in primary schools. The study also set to identify the methods used by teachers in the teaching of reading and any interventional measures given to learners who fail to read at class level; in this case, class 5. The study is hoped to be useful to the policy makers, and curriculum developers of reading materials and the teachers. Other stake holders who could benefit from this study are book writers and curriculum evaluators.

### **1.3 Objectives of the Study**

Objectives of this study were to:

- (i) identify reading abilities for learners in class 5.
- (ii) establish the methods used in identification of learners with reading disabilities.
- (iii) identify the causes of reading disabilities in learners.
- (iv) explore the methods used by teachers in teaching reading.
- (v) investigate the interventional strategies adopted by teachers against reading disabilities.
- (vi) find out whether there are gender differences in reading disabilities.

#### **1.4 Research Questions**

The research questions were formulated from the objectives as follows:

- (i) What are the reading abilities for class 5 learners?
- (ii) What methods are used in assessing learners with reading disabilities in schools?
- (iii) What are causes of reading disabilities in class 5?
- (iv) What methods do teachers use in teaching reading?
- (v) Are teachers carrying out any interventional strategies with learners who have reading disabilities?
- (vi) Are there gender differences in reading disabilities in Kenya?

#### **1.5 Significance of the Study**

The study sought to provide information on causes of reading disabilities, procedures for identifying learners with reading disabilities, teaching methods and materials used and intervention measures taken to improve reading in Kenya. The information gathered and recommendations made from the study may be useful to teachers, curriculum developers and policy-makers for future curriculum planning and teaching of reading in order to assist learners who may fall victims of reading disabilities. From the findings of the study parents could also be more informed on how to enhance reading in their children at home thus ultimately improving their academic performance. Finally, parents may stand to gain directly through their children's improvement in school performance. It is also hoped that the syllabus, text-books and any other reading materials would be developed in relation to the children's cognitive

development stages. Teacher training colleges may implement proper methods of teaching reading at all levels of primary school and that teachers could be encouraged to use all methods of teaching reading for all the learners to benefit. Such colleges would equip the pre-service teachers with methods of identifying learners with reading disabilities. In addition, it is hoped that the data collected could be useful not only to teachers but also to the curriculum developers so that they may look at the reading curriculum and time allocation of each lesson in reading and tools for assessing reading abilities in learners.

#### **1.6 Delimitations and Limitation of the Study**

The study was delimited to total of 240 standard five learners and, 16 class 5 English teachers and 18 class 5 teachers in Nairobi and Nyeri districts. Sixteen out of 91 schools from 4 divisions were sampled using Ministry of Education KCPE (2006) results analysis for Nyeri and Nairobi. The other delimitation was that the data could only be collected in January 2007 and the first 2 weeks of February 2007 to avoid causing errors in the data in that the learners were already covering class 6 syllabus, yet the study focused on those who have completed class 5 by the year 2006. The study covered reading disabilities in English language only.

The study was limited to learners in class 5 in the regular public schools. The private schools were not used because they hardly retain learners with learning difficulties due to competition trends among them. The study did not venture into reading difficulties which could be as a result of other disabilities, for

example, mental retardation, visual and hearing impairment and multi-handicaps. Its focus was only on those learners in regular schools who scored 250 marks and below out of a total of 500 in class 5 end of year examinations. The study was limited to only two districts due to time and financial constraints because the researcher did not get much funding except a limited research grant from Kenyatta University.

### **1.7 Assumptions of the Study**

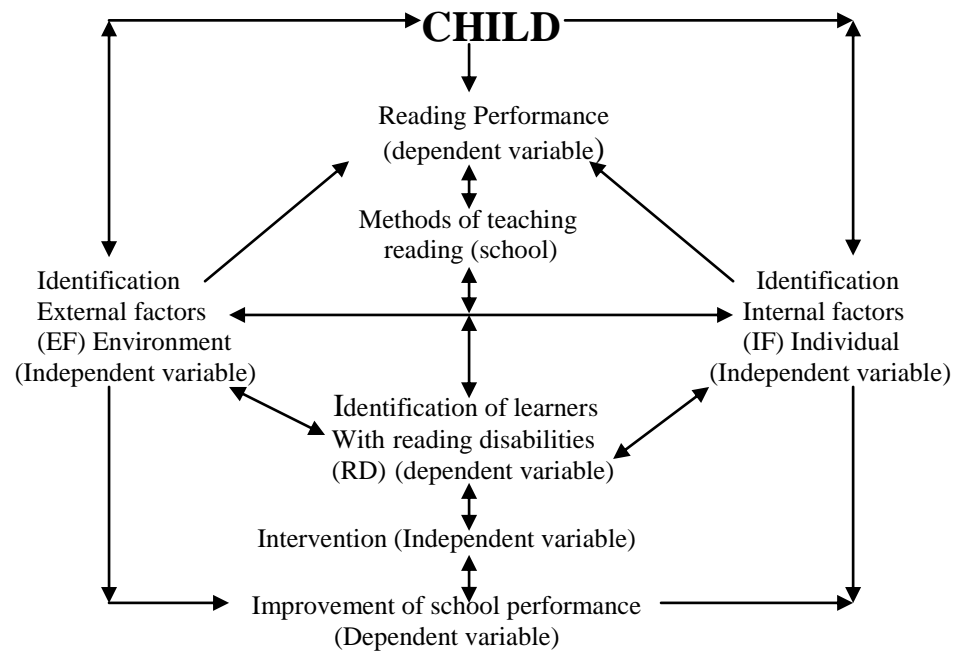
- (i) This study assumed that poor readers are not thoroughly identified and that the pupil's progress is not monitored properly.
- (ii) Teachers have not been fully exposed to several methods of teaching reading and that what is existing is of questionable quality hence students complete their primary education as poor readers.
- (iii) Lack of supplementary materials in school adversely affects the child's reading level.
- (iv) Reading remediation by regular teachers in Kenya has not been highly effective in ameliorating reading disabilities.

### **1.8 Conceptual Framework**

The conceptual framework indicates the child's reading disabilities may result from internal and external factors. The internal factors include: perceptual deficits, language and culture, cognitive and intrinsic motivation. These factors are within the individual child, and if the child's environment is made more conducive, such a child can improve in his/her reading performance. On

the other hand, external factors include: educational, social/economic and lack of extrinsic motivation. Some of these factors may need to be dealt with directly for the child's reading performance to improve.

### Conceptual Framework on Reading Disabilities



Reading Disabilities (RD) can result from Internal Factors (IF) such as Perceptual Deficits (PD), Language and Culture (LC), Cognitive (C) and Intrinsic Motivation (IM). The External Factors (EF) include: Educational (E), Socio-Economic (SE) and Extrinsic Motivation (EM).

*Source: (Author's interpretation from literature review)*

This conceptual framework is based on the social systems perspective developed by Bronfenbrenner (1979) who believed that the ecological contexts or settings in which an individual develops are nested, one inside the

other like a set of Russian dolls. The study uses 4 out of 5 systems of Bronfenbrenner (1979) to explain the independent and dependent variables in the study. He argues that the nested nature of the contexts is decisive in the individual's development as events take place within them. For example, a learner's ability to read and perform well in school may be related to the nature of the relationship between the learners' home in this case, conditions in the home environment and the school and the methods used in teaching such a learner. The individual must have the ability to reciprocate with environment and vice versa. Bronfenbrenner,(1979) uses terms such as ontogenic systems to mean the individual's cognitive, language, social and learning aspects.

In this study, internal factors were based on ontogenic systems, then on microsystem which is the reaction from the relationship of the learner and the teacher (external factors) and the relationship with the learner and the parent-home and relationship with the teacher-school, while the exosystem talks of achievement related to socio-economic status and other factors that may affect reading ability of the learners. The conceptual framework is also strengthened by cognitive and reading developmental theories by Piaget (1983) and Chall (1983) respectively. The study selected these theories because all teachers teaching reading must have full knowledge of each developmental stage in order not to "push" the learner but to give the content materials that are commensurate to the learner's ability.

### **1.9 Theoretical Framework**

The theoretical framework of the study is based on Piaget's (1983) stages of cognitive development and Chall's (1983) reading development stages. Piaget's stages of cognitive development from concrete operational thought to formal operational thought were useful in this study because the learners were already in class 5. The learners in class 5 which was the main focus of this study were between 11 and 12 years and according to Piaget, learners at this stage were assumed to have logical operations that were interrelated and reversible. The learners acquire basic logical ways of reasoning at concrete level where the child can now read, understand and interpret what he/she is reading. According to Piaget's (1983) theory, mental development progresses as a result of learners' interactions with their surroundings. The role of the educator is to provide material and appropriate opportunities in which learners can interact.

The theoretical framework in this study was also based on the stages of reading development given by Chall (1983). According to Chall (1983), there were 6 stages of reading development (0-5). Stage 3, which was the main focus of this study, was for classes 4 to 8, (9 to 14 year olds). This stage is unique in that the child reads for learning, in other words the child uses reading as a tool. While stages 0 – 2, the child learns to read. At this stage, the child learns new information, ideas, attitudes and values. He/she grows in background knowledge, word meaning and cognitive abilities. Reading at this

stage is essentially for facts and the reader typically comprehends from a singular viewpoint.

### **1.10 Operational Definitions of Terms**

**Dyslexia:** Specific and severe reading disabilities which include spelling and writing difficulties.

**Educational Factors:** The environment within the school that affects the child's reading ability. Factors such as teacher's personality, methods of teaching reading, materials available, class size, promotion policy and the curriculum are included.

**Extrinsic Factors:** External factors that promote or hinder the child from learning; problems at the school, such as poor instructional methods and inadequate preparation of teachers.

**Home-based Factors:** The environment at home may contribute negatively to the child's learning through too much pressure from parents and significant others, lack of facilities, poor neighbourhood and any other harsh conditions like domestic violence.

**Intrinsic Factors:** Factors that are within the individual child that inhibit or promote meaningful learning.

**Learning Disabilities:** A basic psychological processing deficit that involves any one or all of the following skills: inability to think, listen, speak, read, write, spell and calculate.

**Phonology:** The study of speech sounds, that includes the study of both phonetics and phonemics. It determines how strings of words are put into sounds and then translated or encoded into symbols or words.

**Physical Factors:** These include auditory, visual difficulties, neurological and motor problems, which affect the child's reading ability.

**Reading Disability:** Refers to all reading difficulties experienced by learners in schools in the process of learning. This was used interchangeably with the terms reading difficulties and problems.

**Social Economic Welfare:** The availability of material things and living conditions of the child in support of his/her education.

**Remediation:** Strategy to teach learners who have learning problems by use of specialized methods to ameliorate the problems.

**Reading Materials:** Materials used by both teachers and learners in a classroom situation.

**Reading Methods/Approaches:** Various methods available for teaching reading.

**Identification:** This is the process of recognizing the learner's strengths and/or weaknesses in reading skills and abilities.

**Non-reader:** This is a poor reader whose scores were less than 50% in word list and/or passage comprehension. This learner is frustrated and is several years below his peer groups in performance.

**Instructional level:** At this level, the learner scores between 50 to 74% in reading wordlist and/or passage comprehension. This learner can be taught how to read from his/her class level.

**Independent level:** At this level, the learner is able to recognize words and comprehend questions correctly scoring 75% and above in any class level. He/she is an independent reader.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.0 Introduction**

In this chapter, relevant literature to the study is presented. The areas of concern are: reading disability, reading process, theoretical framework: stages of teaching development and Piaget's stages of cognitive development, reading readiness, factors causing reading problems, diagnostic assessment of reading, methods of teaching reading and remediating reading.

#### **2.1 Reading and Reading Disabilities**

For a number of decades now, many educators and psychologists have tried to define reading. They are yet to come up with a definition acceptable to all. This is because different experts tend to look at different dimensions of the issue. In this study, reading is an activity which involves the comprehension and interpretation of ideas symbolized by written or printed language (Chapman & Czerniewska, 1978). To Anderson and Lapp (1988), "Reading is a complex process that places demands on the individual's (i) perceptual, (ii) linguistic, (iii) cognitive, and (iv) effective systems" (p.343).

Reading is a verbal process interrelated with thinking and all the other communication abilities such as listening, speaking and writing (Hittleman, 1983). It could be assumed that a child who does not have adequate abilities in thinking, listening, speaking and writing experiences serious reading

difficulties. Learners who have reading disabilities are those said to have failed to read at their ability levels. When learners' performance levels are more than 2 years below their potential or anticipated performance level then, they are considered disabled in reading (Hittleman, 1983). Reading disability is generally defined in relation to the level of general development of the child especially considering the mental development. In this study, any child who was not reading at his/her mental level in more than 1 year was considered as having reading disabilities. The opinion held in the study was that any child who was slower than his or her class level by 2 years would fall in the above category.

## **2.2 Stages of Reading Development**

The theoretical framework in this study was based on the stages of reading development given by Chall (1983). According to Chall (1983), there are 6 stages of reading development (0-5). These stages start with pre-reading (stage 0), birth to 6 years, where the learner grows in his/her control of language both in semantics and syntax. The child increases his/her conceptual knowledge and begins to develop an understanding of the world around him or her. According to Chall (1983), the learner relies on non-visual information and contextual knowledge to begin reading. He/she also begins to develop insights into the nature of words and begins to realize that words are made up of sounds. Stage 0 is followed by stage 1, which may be referred to as initial reading or decoding stage (class 1 to 2 or ages 6 - 7). During this stage, the reader relies heavily on the text and focuses attention on visual information.

The child begins to stare at print (decode) and sounding out words. At this stage, the child attempts to break the code of print, realizes that letters and letter combinations represent sounds, and is aware of vowels and vowel sounds.

Stage 2 known as confirmation of fluency is mainly for standard twos and threes and for learners aged 7 to 8 years. At this stage, the child recognizes patterns of words and reaches a level of automaticity in word recognition. The child acquires orthographic knowledge of words. This stage is of gaining control of reading. Stage 3, which is the main focus of this study, is for classes 4 to 8, (9 to 14 year olds). This stage is unique in that the child reads for learning; in other words, the child uses reading as a tool while in stages 0 – 2, the child learns to read. At this stage, the child learns new information, ideas, attitudes and values. He/she grows in background knowledge, word meaning and cognitive abilities. Reading in this stage is essentially for facts and the reader typically comprehends from a singular viewpoint.

According to Gunning (1996), stage 3 is called reading to learn where learners are expected to refine their reading skills and apply them to obtain information from various types of texts. The researcher's opinion is that a non-reader in standard 4 may still benefit in basic academic skills if given proper remediation and especially if the teacher is aware that standard 4 and above is a crucial stage where learners should read by themselves and use the skill or reading to comprehend other academic skills.

### **2.2.1 Stages of Cognitive Development**

Piaget's stages of cognitive development from concrete operational thought to formal operational thought was useful in this study. The learners in class 5 which was the main focus of this study, were between ages 11 and 12 years and according to Piaget (1983), learners are assumed to have logical operations that are interrelated and reversible. The learners acquire basic logical ways of reasoning at concrete level where the child can now read, understand and interpret what he is reading. According to Piaget's theory, mental development progresses as a result of learners' interactions with their surroundings. The role of the educator is to provide material and opportunities appropriate to learners' stage of development, in which they can interact. Teachers need to determine a child's readiness during teaching reading in order to implement curriculum according to the learners' functional level (Beirne-Smith, Ittenbach & Patton,1998).

According to Lerner (2000), the early stages of reading development are extremely critical to an individual's success in reading. Researches by Torgesen,Wagner & Rashotte (1997), show that learners who get off to a poor start in reading rarely catch up, and poor class 1 readers are likely to continue to be poor readers. Problems with decoding account for about 80% of the variance in class 1 reading comprehension and continue to be a major factor in text comprehension as students' progress through the classes. Kenyan schools do not teach reading very well and most learners lack a firm foundation for reading hence affecting them throughout their lives in school.

In addition, teachers may not be aware of the developmental stages of reading and cognitive and, therefore, could be “pushing” learners who have difficulties in reading beyond their capabilities.

### **2.2.2 Reading Readiness**

For many decades, the question of child’s readiness to read has been explored. At one point, scholars felt that a child’s readiness to read should be determined on the basis of mental age. Researchers have claimed that learners should have attained six and half years before they are instructed in reading (Heilman Blair & Rupley,1981). Downing & Thackray (1975) in attempting to determine which factors in the young child’s circumstances are most related to later reading success, came up with a long list which included general maturity and mental age, among others.

Dreikurs et al. (1998) recorded some studies that claim that the pre-school is to blame for the poor preparation, because the learners do not receive reading readiness and neither are they prepared for reading in class one. Reading readiness is either not taught at all, is taught before the learners are ready, or is taught poorly such that learners start having negative attitude towards reading and learning in general. It is quite interesting that there seems to be a strong belief that the major problems may be due to these issues cited by Dreikurs et al. (1998). Kenyan pre-school programmes may be introducing learners to reading so early that instead of laying a foundation to success in academic skills, it actually destroys the learners academically.

### **2.3 Reading Disability and Dyslexia**

Reading disabilities have been enormous and various experts have proposed several definitions of reading disabilities and dyslexia. Torgesen et al. (1997) state that the last 2 decades have been a productive period in the study and understanding of reading and reading disability. Inability to learn to read has been called “word blindness,” “alexia” or “dyslexia.” These terms denote some serious difficulties that render the individual incapable of learning to read (Kirk, Kliebhan & Lerner, 1978).

Dechant (1982) defines disabled readers as “those whose reading capacity is considerably greater than their reading achievement.... Disabled readers then are readers who ‘should be’ doing better than they are. They exhibit an achievement level that is not explainable by lack of potential”(p.384).

Gough and Turner (1986), Stanovich (1988) and Vellutino (1979) maintain that dyslexia is conventionally defined as difficulty in the ability to identify printed words and letters in learners who have at least normal average intelligence and who are not impaired by general learning difficulties. This study did not consider the dyslexia because most Kenyans and especially regular teachers do not distinguish between reading disabilities and dyslexia or even their similarities.

### **2.3.1 Types of Reading Errors**

Several reading errors have been documented by reading specialists in the past. These include omission where a learner encounters a word or phrase he/she cannot pronounce and skips over it (Shanker & Ekwall 2003). There is also addition of words or letters which occurs when a learner inserts words or letters while reading. Substitution of words is where the learner replaces a word with another one. Substitutions are the most common errors (Shanker & Ekwall 2003). The learner who substitutes one word for another is either a reader who has not developed adequate decoding skills or one with poor fluency skills. Mispronunciations are common among learners who attempt to sound out words without knowing exceptions to phonetic rules. They may also occur in learners who have low levels of listening vocabulary and are unable to use context clues (Mercer & Mercer, 2001). Other reading errors are reversals, repetitions, hesitations, aided words, unobserved punctuation marks and self-corrected errors (Mercer & Mercer, 2001; Leslie & Caldwell, 2006). Others are comprehension errors in which a learner is unable to recall basic facts, inability to give the sequence of a story, read, and to recall the main theme or topic (Mercer & Mercer, 2001).

### **2.3.2 Relationship between Reading and Language**

Both language and reading are communication processes and therefore, closely tied to one another. A child who cannot communicate well because of language disability will also experience problems in reading.

Heilman et al.(1981) state that reading is a language process requiring the understanding of written language and a student's success in school depends to a large extent on how well he/she develops the language facility. This is so because practically much of the learning in school is language dependent. The other communication skills that are language based and which greatly enhance the reading process are: speaking, writing and listening (Heilman et al., 1981). Therefore, a child who experiences problems in reading will experience problems in all these other academic subjects. The researcher feels that skills like speaking, writing and listening should actually be taught thoroughly to young learners as pre requisite for reading skills.

### **2.3.3 Relationship between Reading and Learning Disabilities**

The fields of reading and learning disabilities (LD) are two distinct areas but overlapping with one important factor in common: the disabled reader. The professionals in the field of LD are particularly interested in prevalence and primary causes of reading disabilities in learners. This is well illustrated in the definition arrived at by leading experts in the field, "Learning disability is a genetic term that refers to heterogeneous group of disorders that are manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning and mathematical abilities". (Kirk et al., 2003). This definition does not consider learners who have learning disabilities due to other handicapping conditions, environmental influence or cultural factors. However, about 80% of all learners with learning disabilities experience reading disabilities. It is estimated that among all learners who

have any sort of disability 51% of them have learning disabilities. So far, learning disability is the largest handicapping condition among learners. Yet the definition only considers the causes that are intrinsic to the individual and ignores other causes like poor instruction, poor economic status, and lack of instructional materials, just to mention a few.

Reading on the other hand, seeks pluralistic causes of reading problems and therefore, the study looked beyond learning disabilities causes. This means that poor instruction and lack of facilities, socio-economic factors among others, were considered. Kenyan schools might be having very many learners with learning disabilities because of the various conditions in the country, schools, homes and communities which do affect the learners directly or indirectly, such as malnutrition in children and inappropriate instruction.

#### **2.3.4 Prevalence of Reading Disabilities**

Different researchers have come up with varying estimates for reading disabled learners in different countries. Some reveal that these learners make up between 2% to 30% of the entire school-going population (Ekwall 1976). More recent studies indicate that the prevalence depends on the definition used and the age of the population in consideration. Thus, the lower the class of learners studied, the higher the prevalence because of differing rates of maturation. Such estimates in developed countries have safely given estimates for learners with reading disabilities from class 3 as at 20 to 30% (Berger et al., 1975, Eisenberg, 1978).

Studies by Spreen, Risser & Edgell, (1995) arrived at the estimation that the total prevalence of all forms of dyslexia combined are 20% in the USA and 15.7% in Italy, for those having I.Q. of 80 and above. This issue has not been studied in Kenya, figures are not yet available for the prevalence of reading disabilities and dyslexia.

### **2.3.5 Gender Differences in Reading**

Research data compiled over the past few decades have shown that girls as a group, usually experience less difficulty in learning how to read than boys do as a group. According to Malatesha & Aaron (1982), more male brains are prone to excessive imbalance in information processing strategies than female brains. Their study claims that more boys than girls show reversal errors (e.g. saw for was), though they are superior in spatial ability.

Lerner (2000) observes there are as many girls displaying learning disabilities as boys. The only reason more boys are identified as having more learning disabilities, hence reading is that; males seem to be more vulnerable to learning disabilities due to biological causes and cultural factors (Lerner, 2006). Boys tend to exhibit more disruptive behaviours and they are more troublesome to adults. Also the expectations for success in school may be greater for boys than for girls.

The opinion of this researcher is that the situation in Kenya may even be worse than developed nations like the USA. Boys are only picked as poor

readers because in many families, especially the low income earning families, it may have been decided that boys should go to school, while girls wait for the financial situation to be better. In the meantime, the girl-child who could not get an opportunity to go to school, could not be identified as either a good or a poor reader. On the other hand, Republic of Kenya (1999) National Development Plan (2002 – 2008) has recorded a slightly higher percentage of males who repeated classes in 1999 (13.8% boys and 13.2%` girls). The significance of this difference 0.6% notwithstanding, the Kenyan result shows there are more boys than girls who repeat classes and this may be due to reading problems among the boys.

#### **2.4 Factors which may Cause Reading Problems in Learners**

Reading problems and causes are so many that teachers have to be very careful when dealing with learners with such problems. Ekwall (1976) states that:

rarely will the teacher or clinician find that a single factor has caused a child to be disabled in reading. It is almost always true that a reading disability is the result of several factors working together to impede successful reading progression (Ekwall, 1976:222).

Studies done in Kenya by Arasa (2004) and Abosi (2007) indicate that teachers are aware of the causes of reading disabilities among their learners. Abosi identifies among others, lack of school reforms, poor classroom management and lack of student motivation, as major causes of learning disabilities, where reading disabilities affects 80 percent of the learners. The two studies (Arasa, 2004 and Abosi, 2007) are clear indications of the

magnitude of problems in reading among learners in Kenya and Botswana and probably in Africa as a continent. The question remains, what phenomenon is behind the ever escalating numbers of learners with reading difficulties?

The causes of reading disabilities run from factors such as physical, psychological, cognitive, language, neurological, perceptual, socio-economic, to educational (Ekwall, 1976; Taylor et al., 1995). Even though there may not be a consensus in the etiological factors of reading disabilities, several studies like the one cited above, have dealt with these areas. This study looked at perceptual, phonological, neurological, cognitive, language, motivational, educational and socio-economic factors as the ones likely to affect the reading ability. The study selected these factors because majority of them seem to be covert and the regular teachers are not fully aware of them or their consequences to the child's reading ability. These factors are discussed further in the following subsections.

#### **2.4.1 Perceptual Factors**

In reading disabilities, learners with perceptual difficulties exhibit a variety of problems including reading problems. Some learners do not attend to the relevant dimensions of sense stimuli. Such learners are said to have problems in integrating the environments around them when using visual, auditory, tactile, kinaesthetic, and olfactory senses (Mercer, 1983). In the present study, concern is given to only visual and auditory perceptions because they are

considered to be very important in the acquisition of language and the ability of reading.

#### **2.4.1.1 Visual Perception in Reading Disabilities**

Learners may experience reading problems due to visual perception. This perception involves how letters, words, shapes or symbols are received, interpreted and organized in the brain (Mercer, 1983), for example, seeing a stimuli in relation to space and its surrounding. The learners may also have problems in visual discrimination where they fail to see differences or similarities of a shape, colour, size, position and so on (Lerner, 1981). Such learners may experience serious problems in reading because they may not tell the difference between 'b', 'p', 'd'. Other problems are visual closure where learners may not interpret a figure when it is represented in fragments (Mercer, 1983). For example, a child may not identify a picture of a cat without its ears. Newman, (1969) claims that a "child experiencing reading disabilities will show evidence of eyestrain and will confuse almost similar shaped letters such as o, e, c, or b, h, n. Reading errors consist of confusion of words such as oat, eat, hand, band and hard." (p.51). Other manifestations are where a child is unable to react to words as units. For example, the child will read slowly by spelling out the letters (Newman, 1969). Furthermore, those learners who have mild visual difficulties and are unable to read, may be under conditions of visual stress and fatigue.

#### **2.4.1.2 Auditory Perception in Reading Disabilities**

Learners with auditory perceptual difficulties experience problems in learning to read because they fail to interpret what they hear. They may have difficulties discriminating and associating words or letters. Other problems involve failure to store and retrieve what they have already heard, for example, failing to remember the telephone numbers, letters of the alphabet, numbers and so on (Mercer, 1983).

#### **2.4.2 Phonological Awareness**

Lerner, (1997) shows that the necessary ability for learning to read is the ability to recognize that the words we hear are composed of individual sounds within the word. Some studies state that reading disabilities and dyslexia can be traced to the deficits of phonology. “Phonics is not a programme that teaches the total range of reading skills, but rather teaches a child the skills to ‘attack’ an unfamiliar word. The child is taught the phonetic sounds for the consonants and vowels and how to blend these sounds”(Payne, Polloway, Smith & Payne, 1977). The child who is experiencing problems in phonetics because he/she has not been taught properly or because of his/her inability to learn due to auditory perception, may end up being reading disabled. The impression of this study is that phonological deficits could be a major cause of reading disabilities in Kenyan schools due to lack of fully qualified teachers who can teach phonics effectively and also due to the diversified ethnic groups in the country.

Three main areas of phonological processing have been identified as possible causes of reading disabilities: “phonological coding, phonological awareness, and name coding” (Mossman, 1996 p.262). Several other studies have implicated deficits in phonology as the major cause of reading disability and dyslexia (Howard, 1996; Farmer, 1993; Layton & Deeny, 1996; Torgesen et al., 1997). Snowling & Hulme (1989) claim that the development of various phonological skills depend on the access to the representations of phonological skills. Growing evidence indicates that phonological awareness can be taught and that explicit instruction in phonological awareness can have a significant effect on reading achievement (Gunn, 1996).

### **2.4.3 Neurological Factors**

The inability to read due to neurological problems is intrinsic to the individual. Rupley & Blair (1979) reveal that “neurological deficits can be a contributing cause to learners’ reading difficulties”... (p.49). More emphasis has been put by Bond et al. (1984) who argue that:

among learners who have not yet acquired the ability to read, there are very few who have sustained known brain damage before or after birth. Besides the concern for the child with known brain damage, there has been a great deal of recent concern, research, speculation, opinion and clinical data reported regarding suspected brain damage and reading difficulties. Such terms as developmental dyslexia, primary reading retardation, minimal brain damage, maturational lag and others have been used to refer to suspected brain damage in the absence of medically verifiable brain methodology (Bond et al., 1984:61).

Gaddes (1985), in a comprehensive book of learning disabilities and brain function, states that half of the 15 percent of learners who are underachieving

academically, have some degree of central nervous system dysfunction. A number of learners who are referred to neurologists in Kenya by their parents seem to have problems in reading.

#### **2.4.3.1 Lateral Dominance**

People tend to have a dominant hand, leg, eye and cerebral hemisphere. Such people prefer to use one side of their bodies, which means that, that side usually functions in a superior manner (Taylor et al., 1995). Several researches have been done in this area and yet to this day, the role of lateral dominance in reading disability remains a very controversial issue (Bond et al., 1984; Lerner, 1997).

Kephart (1971) believes that laterality permits the child to recognize the difference between symbols such as a 'b' and a 'd' in reading. Some studies claim that neurological deficits can be a contributing cause to learner's reading difficulties (Rupley & Blair, 1979). Other studies state that there is no clear evidence found supporting a relationship between lateral dominance and reading achievement, including those learners who are beginners in reading (Balow & Balow 1967., Goodglass & Barton 1963., Hillerich 1964., Tinker 1965., Bond et al., 1984., Taylor et al., 1995 & Lerner 1997).

#### **2.4.4 Cognitive and Language Factors**

Learners with slow cognitive development due to one reason or the other are bound to have problems in language hence reading problems. Heilman et al.

(1981) state that reading is part of any language. Student's success in school depends to a large measure on how well they develop language ability (Heilman et al., 1981). Other studies state that even though reading achievement is related to intelligence, intellectual development alone does not determine how well a child will or should read (Beldin 1976; Kirk & Elkins 1975; Sewell & Severson 1975).

These studies agree that both cognitive and language deficits may result and are normally influenced by other factors. Therefore educators must be careful in their conclusions because the relationship between intelligence and reading achievement must never be used to set any limit on how much or what a child can learn.

Looking at the relationship between language and reading, Dechant (1982) reveals that inadequate language development is a common cause of poor reading and that reading must be regarded as a language-related process. This is further supported by Pearson (1978) who says that it is a serious educational shortcoming when diagnosticians fail to look at reading failure in the context of language. This is also supported by Taylor et al. (1995) who asserts that a child who comes to school speaking another language rather than the language used in the school may have problems in reading. An example is given of a study on non Standard English by Afro Americans in 1960s and early 1970s where their dialect was different from the spoken Standard English in schools. Some educators wrote special books for readers who spoke non Standard

English to start reading from there and move the child more gradually to standard English (Taylor et al., 1995).

Kenya, has many ethnic groups with different languages and dialects in a cosmopolitan area like Nairobi a number of learners go to school having learnt Kiswahili on top of mother tongue. Immediately they get to school, English language is introduced, disregarding the languages the child speaks. Some of these learners may be having normal or above normal intelligence, but the lack of a gradual transition from mother tongue to English discourages them. May be if they were taught reading in the language they speak better, such learners may not experience a high magnitude of reading difficulties.

#### **2.4.5 Intrinsic Motivation**

Normally, in an ideal classroom, students pay attention, ask questions, do assignments without complaining and show an atmosphere of wanting to learn. But teachers hardly teach in an ideal world, instead more often than not they have some students who are not motivated (Eggen & Kauchak, 1997).

Learners with reading disabilities often feel lost, frightened and frustrated. Because of consistent failure, they may not feel driven to try more. A student of this nature is not intrinsically motivated. She may not view her studying as enjoyable or worthwhile in itself. (Eggen & Kauchak, 1997).

Maslow (1968, 1970) states that people are constantly striving to satisfy needs and when one need is satisfied, they turn to another. In the same, we assume that when a child reads well in a given paragraph, she would want to continue. Likewise if the child gets 70% to 100% in her comprehension, she would want to try harder to retain the mark or do better. Unfortunately, this always does not happen. Smith, (1983) reveals that the best form of motivation comes from within the child. Yet learners with learning problems find it safer to expect little, by doing nothing, and be helpless. (Dweck, 1975).

Taylor et al. (1995) note that teachers can help learners who have developed feelings of helplessness by redirecting the learner's attention to factors over which the learners have some control over. This will in turn trigger the learner's intrinsic motivation to move on or apply more efforts. This is explained further by Goldsterni (1934) who says that psychological motives in a child are paramount. That self-esteem, self-realization, curiosity, security, a need to be adequate and successful, a desire to belong are all motives that energize learner's behaviour. He also adds that learners will learn more readily and retain information when they want to learn. However, all these motives may not fall in place if the home and school environment are not conducive.

A study on effects of parental involvement in intervention and peer tutoring of their learners by Fantuzz, Davis & Ginsburg (1995) shows that learners who are given conducive conditions perceived themselves as more socially confident and adjusted more positively in school. Another study on intrinsic

motivation and the process of learning by Cordova & Lepper (1996) reveals that when teachers present new material in a very abstract or decontextualized form, they tend to create a very different setting from what the learners already know. In this, teachers risk undermining learner's intrinsic motivation for learning. Stoodt (1981:66) suggests that:

teachers can create opportunities for learners to experience success by selecting materials that interest them and that are in line with student level of ability. Learners who associate pleasure and success with reading will be motivated to read.

#### **2.4.6 Extrinsic Motivation**

Extrinsic motivation is triggered by interesting situations both at home and school including materials and activities the learners are involved in. According to Eggen & Kauchak (1997), a student with extrinsic motivation may study hard for a test because he/she believes studying may lead him/her to getting good marks or good compliments from the teacher. Such a student will also get a good position in his/her class. Parents of such a student may also give rewards and compliments to their child. Other factors that influence students' extrinsic motivation are when parents make the right choice for a school for their children. Wells (1990) reveals that when parents are empowered to avoid schools that are perceived as "low quality," the academic performance of their children turns up positive.

Also when parents have selected schools with resources that meet their learners' needs, the academic performances tend to be better. According to Bempechat (1990), there is extensive research suggesting that parental

involvement in the academic activities of their children do motivate them in terms of academic achievement. A good relationship between the home of the child and the school has been cited as contributing to the child's motivation. (Shumow, Vandell & Kang, 1996). Child-rearing practices have also been cited in relation to academic achievement. Studies by Baumrind (1989) and Clark (1983) reveal that parents who are firm but also responsive to their learners tend to have learners with fewer behaviour problems, better social adjustment and more academic success.

They further write that those parents, who are firm, establish reasonable rules, set reasonable standards and also explain reasons for their behaviour towards the children as well as meeting their learning needs. The learners in such homes would be termed as extrinsically motivated. Lerner (1997) states that extrinsic motivation can be enhanced by both parents and teachers by allowing the child to succeed and by rewarding the child. The study believes that to maintain motivation, teachers must make all learning enjoyable and pleasurable to pupils in order to ensure success throughout the learning period. Parents, on the other hand, must learn to encourage rather than push their learners to learn.

#### **2.4.7 Socio-Economic Factors**

For any child to be successful in reading, he/she must be supported by the family. Parents contribute much to the child's language, emotional and physical development. Stoodt (1981) reveals that; "parents who spend time

talking with their learners are encouraging language development. Love, patience and understanding foster a sense of security that is the groundwork upon which successful learning can occur” (p.39). A study by Peck and Stackhouse (1973) on problems and successful readers found that problem-readers’ families and home environments are characterized by an atmosphere of closed communication which inhibit the child’s ability to learn.

Learners who come from backgrounds where they are read to frequently and where they are engaged in parent-child conversations about books seem to do better in Kindergarten and first grade than do other learners. These learners seem to acquire a type of print awareness that gives them a sense of what literacy is all about and allows them to contextualize the types of literacy activities that they generally encounter in first grade. (Taylor et al.,1995: 47).

Further, Callaway, Jerrolds, & Gwaltney (1974) found that those students who rated highest in reading and language achievements come from homes with the most extensive accounts of reading materials. Another study by O’Connor & Spreen (1988) states that learners with learning disabilities (where reading is a major concern) who come from wealthy families tend to complete more schooling than individuals with learning disabilities who come from less advantaged families. The study by Arasa (2004) indicates that many learners from the slums fail to acquire literacy, numeracy and life skills that are a foundation for learning throughout life.

On the other hand, learners from wealthy families receive continuous and consistent support from parents and family when it is needed, even up to adulthood (Smith & Luckasson, 1995). Shea & Bauer (1994) claim that socio-

economic status may serve as a gatekeeper for capable students. High achieving students who attend disadvantaged schools tend to be isolated and they may be limited by programmes aimed at their less capable peers; consequently, the teachers do not recognize the potential in such students. Moreover, a study from South Africa by Engelbrecht, Kriegler & Booysen, (1996) reveals that:

The school success of a child from an intact family of middle-class background is enhanced by adults who help their learners understand and interpret classroom events by introducing them to school-like experiences during their pre-school years. Those learners from disadvantaged socio-economic backgrounds also face general linguistic deprivation. There is frequently lack of books, magazines and newspapers, radio and television in the home. Engelbrecht et.al., (1996:3)

Another factor is given by Stoodt (1981) who says that learners from a low socio-economic status background do perform much more poorly in reading competence than learners coming from higher socio-economic backgrounds. This is confirmed by Bowey (1995) who reveals that there is available evidence showing that learners from higher socio-economic status families show more sensitivity to phonological structures than those from low socio-economic homes.

Learners from low economic welfare are low in motivation and conceptual background and, subsequently, high in language deficiencies. The socio-economic background may affect the learners as early as before birth. Low socio-economic status may mean poor nutrition and poor health upkeep for an expectant mother who in turn will make the child vulnerable. According to

Macmillan (1982), “social factors can affect the physical development of the child prior to birth. A mother from an impoverished home may have had poorer nutrition as her reproductive system matured, poorer nutrition during her pregnancy, and little or no medical attention during the pregnancy” (p.88). The researcher's opinion is that many learners in Kenya could be poor readers due to low socio-economic welfare where even one full-balanced meal may be difficult to get. This may mean that those learners’ normal development was affected. Low socio-economic level may also mean that there is no extra money to pay for reading books and materials. In addition, quite a big number of families in Kenya live below poverty line and their first priority may be to look for daily food by seeking semi or non-skilled jobs. The issue of school and reading materials for their children becomes a secondary thing in life.

#### **2.4.8 Educational Factors**

There are various factors that do interfere with learners’ reading achievement and the majority of these factors could easily be avoided or minimized. These factors range from classroom facilities, methods, curriculum, and even attitudes of teachers.

Among all factors that are considered possible causes of reading disability, the group of conditions classed as educational stands are tremendously important. In the vast majority of reading disability cases, careful diagnosis reveals that there is faulty learning or lack of educational adjustment in the student’s instructional programme. (Bond et al., 1984:89).

## 2.5 Effective Teacher Training on Methods of Reading

Best methods and the best material may not work without an effective teacher.

It is therefore important to look at the teacher training component and how it affects teaching of reading.

Effective reading teachers employ ongoing diagnosis of a pupil's reading development, structure and direct the pupil's learning, provide opportunities for the pupil to practise and apply skills in meaningful context, and attend to maintaining a high level of pupil involvement in learning" (Heilman et al., 1985:16).

When talking of organizations of instruction, Bickel & Bickel (1986) posit that:

decisions about the use of time, the pace of instruction, the way the curriculum is structured and delivered, the way students progress through the curriculum, and the way students are grouped for instruction can directly affect basic skill outcome (p.493).

For the above to take place, there must be effective teacher training and in-service programmes in reading. Wheelock (1995), in a study for empowering teachers and learners, states that reforms in teaching and learning do not come about by accident, they happen only because professional educators combine thoughtful programme development with hard work in a way that is powerful enough to change even the most entrenched classroom practice and bureaucratic habits. She further says that improved learning depends on teachers who are knowledgeable about academic content and are able to employ a variety of teaching methodologies to help all students master that content. According to Newmann & Wehlage (1993), authentic instruction should meet the standards of the following: 5 areas; higher-order thinking,

depth of knowledge, connectedness to the world, substantive conversation and social support for the student achievement.

Stoodt, (1981) gives the following characteristics and qualities of an effective reading teacher: one who shows confidence in her ability to organize successful classroom programmes; one who respects the pupils as individuals; one who plans well, having students pace and ability in mind; one who recognizes that both teaching and learning are creative processes; one who is ready to accommodate changes in teaching methods and plans and finally one who keeps in mind that enthusiasm is an essential quality of effective reading achievement and teaching performance (Stoodt, 1981). A reading teacher should have a variety of reading methods and should know how to deliver them to different learners functioning at different levels.

## **2.6 Diagnostic Assessment in Reading**

Most teachers have a misconception about the nature of psychological and reading tests. To many, testing is an unnecessary waste of valuable teaching time. However, others find testing essential to effective teaching but with reservations. These reservations may arise from lack of information on tests, lack of training and the limitation in the use of tests (Chapman & Czerniewska, 1978). A reading test is a means of obtaining information that helps teachers, school inspectors, psychologists, administrators, parents and pupils to answer questions and make decisions more adequately concerning the learner's progress or difficulties.

According to Salvia & Ysseldyke, (2007), reading is a complex behaviour comprising a number of skills. This means that no one diagnostic reading test is capable of assessing all the factors of reading in their entirety. Each reading test gives the characteristic of what the study is looking for in a particular test. The current practice in USA involves identifying learners with reading disabilities who demonstrate a significant discrepancy between expected achievement and actual achievement levels (Glaud, 1992). The assessment of each child should show the child's current ability and the trends of strengths and weaknesses (Mercer, 1983). After the assessment, the teachers can determine the remedial programme best suited to correcting or improving the disability (Kirk et al., 1997). General reading diagnosis helps the teachers in comparing each pupil's progress in reading with the pupil's levels of progress in non-reading academic areas (Bond et al., 1984).

Specific diagnosis separates the reading act into some more precise skills and abilities. It shows whether the child's difficulty is in a specific type of comprehension, in word recognition techniques, in reading efficiency, in oral reading or in basic study skills (p.116).

Learners with reading disability experience problems in:

- (i) Faulty word identification and recognition for example failure to use context and other means of clues.
- (ii) Inappropriate directional habits for example orientational confusion with words.
- (iii) Deficiencies in basic comprehension abilities, for example, limited meaning vocabulary.

- (iv) Limited special comprehension ability for example, inability to isolate and retain factual information.
- (v) Deficiency in basic study skills e.g. inability to use aids in locating materials to be read.
- (vi) Deficiency in adapting to reading needs of content fields, for example, insufficient concept development.
- (vii) Deficiency in rate comprehension for example inability to adjust the rate and lack of phrasing.
- (viii) Poor oral reading.
- (ix) These specific assessment-reading difficulties were suggested by Bond et al. (1984). The same skills have been adapted by Gearheart (1985).

### **2.6.1 Methods for Assessing Reading**

In addition to indicating the learner's current reading ability, assessment can point to specific strengths and weakness and help the teacher in planning instructional objectives. Two types of assessment that a regular classroom teacher or a reading specialists can use are formal and informal assessment. While the formal assessment tools may not be readily available in Kenya, informal assessment tools can be developed by the classroom teacher. These are described as follows:

- (i) Curriculum-based assessment uses a direct observation and recording of a learner's performance in the school curriculum as a basis for determining learner's instructional needs by directly

assessing specific curriculum skills and arriving at what to teach (Choate, Enright, Miller, Poteet & Rakes, 1992).

- (ii) Portfolio assessment consists of a collection of materials that reflect a particular learner's personal reading history and accomplishments as a reader (Mercer & Mercer, 2001). This type of assessment which is more or less like learner's progress reports provides information for further assessment as well as self assessment by the learner (Tompkins, 2004).
- (iii) Reading miscue analysis is a method of analyzing the learner's oral reading strategies and its more concerned with the type of reading errors such as substitution (Mercer & Mercer, 2001).
- (iv) Cloze procedure or fill in-the-blank statement can also be used to measure reading level and comprehension informally (Tompkins, 2004). It allows the teacher to estimate the difficulty the learner will have with a specific reading material and therefore, helps the teacher to determine whether a book is of appropriate level or not (Mercer & Mercer, 2001).
- (v) Observation is an important component in the overall assessment of the learner. It confirms the classroom curriculum and also yields important assessment information about the learner's functioning with the curriculum. Direct observation can be used to give more information on instructional time, methods, and evaluation procedures (Choate et al., 1995). According to Lipson & Wixson (1997), observation in the hands of an experienced evaluator is one

of the most powerful assessment tools a teacher can possess; that information is about every component of teaching and writing can be collected by use of observation.

## **2.7 Methods of Teaching Reading**

Some methods of teaching reading have been in place for many decades and they are still in use in our schools today. The study highlights only a few, which are commonly used. These are:

- i) The alphabetic method
- ii) Phonics method
- iii) Whole word method.

These methods are discussed below.

### **2.7.1 The Alphabetic Method**

This method has been in use for more than 500 years up to early 20<sup>th</sup> century in developed countries like USA (Beard, 1987). With this method, learners are taught to read by saying the names of the letters through which they learn to recognize and pronounce words (for example “em-ee-en). According to Beard (1987), the alphabetic method overlaps with phonics in that the consonant letter names contain a phoneme with which they are commonly associated b,c,d,f,g,j,k,l,m,n,p,r,s,t,v,x,y, and z. The vowels also have names which contain “long” phonemes with which they are often associated; ae, ee, ie, oe, ue. This method is still in use in the Kenyan schools but to what extent

the method may be in use and how well it is used is not known. This study intended to find out the effective use of this method.

### **2.7.2 The Phonics Method**

The phonics method has been in use since the middle of the 19<sup>th</sup> century (Beard, 1987). Phonics instruction consists of teaching letter sound relationships. Learners are taught these techniques so that they are able to identify words that they do not recognize in print.

Teaching learners phonics has three major purposes. These are:

- (i) To teach the new reader that printed letters and letter combinations represent speech sounds, which are heard in words. It also teaches the beginning reader that speech sounds heard in words are quite different from “cat” in the sentence “the cat ran after the mice.”
- (ii) To teach the child to blend the sounds represented by the printed letters when he/she meets a word he/she does not recognize. According to Heilman et al. (1981) blending the sounds is an essential part of phonics instruction.
- (iii) To teach the child to use all available cue systems in combination with letter sound relationships, to identify words and comprehend written text. In teaching phonics, word meanings and comprehension should be given proper attention.

Phonics is one of the methods that have been used in the Kenyan schools where in some cases it is introduced at pre-school level. This in itself could be causing much damage to learners because not all words written in English can be read through phonics. A study by Maneno (2008) on identification processes of articulation and phonemic disorders in children with communication disorders in Nairobi found that most teachers did not have phonological skills needed to effectively handle children with phonemic problems. The study also found that children with learning disabilities who had phonological problems were labelled slow learners and could not get any assistance from their class teachers.

### **2.7.3 Whole Word Method**

This method is also known as sight method. The advocates of this method expect that learners will be able to identify words on sight without first having to go through conscious letter – by – letter analysis. It is also referred to as “look and say” because learners are expected to say (identify) a word as soon as they look at it. According to Durkin (1983), whole word methodology is simply a matter of naming words and is used frequently by teachers and non-teachers. Students establish automatic stimulus – response patterns for dozens of frequently used words such as: that, with, be, are, and, was, it, the, in, to, than, they, you, said, when, extra. Durkin (1983), further observes that these words must be “over learned” to the point where recognizing words is automatic and as whole words.

Learners who have reading difficulties may have problems with sight words (whole word) because many of them may have learnt to use phonics. This may be a major problem in Kenya in that most learners are taught to read through phonics, and a number of teachers do not know how to teach phonics effectively. According to Lerner (2000), for a student to read fluently, he or she must recognize words instantly, without hesitation or further analysis.

## **2.8 Remediation of Reading Disabilities**

Bond et al. (1984) states that:

The diagnostician or reading teacher studies the diagnostic findings and then arranges learning conditions in which the disabled reader can grow at an accelerated rate... it is necessary to identify the specific limitations in the disabled reader's reading profile that are impeding reading growth. (Bond et al.,1984:151).

There is no doubt that once a specific problem has been identified by the teacher and the child, it is tutored or remediated then the child should make some improvements in reading. Studies have shown that readers can achieve at least grade-level reading skills if they are given intensive intervention to correct their reading deficiencies. (Clay, 1985; Iversen & Turner, 1993; Pinnel, 1989, Wasik & Slavin, 1993). A study on migrant students who were given special teaching showed a great improvement. "The age group 7 years 6 months to 7 years 11 months showed an increase of 292%. The 8 years 5 months age groups increased by 860.%" (Hillman, 1990:109).

A child who has continually failed in reading despite the teachers' use of all the classroom methods they know, should be remediated before the problem becomes too severe. Remediation is based upon sound instructional principles focused upon the needs of the learners on the basis of careful diagnosis (Wilson et al., 1972). Proper remediation calls for skilful teaching of the learners who are in need. Remediation falls into the following three categories (Wilson et al., 1972).

**On-the-spot remediation.** This type of remediation is conducted immediately. The teacher is expected to directly observe the learners while teaching, pinpoint the errors the learners could be making and correct them immediately through instruction.

**Classroom remediation.** This requires the child to be observed in class and helped individually. The teacher is expected to adjust the instruction to the child based on the diagnosis and the child's established problem. The instruction is more formal and more less directed by the teacher and may be with the help of special education expert.

**Clinical remediation** - involves either working with the child outside the classroom environment for a period of time or working with the child in the classroom permitting the teacher to observe clinical techniques. Clinical remediation assumes small group or individualized instruction and mostly conducted by special education specialists.

At this point and time, a majority of Kenyan schools have not been helped able to conduct effective remedial programmes because the vast majority of the regular teachers are not specially trained. This actually may mean that learners who could have been helped at an early stage of reading difficulties, go unnoticed until they fall off the system.

### **2.8.1 Summary on Reading Disabilities**

The review of related literature suggests that reading skills and reading development have a great impact on the child's schoolwork and his/her subsequent entire life after school. However, many learners have severe reading disabilities even with normal cognitive development. Some of the problems learners encounter in schools are either within them or as external factors. Teachers on the other hand may not be accountable for learners' failure to read. This may be in terms of methods of teaching, assessment and remediation.

## **2.9 Research Hypotheses**

**H<sub>01</sub>** There was no significant difference between reading ability and the nature of lighting system at home among respondents from Nyeri and Nairobi districts.

**H<sub>02</sub>** There was no significant relationship between availability of the reading table at home and learner's reading ability in Nyeri and Nairobi districts

- H<sub>03</sub>** There was no significant relationship between learners' reading ability and the preferred language of communication at home and school in Nyeri and Nairobi districts.
- H<sub>04</sub>** There was no significant relationship between the learner's reading ability and the school of study and its category.
- H<sub>05</sub>** There was no significant relationship between learners' attitude Towards reading and reading abilities in Nyeri and Nairobi districts.
- H<sub>06</sub>** There was no significant relationship between teachers' ability to identify specific reading errors and learners' actual performance on omitted, substituted, mispronounced and added words in Nyeri and Nairobi districts.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

The chapter describes the methods that were employed in the achievement of research objectives. It covers research design, variables, location of the study, target population, sampling techniques and sample size, research instruments, data collection techniques and data analysis. Research instruments were piloted to determine their validity and reliability. Finally, ethical considerations were also taken into account in the study.

#### **3.1 Research Design**

This study adopted both qualitative and quantitative research approaches. This mixed methods design, presents procedures for collecting, analyzing and linking both quantitative and qualitative data in a single study (Creswell, 2005). The combination of both forms of data provides a better understanding of the variables under study concerned with finding out:

1. The causes of reading disabilities in learners.
2. Teachers' knowledge of identifying learners with reading disabilities.
3. The existing methods/approaches used in teaching reading.
4. Whether teachers carry out any intervention strategies with learners who have reading disabilities.
5. Whether there was any gender difference in learners with reading disabilities.

### **3.1.1 Study Variables**

Variables are key ideas that researchers seek to collect information to address the purpose of their studies (Creswell, 2005). Mugenda & Mugenda (2003) describe different classifications of variables such as dependent, independent, intervening confounding and antecedent. This study considered the dependent and independent variables.

#### **3.1.1.1 Independent Variables**

An independent variable is an attribute or characteristic that influences or affects an outcome or dependent variable (Creswell, 2005). In this study independent variables include causes affecting reading abilities which are lighting system (electricity), reading table, language spoken at home and school, category of school and attitude of learners. Other variables included methods of teaching and assessing reading, remediating reading and challenges faced by teachers.

#### **3.1.1.2 Dependent Variables**

A dependent variable is an attribute or characteristic that is dependent on or influenced by the independent variable (Creswell, 2005). In this study, the dependent variable was on improving reading abilities for learners, and teacher effectiveness in assessing and teaching reading.

### **3.2 Location of the Study**

The study was conducted in two districts, namely, Nairobi and Nyeri. Nairobi being a cosmopolitan province has different peoples, who have immigrated from all over the country or from other countries searching for jobs and better lives. All racial and ethnic groups and all social economic classes are found in Nairobi as capital city of Kenya. The characteristics of learners might be different from those in rural areas due to the nature of the city multi-ethnic languages. Also, the languages of instruction in Nairobi are Kiswahili and English as opposed to rural areas where the language of the catchment area is used as language of instruction (LOI). From Nairobi 2 divisions were selected: Dagoretti division was selected to represent low performing grades as per 2006 KCPE examination grades, and Westlands Division to represent schools with higher performing class. Another reason for selecting Nairobi and Nyeri schools was because of availability of electricity as a lighting system at home. It would be interesting to find out whether availability of reading tables play a role in both places.

Nyeri, on the other hand, has representation of rural schools because the medium of instruction is mother tongue (Kikuyu). In Nyeri, the 2 divisions that were selected included Nyeri Municipality and Othaya. The rural districts use mother-tongue as a medium of instruction and yet they sit for the same national examinations with other learners in Nairobi and in other cosmopolitan regions.

### **3.3 Target Population**

According to Creswell (2005), a target population is a group of individuals or a group of organizations with some common definitive characteristics that a researcher can identify to study. The target population of this study comprised 2,413 teachers, 103,569 learners from 232 schools in Nyeri, while those from Nairobi were 4,231 teachers, 196,059 learners from 193 schools. All the classes 5 learners from Nyeri were 17,383 in 2006 while those in Nairobi were 26,025 learners.

The teachers who taught English in class 5 and those that were class 5 teachers were included in the study. The 2 types of teachers were expected to know individual learner's reading abilities because of their level of interaction at the one-to-one learner-teacher ratio. The study also constituted all class 5 learners in the sample schools in Nyeri and Nairobi.

### **3.4 Sample and Sampling Techniques**

This section represents the sampling techniques used by the researcher in determining the size of the sample on which the study was carried out.

#### **3.4.1 Sampling Techniques**

Sampling is the procedure a researcher uses to identify and gather people, places or things to study (Kombo & Tromp, 2006). In this study, several sampling techniques were used to arrive at the study sample. The techniques used included; purposive, convenient and stratified random sampling.

Purposive because the sample for teachers contained 16 teachers of English for class 5 and 18 class 5 teachers. Convenient because the choices of the districts Nyeri and Nairobi were that Nairobi represented a metropolitan status and being near Kenyatta University was easy to reach and Nyeri being the district from where the researcher comes from was easy to access. Stratified random because only students who scored less than 250 marks in end of term examinations for class 5 were chosen as a homogeneous sub-group.

#### **(i) Divisions and Schools in the Study**

Purposive and convenient sampling techniques were used respectively to arrive at the 4 divisions and the 16 schools for the study. Purposive sampling that was used by the researcher to select the divisions, involved selecting the samples using set criteria. In this case, the KCPE results analysis of 2006 were used to select the division that performed the best (Westlands) and the poorest performing division (Dagoretti) in Nairobi. Nairobi best performing schools from Westlands division were: Highridge, Hospital Hill, Kilimani and Milimani. Schools with low order of merit were Jamhuri, Joseph Kangethe, Ndururu, and Toi selected from Dagoretti division.

Two divisions in Nyeri were purposively selected with Nyeri municipality representing urban-rural and Othaya representing rural population. The schools from Nyeri Municipality were: DEB Muslim, Kamuyu, Nyamachaki and Temple Road. Those from Othaya were Gitundu, Munaini, Ruruguti and Thunguri.

Schools in the 4 divisions were conveniently selected due to the time and financial constraints. Orodho (2005) defines convenient sampling as selecting the population elements or samples based on ease of access. In this study, the majority of 16 schools sampled were easily accessible due to their distances from each other with only a few that required many hours of travelling to reach them.

#### **(ii) Teachers in the Study**

Purposive sampling technique was used to select teachers who taught English to the learners in the study in 2006. The class 5 teachers were also selected for the study if they were not the same as the teachers of English. These 2 groups were better placed to know their learners' reading difficulties because of having more contact hours with learners and or dealing with learners' progress records.

The teachers were briefed on research exercise that was to take place in their schools and what they were expected to do, for example, to fill in questionnaires on teaching of reading and individual learner's reading error checklist.. They were also asked to provide the progress records of class 5 for year 2006, to be used as a tool for selecting learners in the study. Teachers were informed that only those learners that had an overall score of 250 and below out of a score of 500 were required for the study.

**(iii) Learners**

Stratified random sampling and simple random sampling were used to arrive at the sample for learners in the study. Stratified random sampling involves dividing the study population into homogeneous sub-groups and then taking simple random sample in each sub-group (Kombo & Tromp, 2006).

In this study, class 5 learners who had scored 250 marks and below out of the total 500 marks in primary school subjects were stratified as a sub-group with certain homogeneity due to their poor performance. This is a group which probably is condemned by teachers and the prediction of their school performance including in KCPE examinations is more negative than positive. Simple random sampling was used to select learners in this lowly scoring group. The reason for selecting the learners who scored 250 or less marks in the end of year (2006) results were as follows:

- (i) The learners had completed 5 academic years in the primary school and probably a few years in pre-school including a pre-unit class. Even though not all learners have gone through pre-school, education, at least they had had an opportunity to be in pre-unit class and classes 1 to 5.
- (ii) According to Chall (1983) and Gunning (1996), all school going children become proficient with the basic decoding and word recognition skills and begin to read longer, more complex sentences by the end of class three. From class 4, the learners use reading as a tool to learn. They are proficient and fluent in reading

and are expected to score high marks in comprehension; hence, the reason for picking standard 5 because the learners should be reading textbooks by the end of standard 4.

- (iii) The learners scoring 250 marks and below out of 500 marks are barely of average performance, in standard 5. Majority of dropouts and repeaters will mostly come from this group of learners because of repeated failure and helplessness syndrome developing in them. Some of them may be two or more years behind their age mates and the gaps continue to widen if no help is given to such failing learners.
- (iv) The reading difficulties could have started in the early years and probably such problems could have been eliminated if the teachers considered the individual needs and interests. If the teachers knew how to identify reading difficulties, taught children using appropriate methods and remediate the problems, maybe there would be a smaller number of learners unable to read.
- (v) Class five teachers could still teach reading skills to learners with reading difficulties and make arrangements for intervention measures. Instead, most teachers feel that this is not their work and they keep the learners unattended to until they fail in examinations, getting very few marks such that they cannot continue with education. Some learners who are dropped by the education system end up not even acquiring functional academics like use of money,

running small businesses for economic gain or even learning basic words used in daily life.

- (vi) Even though the learners are failing to read at class level, teaching of reading skills is one of syllabus contents in lower and upper primary classes referred to as teaching of reading skills. The 2 methods (look and say and phonic) elaborated in the Kenya primary teacher education syllabus (2004) ought to be equipping the teachers with methods of teaching reading. If this were done, many learners would not be coming out of school as non-readers.

### 3.4.2 Sample Size

The sample for the study comprised 240 class 5 learners and 34 teachers (16 teachers of English and 18 class teachers) in 16 schools, 8 from Nairobi and 8 from Nyeri districts. This is shown in figure 3.1 below

**Table 3.1: Sample size**

District	Division	Primary School	Teacher of English	Class Teacher	No. of Children scoring 250 marks and below in a school
Nairobi	Westlands	Hospital Hill	1	-	15
		Highridge	1	1	15
		Kilimani	1	1	15
		Milimani	1	-	15
	Dagoretti	Toi	1	-	15
		Joseph Kang'ethe	1	2	15
		Jamhuri	1	2	15
		Ndurarua	1	3	15
Nyeri	Municipality	DEB-Muslim	1	1	15
		Temple Road	1	1	15
		Nyamachaki	1	4	15
		Kamuyu	1	-	15
	Othaya	Munainani	1	1	15
		Thunguri	1	1	15
		Gitundu	1	-	15
		Ruruguti	1	1	15
Total: 2	4	16	16	18	240

Nairobi was chosen because of its urban setup where it was felt it is a representative of an area where most of the factors like language spoken at home and school would be similar in many schools. It was felt that it would give a proper sample of the reading situation in Kenya's urban areas. Nyeri, on the other hand, represented a rural setup where most of the factors like mother-tongue would play a significant role on learning of reading skills. The schools chosen were representative of poor and good KCPE performing schools as per KCPE 2006 analysis. It is important to note that learners were randomly selected from a population of low scoring students, 250 marks and below, in their end of third term examination results of 2006. Fifteen pupils were then selected randomly from the class of those who scored below 250 if those scoring 250 and below were more than 15. Nairobi had a total of 120 pupils of which 58 were boys and 62 girls while Nyeri on the other hand, had 78 boys and 42 girls selected in the study sample. The reason why the sample size of boys and girls were not equal in the study is because the researcher used a random sampling of all the children scoring 250 and below from the provided progress reports.

### **3.5 Research Instruments**

The instruments consisted of 34 Teacher questionnaires, 240 checklist on reading errors, 240 learners' instruments reading attitude survey, 240 wordlist and 240 levels 1-4 reading passages. These are discussed below.

### **3.5.1 Teachers' Questionnaires**

#### **(a) Instrument I: questionnaire for teachers on identification of learners with reading disabilities**

These questionnaires were filled by the 16 teachers who had taught English to the learners of class 5 and the 18 class teachers of class 5 in the year 2006. The questionnaires comprised 31 items which were divided into 3 sections. (Appendix A)

Section A comprised directory information where the teachers were to indicate age bracket, gender, name of school, professional grade, year of graduation from college, area of specialization and teaching experience in lower, middle and upper primary. Finally, they were asked to give total number of pupils in their class and their totals by gender.

Section B comprised information on teaching of reading. Teachers were asked to indicate number of non-readers by gender, the methods they used in assessing learners with reading difficulties, the difficulties they encountered in teaching and assessing reading, strategies used to help poor readers, the rating of additional help obtained, and methods used frequently to teach reading. They were also asked to indicate reference materials used in teaching reading.

Section C asked the teachers to give information about the learners they taught reading. The information comprised characteristics of learners with reading difficulties, characteristics of good readers, causes of reading difficulties,

impact of reading difficulties on other subjects, school policy on reading, remediation strategies used in the past and suggestions on how to improve reading among class 5 pupils. Teachers were also asked to talk about reading problems in their schools in a focus-group discussion. The focus group discussion was conducted using some of the questions in the questionnaire which required more elaboration. A tape recorder was used to record the responses.

**(b) Instrument II: checklist on reading errors**

Teachers filled details about learners in a checklist (Appendix B) entitled “checklist on reading errors” which had 3 sections: first section had the learner’s personal details: learner’s name, class, school, division, district, age, gender, father and mother’s names, and occupations.

Second section comprised 4 items giving details of the checklist on reading errors commonly used to identify learners with reading difficulties. The teachers were expected to fill in a 5 point likert classification rating scale, ranging from 1 to 5, with 1 being not at all, 2 less frequent, 3 average, 4 more frequent, and 5 most frequent. They were also to classify the learners in the study using the 4 items namely:

- Omits a letter, word or sentence of (e.g. Jane – a cat)
- Adds letters or words (e.g. the cat ran (fast) after the rat).
- Substitutes a word or a letter for another (e.g. the house, horse was big)
- Mispronounces words (pottle for bottle)

The checklist on reading errors was given to teachers to rate the individual learners' reading problems as shown in the table 3.2 below:

**Table 3.2: Likert Scale showing reading errors**

Child	1. Not at all	2. Less Frequent	3. Average	4. More Frequent	5. Most frequent
1. Omits a letter, word or sentence of (e.g. Jane- a cat)					
2. Substitutes a word or letter for another (e.g. The house, horse was big)					
3. Mispronounces words of (pottle or bottle)					
4. Adds words (e.g. the cat ran (fast) after the rat.					

The reading errors cited by the teachers were compared with the actual learner's performance on reading, based on assessment using wordlist and the passage. This was done in order to find out whether teachers really knew how to identify learners with reading disabilities and if the teachers are aware of the specific reading difficulties their learners had. Putting in cognizance the fact that classes are large, it is still expected that individual subject teachers, especially class and language teachers, should have known the strengths and the weaknesses of each learner.

Third section contained the child's academic progress record with details of; number of days absent in the year, reason for absence, academic performance rating and any other information useful for the study.

### **3.5.2 Learners' Questionnaires**

#### **(a) Instrument I: Reading attitude survey**

The study also contained appendix C entitled "Reading Attitude Survey" with two sections. It was filled by the learners selected for the study with the help of research assistants under the researcher's supervision. Section I had the child's status at home with details of child's siblings, order of birth, availability and use of lighting at home, availability of reading table or reading corner at home, preferred language at home and school. Section II contained actual child's reading attitude containing 20 items rated 1 to 3, with 1-sad, 2-happy, 3-very happy. Some of the questions from the reading attitude survey were:

- How do you feel when you read a book on a rainy day?
- How do you feel about spending free time reading?
- How do you feel about reading for tests?

Studies have shown that lack of motivation (intrinsic and extrinsic) may lead to negative attitude towards reading. In an ideal situation, learners would pay attention, ask questions, do assignments without complaining and show attitude of interest in learning. Learners with reading disabilities often feel lost, frightened and frustrated. A learner who is not intrinsically motivated may not view studying as an enjoyable task. Likewise, the learner who is not extrinsically motivated by parents or teachers may not find a good reason to try harder.

This elementary (primary) reading attitude survey provides a quick indication of the learner's attitudes toward reading. This assessment consists of 20 items which are briefly and simply worded with pictures. The original test adopted from Mckenna & Stalh (2003) has been modified to fit the group being studied instead of pictures of "Garfield;" it has 3 pictures of faces (sad face, happy and very happy face). The study intended to find out whether the standard 5 children were sad, happy or very happy when reading and whether it was because of their poor attitude towards reading that they scored low marks across all school subjects. The results of the attitude test were compared to the actual wordlist and passage performance.

**(b) Instrument II: Wordlist levels 1 to 5**

The study also contained appendix D called, "Wordlist levels 1 to 5", taken from the New Progressive Primary English book series (KIE 2003). Each level had 20 words and the learners read the words from their copies as the research assistants marked the accuracy on another copy. Errors were words which were mispronounced or skipped. Other reading errors noted were: substitution, omission and addition of words as well as the passage's comprehension. The study gave level three as the benchmark being 2 levels lower than class 5. Those who could not read level 3 words well were given 1 or 2 lower levels and those who read were given 1 or 2 higher levels. The numbers of words read correctly were recorded at the bottom of every list for each learner.

**(c) Instrument III: Reading passage: levels 1 to 4**

The study also contained appendix E known as “Reading passage with levels 1 to 4” taken from New Progressive Primary English book series 1 to 5. The choice of the passage level for reading depended on the child’s independent performance on the wordlist at any level (15 to 20 words read fluently). For example, majority of those who read level 3 wordlist were given level 2 passages to read and if they read well then, they were given one additional level, level 3 or 4 passage. Most learners read at least one passage whose level could be from any level 1 to 4 depending on the performance at the wordlist. Those who could not read even level one wordlist did not read any passage.

At the end of every passage, there were comprehension questions to be answered. Passages 1 and 2 had 6 questions each while passages 3 and 4 had 10 questions each. The research assistants were instructed to record on each child’s passage the number of words omitted, substituted, added and mispronounced. They also recorded time taken in reading the passage and number of correct answers read from each passage. The reason for giving wordlist and passage is identifying as close as possible the actual reading levels of each learner using the materials the learners had already learnt from.

**3.5.3 Training of Research Assistants**

Five research assistants were earlier trained and used for different research which entailed identification of learners with reading difficulties in 3 selected schools in Nairobi. This training took a duration of 30 days and involved

familiarisation of the data collection tools. They also got tested on the use research instruments. The researchers were taken out for 1 week to practice with 5 children before the pilot study occurred. The assist researchers were students who had taken 6 units in the area of learning disabilities at Kenyatta University. The units included a unit in teaching of reading in the school curriculum and also an introduction to reading difficulties.

### **3.6 Pilot Study**

The pilot study was done in class 5 using 24 pupils and 2 teachers in Kasarani primary school in Kasarani division of Nairobi. The school was selected for pilot study because it was near the researcher's working station and in case of any problems, the researcher would get back to the school easily. The objective was to measure validity and reliability of the research instruments. Another objective was to help determine if teachers and learners in the study were capable of completing the survey and whether they could understand the questions asked. The school and the division were not used in the main study. However, the pilot study helped find faults in the study instruments which were corrected and some items were changed and others deleted prior to the main study. The respondents were asked to point out all the questions that were not clearly stated. This helped in changing the administration and correction of the study instrument and scoring. After the pilot study, all alterations on the instruments were discussed with the supervisors who approved them before use. It was after the pilot study that the researcher realized that focus group discussion was important to gather more information

from the respondents. However, the researcher used the same methods of collecting data, both in pilot and main study. The results of the study enabled the researcher to have an idea of the kind of results to expect.

### **3.6.1 Validity**

Validity shows how accurately the data obtained in the study represents the variables (Mugenda & Mugenda, 2003). In this study, the tools were validated during a pilot study which took place at Kasarani primary school in Kasarani Division of Nairobi. The tools were adapted from the primary school syllabus and English textbooks. The adaptations were on the questions asked in the passages 1-4 while the words in the word list were simply picked and adopted. They were tested on peers and modified with the help of the supervisors. This enabled the study to find out whether such tools measure what they are expected to measure. The peers included 2 lecturers who read through the instruments and corrected them for content validity and language clarity. For example, on teachers' questionnaire, item number 10 before the pilot study was a three-likert scale, but after the pilot, it was discovered that it was limited and shallow in achieving objective number 3, which asked about causes of reading disabilities in learners. Hence, it was categorised into the specific elements related to the exact causes of reading disabilities. Five research assistants who were earlier trained by the researcher were subjected to all the tools and asked to answer the questionnaires in the pilot study and to do the assessment tests for the learners. The research assistants were subjected to the assessment tools and a marking scheme to ensure that all items were

appropriately asked. Two teachers and 24 learners were used in the pilot study to help clarify the items in the questionnaires. All the instruments were amended as per the peers', research assistants' and the respondents' responses. For example, they assisted the researcher to add more domains to teachers' questionnaire, such as directory information, information of teaching-reading and assessment, information about children's characteristics and methods of remediation.

### **3.6.2 Reliability**

Reliability is a measure of how consistent the results of a test should be. To ensure reliability for the tools, the researcher used test-retest method. In this case, it involved administration of the same instrument(s) twice to the same group of sampled subjects. The time lapse between the first test and the second test was three weeks (Mugenda & Mugenda, 2003). The following steps were followed in this test-retest method:

- i) Selection of an appropriate sample group of subjects.
- ii) Administration of the test to the subjects.
- iii) All the initial conditions were kept constant, and the test was administered to the same subjects.
- iv) Finally, a correlation of the scores from both testing periods was calculated.

Pearson Product Moment Correlation Coefficient was performed to assess the reliability between the two administered tests and a correlation coefficient of 0.792 was obtained in the learner's tool which was administered twice to test and re-test. According to Mugenda & Mugenda, (2003), a correlation coefficient of 0.8 and above, indicated a strong correlation between measures.

### **3.7 Data Collection Procedures**

Data were directly collected with the help of 5 well-trained research assistants, who assisted in testing the learners in a period of 45 days. The study had several tools which were used alongside each other for effective results. It was not possible to test all the learners in the study and at the same time administer the questionnaires to teachers and learners. Based on this, it was necessary to train 5 assistants on testing learners and asking the appropriate non-offending questions to learners with problems.

Initial contact was first established by visiting the City Education Office and the Provincial Education Office in Nairobi and Nyeri Municipal Education Office and Othaya Education Office to deliver the copies of the permit and inform them about the purpose of the study. A courtesy call was made to each individual school to talk to the head teacher before introducing the research assistants and distributing the questionnaires. The assistants were also trained in recording details in the instruments as they tested the learners.

After the teachers filled in the questionnaires, the researcher conducted focus group discussions in order to enable the teachers to express themselves freely and to allow them to elaborate the points they could not easily record in the questionnaires.

### **3.8 Data Analysis**

The data collected was coded using the Statistical Package for Social Sciences (SPSS) which allowed for use of both descriptive and inferential analyses. A general picture was given about the central tendencies of each variable and comparisons among the variables were made. Most of the data about teachers were analysed using descriptive statistics alone. Chi-square test was used for analysing the hypotheses in the study which were to find out whether reading ability was influenced by gender, home reading condition and electricity availability, reading table and language spoken at home and at school. The following null hypotheses were formulated based on the literature review:

- H<sub>01</sub>** There was no significant difference between reading ability and the nature of lighting system at home among respondents from Nyeri and Nairobi districts.
- H<sub>02</sub>** There was no significant relationship between availability of the reading table at home and learner's reading ability in Nyeri and Nairobi districts.
- H<sub>03</sub>** There was no significant relationship between learners' reading ability and the preferred language of communication at home and school in Nyeri and Nairobi districts.

- H<sub>04</sub>** There was no significant relationship between the learner's reading ability and the school of study and its category.
- H<sub>05</sub>** There was no significant relationship between learners' attitude towards reading and reading abilities in Nyeri and Nairobi districts.
- H<sub>06</sub>** There was no significant relationship between teachers' ability to identify specific reading errors and learners' actual performance on omitted, substituted, mispronounced and added words in Nyeri and Nairobi districts.

### **3.9 Logistical and Ethical Considerations**

The researcher obtained the research permit from the Ministry of Education-Research Department after being registered by the Graduate School of Kenyatta University. A list of schools was obtained from the City Council Director of Education in Nairobi and from the District Education Officer in Nyeri District. The copies of authorisation letter from Ministry of Education were distributed to relevant offices in the Ministry of Education and schools in both Nairobi and Nyeri districts. In addition to making courtesy calls, ethical considerations for the study included consents from the headteachers and teachers where respondents were stationed. All respondents in the study were treated with respect and assured that all data would be treated confidentially.

## **CHAPTER FOUR**

### **PRESENTATION AND DISCUSSION OF FINDINGS**

#### **4.0 Introduction**

In this chapter, the results of the study are presented and analysed. The chapter is divided into 3 main sections. For the purposes of sample description, section one presents the background information for both learners and teachers in the 2 districts studied. The second section presents the results of the research questions formulated in the study and discussed in form of themes. Each research question was tallied with respective questionnaire items from both sampling units and analyzed using frequency counts and percentages. The summary of these analyses are presented in tables and figures for interpretation. In the third section, the hypotheses of the study are analysed and interpreted accordingly.

#### **4.1 Section One: Demographic Data**

Sample description was analysed and presented using frequency and percentage tables, coupled with figures, along such demographic variables as age, gender, and teachers' professional levels. There are two sub-sections under this section, with the first sub-section presenting the demographic information for learners, while the second sub-section deals with teachers' information.

#### 4.1.1 Demographic Characteristics of Learners

The demographic characteristics of learners were analyzed along variables such as gender, age, number of siblings and position in the family.

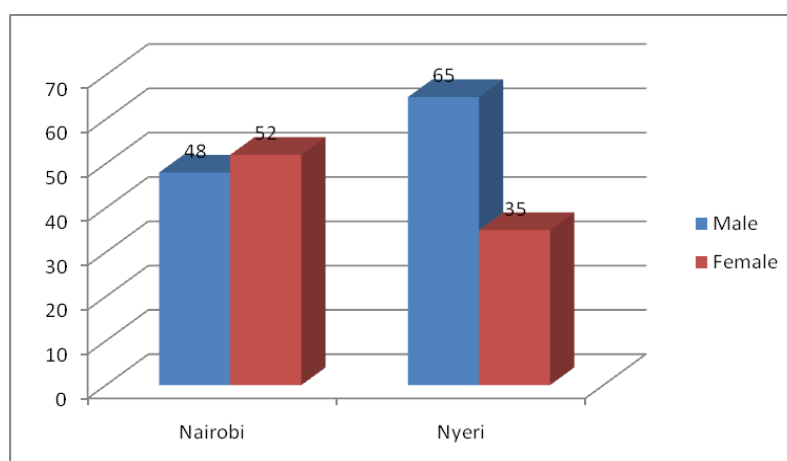
##### Gender of learners

Nairobi district had 58 (48%) male and 62 (52%) female in the sampled study. Nyeri had 78 (65%) male and 42 (35%) female from the study. From the table 4.1 below, the boys in Nyeri were almost twice as many compared to girls while in Nairobi the number of boys and girls were relatively close to each other.

**Table 4.1: Gender distribution per District**

	Nairobi			Nyeri	
	Frequency	Percentage		Frequency	Percentage
Male	58	48	Male	78	65
Female	62	52	Female	42	35
<b>Total</b>	<b>120</b>	<b>100</b>	<b>Total</b>	<b>120</b>	<b>100</b>

Nyeri district had the higher number of boys than Nairobi while Nairobi had more than Nyeri in sampled group. Figure 4.1 summarizes the gender distribution of learners in the two districts.

**Figure 4.1: Gender distribution per District****Age of learners**

The mean age of the learners in the study was 12 years with the youngest being 10 years old and the oldest 17 years. Table 4.2 analyses the age distribution of learners who participated in the study.

**Table 4.2: Age distribution of learners by years and Districts**

Scores	Districts	
	Nairobi	Nyeri
	Years	
<b>Mean</b>	12.43	12.63
<b>Median</b>	12.00	12.50
<b>Mode</b>	12	12
<b>Std. Deviation</b>	1.128	1.101
<b>Skewness</b>	1.173	1.523
<b>Minimum</b>	10	11
<b>Maximum</b>	17	18

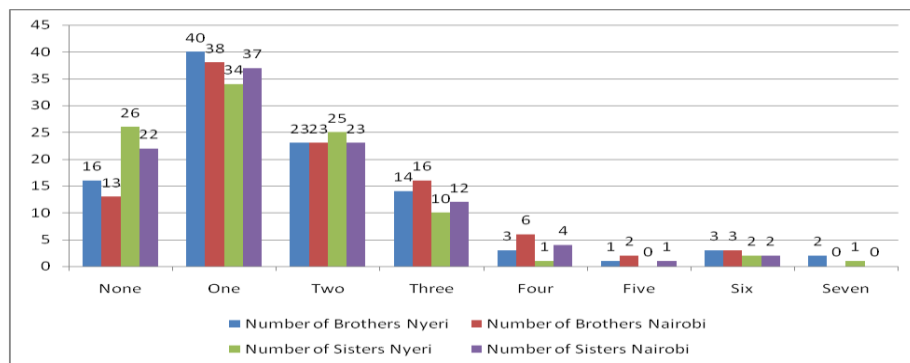
Majority of the learners were within 12 and 13 years of age. Learners between 14 and 18 could have repeated classes. The mean score for age in Nairobi was 12.43 years, with the youngest learners being 10 years and the oldest 17 years. It may be assumed that several learners had repeated classes especially above

13 years because KCPE candidates should be within a mean score of 13 years. On the other hand, the age range for Nyeri learners was between 11 and 18 years. The mean score for age for Nyeri is 12.63 which was higher than that of Nairobi.

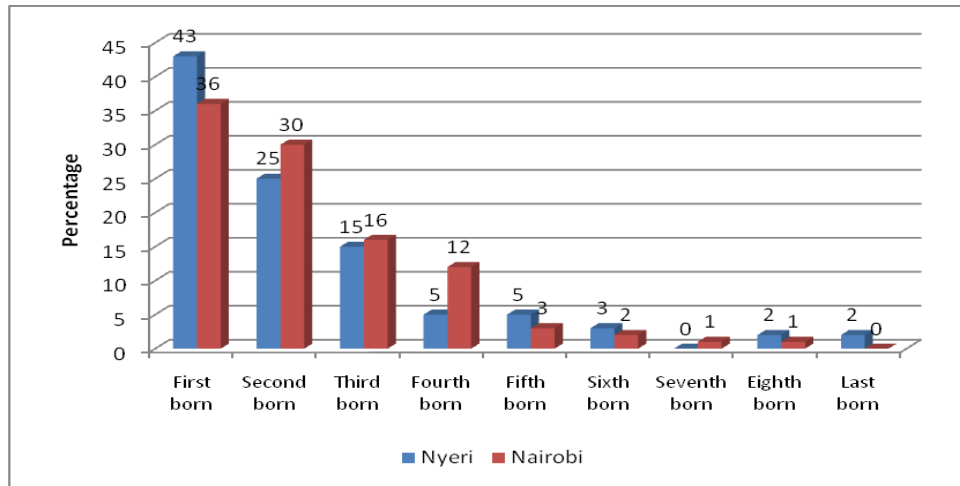
### Number of siblings

Majority of learners in both Nyeri (74% ) and Nairobi (75%) had only one sibling meaning the families were small. Figure 4.2 presents an analysis of number of siblings.

**Figure 4.2: Number of siblings by districts and gender**



From figure 4.2, it can be observed that more children with reading disabilities came from smaller families of 1 and 2 siblings. It may mean that the expectations of these families were too high and, therefore, made the learners too anxious to perform.

**Figure 4.3: Ordinal birth positioning of respondents by districts**

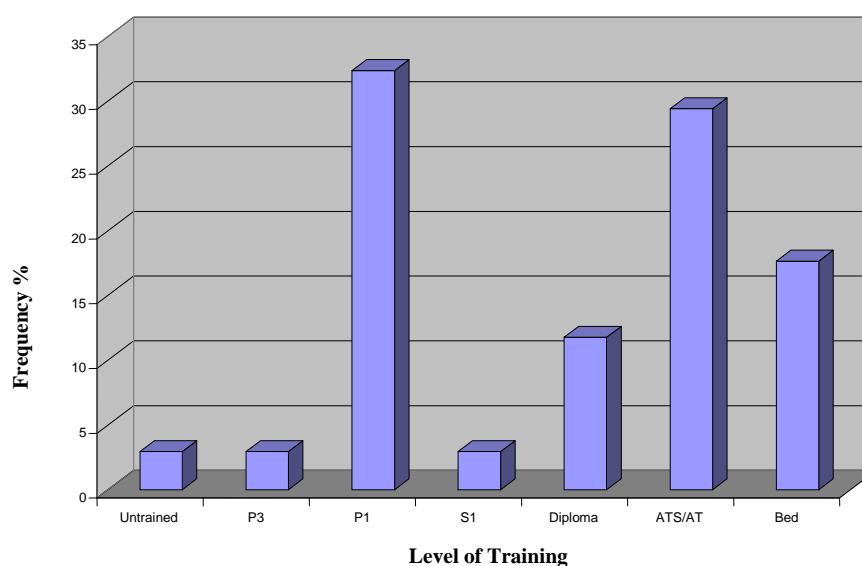
From the figure 4.3 above, both Nyeri and Nairobi had majority of learners who were first-born scoring 250 marks and below out of a possible 500. Nyeri had the higher percentage (43%). A number of poor readers given had 1 or 2 siblings and are themselves first or second ordinal birth positions. The opinion of the researcher is that any parent would put his / her hope on the first born, which may lead one to reason that these learners could be under parental pressure to perform well in school. Besides, they may be having too much responsibility at home.

#### **4.1.2 Demographic Characteristics of Teachers**

The study had 34 teachers purposefully sampled from the 16 schools used for the study, 8 schools from Nyeri and 8 from Nairobi. Only those teachers who taught English or were class teachers in class 5 in 2006 were involved in the study. The 34 teachers used in the study were asked to give the qualifications they attained at their colleges. This was crucial in that it gave the indication of

the level of preparedness and professionalism in their career. The qualifications of the teachers in the study were as indicated in figure 4.4 below.

**Figure 4.4: Teacher qualifications by level of training**



From figure 4.4 above, the professional qualifications ranged from untrained teacher to Bachelor of Education degree. One of the teachers was not trained. Majority of the teachers were trained in various methods of teaching learners including teaching of reading in English ( KIE 2004 ) primary teacher education syllabus.

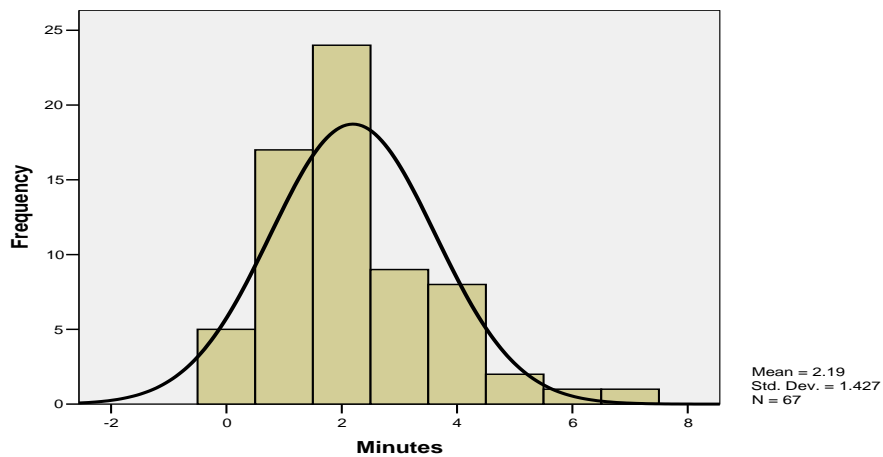
## **4.2 Section Two: - Reading Abilities and Disabilities**

Presented in this section is information on the reading abilities and disabilities got from the learner's data based on assessment and the teachers' perception on reading errors. Gender differences in reading disabilities are also discussed.

#### 4.2.1 Reading Rates in Reading Levels 1 and 4

The researcher analysed the learners' ability to read words on the wordlists across reading levels 1 to 5, where reading level 3 was the benchmark, and the total sample of the study attempted it. The learners were assessed along 3 categories of reading ability on reading level 3, that was, **non-readers (0-9 words)**, **Instructional level (10-14 words)** and **Independent level (15-20 words)**. Those who read at independent category proceeded to reading level 4 and 5 of wordlists and began reading level 2 passage, which was a benchmark to determine whether the respondent should continue reading passages 3 and 4 or passage 1 for non readers. The researcher went ahead to analyse the time lapse in reading of non readers and independent readers for passages 1 to 4 (see Appendix E) in order to determine the differences in reading speeds. The results are summarised in the following figure.

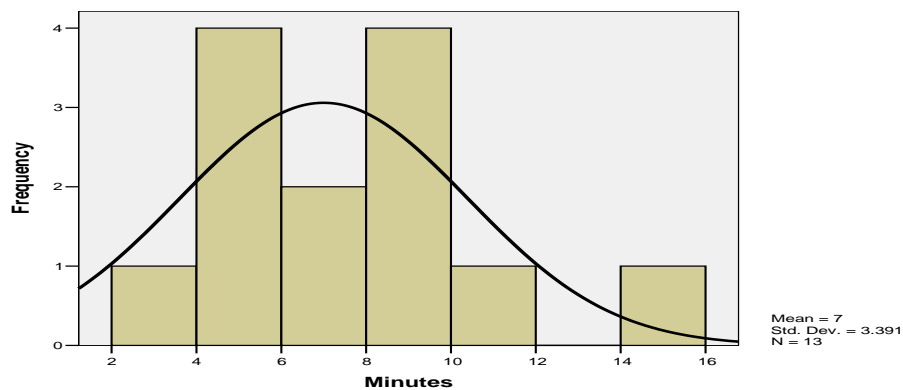
**Figure 4.5 (a): Reading rates in level 1 passage**



The minimum time taken to read level (class) 1 passage of 88 words was 1 minute and a maximum time of 7 minutes. The mean time taken to read the

passage was 2 minutes 19 seconds. The standard deviation was 1 minute 43 seconds. The results show that the learners were quite slow. Some of the learners who read passage 1 were slower than those who read passage 4 considering that passage 1 had only 88 words (Figure 4.5a, above) and level 4 had 277 words (4.5b, below).

**Figure 4.5 (b): Reading rates in level 4 passage by minutes and frequency**



The minimum time taken to read a passage of 277 words from class 4 was 2 minutes while the maximum time taken was 14 minutes. The mean time taken was 7 minutes. The standard deviation was 3.39 minutes. Also majority of learners read the passage between 4 and 8 minutes. Learners who read the passage at 2 minutes were fast readers, while those who read at 7 minutes were average in reading speed. However, those who read at 8 minutes or more were quite slow, which means they would take longer time to comprehend materials at this level and will always be behind their peers in reading speed.

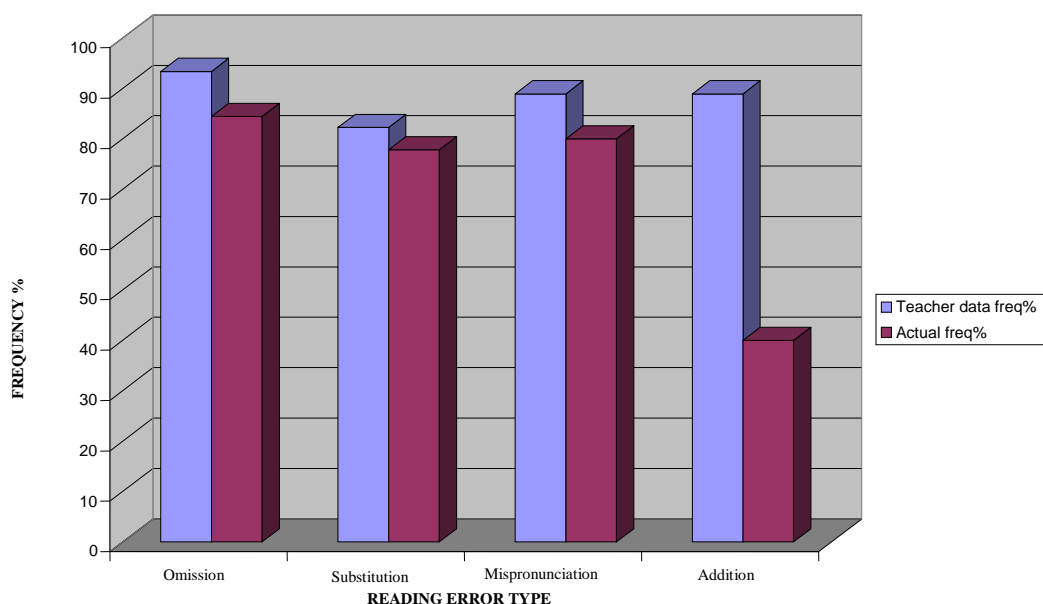
#### **4.2.2 Identification of Specific Learners' Reading Problems: Teachers' Opinions against Actual Reading Assessment**

##### **Teachers' opinion against actual reading assessment**

The study went further to investigate the teachers' knowledge on identification of learners with reading disabilities by selecting 4 specific reading errors from checklist on reading errors (see appendix B). These were analysed quantitatively using the responses given by teachers against the learners' actual performance on level 1 reading passage. The specific reading errors include; omission of letter, word or sentence; substitution of a word or letter for another; mispronunciation of words and addition of letters or words. Figure 4.6 (a) from Nairobi District and Figure 4.6 (b) from Nyeri District show the same trend. Addition problems were not properly identified by teachers from both Nyeri and Nairobi districts, compared to the other 3 problems presented below.

##### **Figure 4.6 (a): Identification of reading errors in teachers' opinion versus actual learners' assessment scores in Nairobi district**

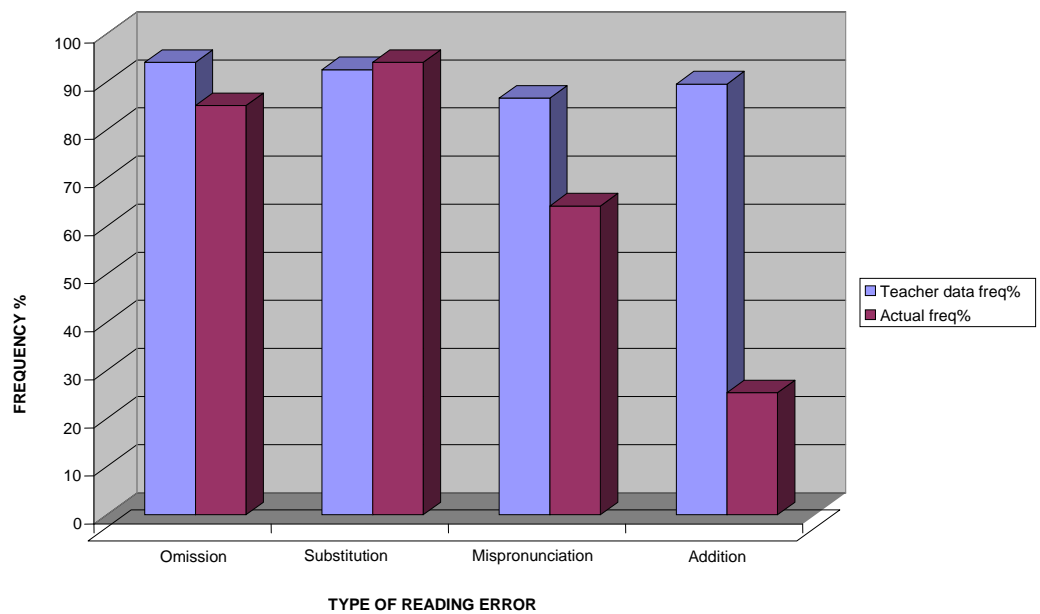
Figure 4.6 (a) indicates the teachers' prediction on learners data and performance in frequency and the learners' actual reading performance in Nairobi District:



The actual learners' reading performance was slightly lower than that of teachers' predications in omission, substitution and mispronunciation. However, there was a major difference in the results given by teachers and the actual performance of the learners on addition. From figure 4.6 (a) teachers' predictions on the learners' performance on omission, substitution and mispronunciation were close to the learners' actual performance. However, predictions on addition had a major disparity between teacher's predictions and learners' actual performances. Teachers' prediction was less than 40% while the learners actual performance was more than 80%. The teachers were not able to identify all the reading errors which, in the researchers' opinion, may imply that teachers were not well informed about all the reading errors which learners could make and how each could be corrected.

**Figure 4.6: (b) Identification of reading errors in teachers' opinion versus actual learners' assessment score in Nyeri District**

Figure 4.6 (b) indicates the teachers' prediction on learners data and performance in frequency and the learners' actual reading performance in Nyeri District:



From Figure 4.6 (b) above, the teachers' data on identification of reading errors (omission, substitution and mispronunciation) were closely related to actual performance of the learners with the teachers' frequency just slightly above the actual learners' performance on actual reading assessment. However, the teachers' prediction of addition of letters or words was far much below that of learners' performance, suggesting that teachers may have not been aware of this particular reading error called addition.

The study found that even though teachers have knowledge on general information on reading disabilities, they could not specifically identify learners with reading disabilities in various skill areas, especially with mild cases (discussed below) but were able to identify the non-readers who were already 4 years below their peers as indicated in the figures 4.6 (a) and 4.6 (b) above. This study agrees with that of Dr. Maneno (2008) which found that teachers in Nairobi did not have adequate knowledge and skills to identify phonological difficulties and had labelled their learners with learning disabilities as “slow learners.”

#### **Analysis of Individual Learner’s Scores on 10 Learner Cases against the Teachers’ Prediction**

Out of 240 learners in the study, 10 subjects were selected from those cases that were scoring on level 4 passage with more than 80% on comprehension which is at independent level of reading. The details of these learners were obtained and analysed. The analysis was both from actual learners’ performance and the teachers’ predictions. Figure 4.7 below displays the performance of the 10 learners as shown in the figure, key and more details are provided in Appendix F. Further, each of the 10 individual learners’ performance was analysed using the checklist on reading errors. The scoring scale on the 4 checklist items ranged from 1 to 5, as follows: 1-not at all (no problems), 2-less frequent, 3-average, 4-more frequent and 5-most frequent. The average percentage score on all the 4 items was calculated for each case study.

Other instruments used in coming up with learners’ actual performance were Wordlist levels 3, 4 and 5 (see Appendix D); passage level 4 showing the details of number of omitted, substituted, mispronounced and added words (see Appendix E ). The overall scoring given by teachers on individual learner was as follows: 1-Very poor; 2-poor; 3-Below average; 4-Average; 5-Above average. The percentages of the above score scale was then calculated. The graph below displays these results. Each learner had 4 items compared: Teachers’ general prediction on the individual learner’s academic performance worked out as a percentage; mean score given by the teachers on each learner from the 4 items in the checklist; each learner’s actual wordlist score at reading level 3, 4 or 5; and passage 4 comprehension score in percentage.

**Figure 4.7: Analysis of individual learners scores on 10 learner cases by frequency and teachers’ general prediction**

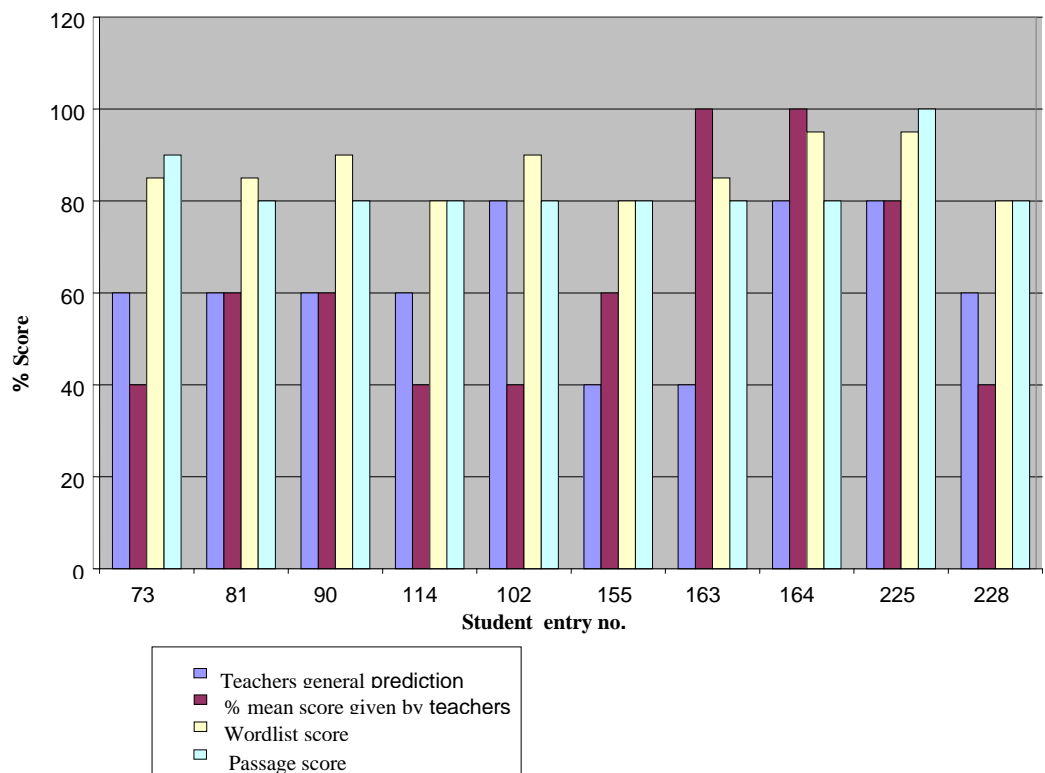


Figure 4.7 above represents 10 subjects who were purposively selected because of their outstanding performance at independent levels (80% score) at class 4 passage and also class 5 level in word list. This was way above the benchmark of class 3 level in wordlist. Out of 240 learners in both Nyeri and Nairobi, 35 learners performed at class 4 and class 5 levels. Of those 35 learners, 10 learners were picked as case studies. Teachers predictions and actual learners' performance were compared as in Figure 4.7 above. The main reason for picking the 10 learners was to further analyse their scores for actual level of performance considering that they had already been labelled poor performers in school work. One of the research objectives was to find out the methods teachers were using to identify poor readers. The teachers had used a tool given by the researcher to identify poor readers. From the answers given by teachers, it can be inferred that teachers were not very thorough in identification procedures for reading difficulties. Furthermore, the same teachers had already grouped those learners with poor performance through the use of end of term tests. Choate et al. (1995) asserts that teachers could use curriculum based assessment to determine learners' instructional needs and skills. Teachers can also use portfolio assessment to collect personal reading details and history of individual learners (Mercer & Mercer, 2001). Below is an analysis of how each of the 10 learners performed:

### **1. Learner 73**

Teacher's general prediction and mean scores are 60% and 40%.

Learner's wordlist and passage scores are above average of 80% each. If the learner can read and comprehend at level 4 reading

passage, he cannot be below average as predicted by the class teacher. The class teacher's prediction and the actual reading assessment had a disparity.

## **2. Learner 81**

Teacher's prediction and mean scores are each 60%. Learner's wordlist and passage 4 score are  $\geq 80\%$ . The additional notes from the teacher are that the learner is performing below his age mates. He omitted 7 words and substituted 2. The teacher's predictions are lower than the learners' actual performance, which is above average. There is disparity between the class teacher's prediction and the actual assessment.

## **3. Learner 90**

Teacher's prediction and mean scores are each 60%. Learner's wordlist and reading passage level 4 scores are  $\geq 80\%$ . The additional notes from the teacher are that the learner is performing below her age mates. She did not omit or substitute any words. The teacher's predictions are lower than the learners' actual reading assessment performance, which is above average. The class teacher therefore gave a wrong assessment of the learner.

## **4. Learner 102**

Teacher's prediction and mean scores are 80% and 40%. Learner's wordlist and reading passage level 4 score are  $\geq 80\%$ . The additional notes from the teacher are that the learner is performing below expectation because she is sick and has fee

problem. She omitted 1 word, mispronounced 2 and substituted 2. The teacher's predictions are lower than the learner's actual reading assessment above average performance. The class teacher's prediction and the actual assessment had a disparity.

#### **5. Learner 114**

Teacher's prediction and mean scores are 60% and 40%. Learner's wordlist and reading passage level 4 scores are  $\geq 80\%$ . The additional notes from the teacher are that the learner is performing below his age mates level. She did not omit or invert words and substituted 2. According to the teacher, the learner uses fingers on the text, looks tensed and has strange behaviour. The teacher's predictions are lower than the learner's actual above average performance. The class teacher's assessment and actual reading assessment of the learner showed disparity. This is an independent learner who does not need remediation.

#### **6. Learner 155**

Teacher's prediction and mean scores are 40% and 60%. Learner's wordlist and reading passage level 4 scores are 80%. The additional notes from the teacher are that the learner is performing below average because he is sickly. He omitted 0 words and substituted 2. The teacher's predictions are still lower than the learners' actual reading assessment performance, which is average.

**7. Learner 163**

Teacher's prediction and mean scores are 40% and 100% which are on their own contradictory. Learner's wordlist and reading passage level 4 score are  $\geq 80\%$ . The additional notes from the teacher are that the learner is absent most of the days and has poor comprehension. She omitted 1 word and substituted 4; inverted 1 word and mispronounced 2. The teacher's predictions are lower and higher than the learners' actual reading assessment performance which is above average. The class teacher's assessment and the actual reading assessment performance had a disparity.

**8. Learner 164**

Teacher's prediction and mean scores are 80% and 100%. Learner's wordlist and reading level passage 4 score are  $\geq 80\%$ . The additional notes from the teacher are that the learner omitted 1 word and mispronounced 1. The teacher's predictions are slightly higher than the learners' actual reading assessment performance, which is scored as above average. The class teacher therefore gave a correct assessment of the learner.

**9. Learner 225**

Teacher's prediction and mean scores are each 80%. Learner's wordlist and reading passage level 4 scores are = 95%. The additional notes from the teacher are that the learner is performing below his age mates because she is restless and incapable of

concentrating. She mispronounced 2 words and added 1. The teacher's predictions are lower than the learners' actual performance, which is way above average.

#### 10. Learner 228

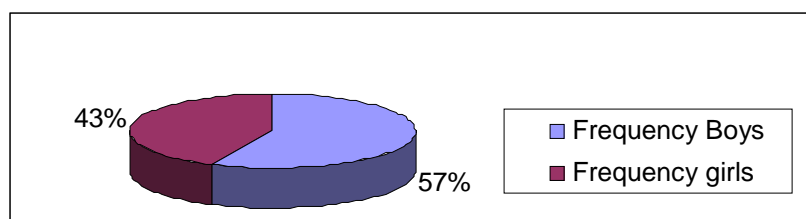
Teacher's prediction and mean scores are 60% and 40%. Learner's wordlist and reading passage level 4 scores are 80%. The additional notes from the teacher are that the learner is performing below average. He omitted 1 word and substituted 3; mispronounced 4 and added 2. The teacher's predictions are lower than the learners' actual reading assessment performance, which is average.

### 4.2.4 Gender Difference in Reading Disabilities in Kenya

#### 4.2.4.1 Teachers' opinions

According to the teachers' data in Figure 4.8 below, taken from the study, there was gender difference in non-readers. There were 181 non-readers of whom 103 (57%) were boys and 78 (43%) were girls.

**Figure 4.8: Distribution of non readers by gender and frequency from teachers' data in Nyeri and Nairobi Districts**



The information in table 4.3 below, further confirms the data from Nairobi and Nyeri districts where Westlands Division had 52% boys and 48% girls; Dagoretti Division had 52% boys and 48% girls; Nyeri municipality had 62% boys and 38% girls; Othaya Division had 59% boys and 41% girls. It is important to note that overall Othaya Division had the highest number of non-readers (33.7%).

**Table 4.3: Distribution of non-readers by gender and frequency from teachers' data in Nyeri and Nairobi districts**

Location	Number of boys	Frequency% of boys	Number of girls	Frequency % of girls
Westlands	11	52	10	48
Dagoretti	28	52	26	48
Nyeri Municipality	28	62	17	38
Othaya	36	59	25	41
Total	103	57	78	43

#### 4.2.4.2 Gender of learner and reading ability as per learners' data

Of the 54 pupils from Nyeri who were non-readers, 37 (69%) of them were males and 17 (31%) were females. Out of 42 pupils who could read at instructional level, 26 (62%) were males and 16 (38%) were females. Out of 24 pupils who could read at independent level 15 (63%) were males and 9 (37%) were females. However, the learners data from Nairobi indicated that out of 52 pupils who were non-readers, 24 (46%) of them were males and 28% were females. Likewise, out of 31 pupils who could read at instructional level 18, (58)% were males and 13 (42%) were females. At independent reading level, 16 (43%) were males and 21 (57%) were females. From the learners' data, Nairobi District had slightly more females who were non readers while

Nyeri had more males who were non-readers. While the teachers' data in both Nairobi and Nyeri districts concurred with findings highlighted in the related literature, the Nairobi District learners' data did not support. The opinion of the researcher would be that the marginal difference of males and female data could have resulted from the sampling procedures and the small number selected for the study.

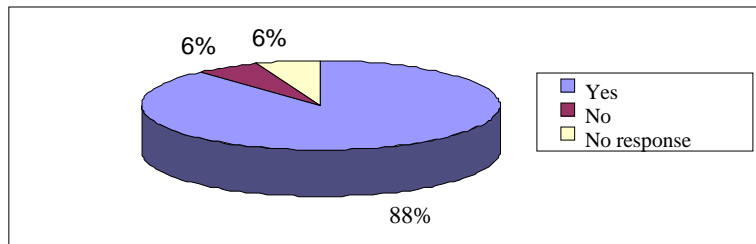
According to Lerner (2000), clinics and schools identify four times as many boys than girls who have learning disabilities, where 80% of these children are known to have reading disabilities. Malatesha and Aaron, (1982) claim that more male brains are prone to excessive imbalance information processing strategies than female brains. This study indicated that more boys show reversal errors.

### **4.3 Methods of Reading Assessment**

Several questions were given to the teachers in the area of assessment in reading. The questions were categorized as general and specific. The general questions compared whether teachers assessed learners at all, how often they assessed the learners in reading using the continuous assessment tests (CATs), description of methods they used in assessing reading ability in pupils, the characteristics of good and poor readers, the proportion of learners with reading disabilities and the impact of reading disabilities on other subjects. The specific questions asked included testing ability to identify specific reading errors in individual learners and prediction of performance of individual

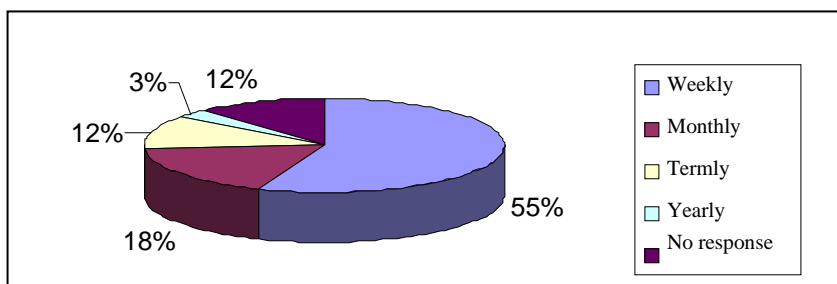
learners in reading. Qualitative and quantitative data were obtained from the teachers' questionnaires and checklist on reading errors respectively, to indicate whether teachers had full knowledge of identifying learners with reading disabilities in specific skill areas. The results of teachers' responses and learners' data on the question are analysed below. **Do teachers ever assess the learners' reading ability and how often?**

**Figure 4.9 (a): Indication of whether teachers assess learners' reading ability**



From the teachers' responses shown on figure 4.9 (a) above; 88% of the teachers assessed learners' reading ability, while 6% of them did not. Another 6% left the space blank. This is a good indication that the teachers voluntarily assessed learners' reading abilities.

**Figure 4.9 (b): Frequency of continuous assessment tests in reading to learners**

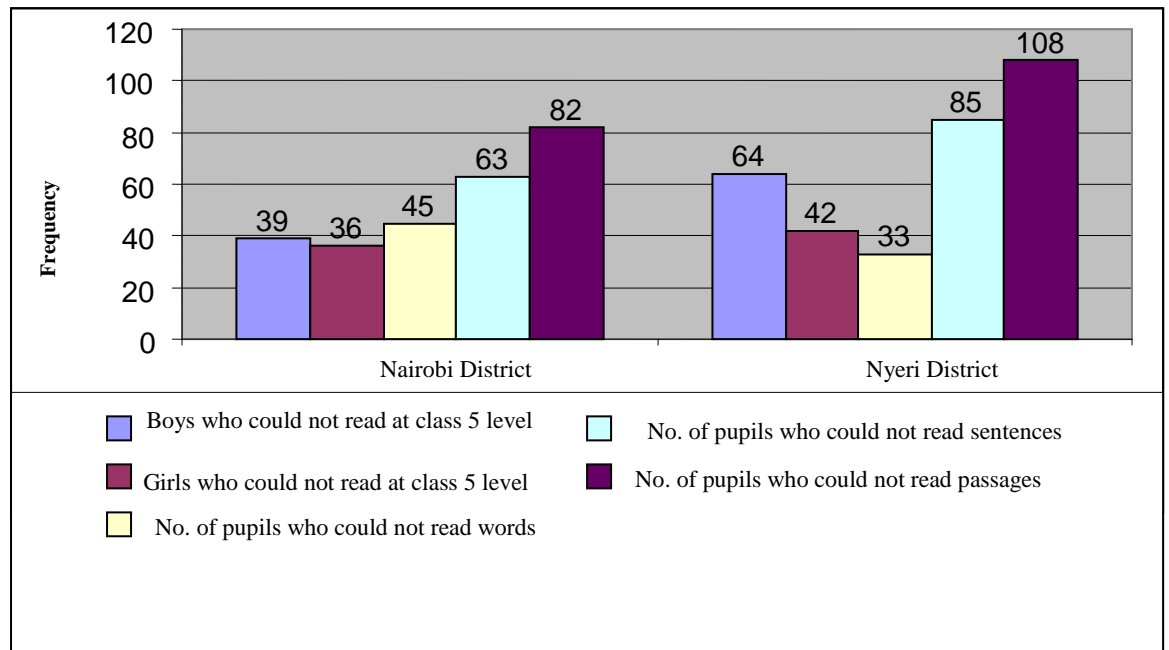


When asked how often they assessed the learners, over half (55%) of the teachers in the study said they tested their learners weekly, 18% monthly, 12% termly, 3% yearly while 12 % left the space blank indicating they were not sure or they do not assess at all (see figure 4.9 (a). From the finding 88% of teachers assess learners' reading ability, but there was a problem with frequency of testing which was too low as indicated in figure 4.9 (b). If at all 73% (55% plus 18%) of the teachers, assess learners' reading ability at least monthly, the learners in the study would not have had difficulties in reading since teachers would have identified such learners for interventions.

According to Heilman et al. (1985) effective teachers of reading employ ongoing diagnosis of a learners' reading development and also provides opportunities for the pupils to practice and apply skills in meaningful context. For teachers to be effective, they should assess the learners often and within the lessons they teach, give feedback and maintain a high level of pupil involvement in their own learning.

#### **4.3.2 Proportion of Non-readers in Class 5 According to Teachers**

The teachers were asked to indicate the proportion of learners who could read words, sentences and passages fluently at class level. Figure 4.10 below, indicates the data from the teachers.

**Figure 4.10: Proportion of Non-readers in Class 5 according to Teachers**

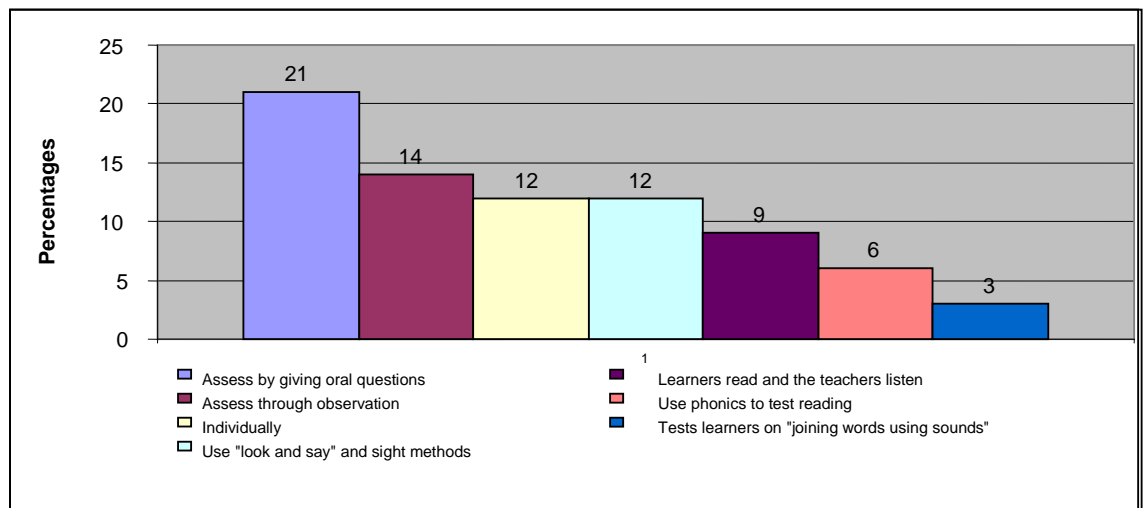
In Nairobi District, there were 39 boys who could not read at class five level while in Nyeri District, 64 could not read at class 5 level at the time of the study. There were more girls who were non readers than were boys according to the information given by teachers. Nyeri District, however, had the highest number of learners who could not read passages (108) and sentences (85). From the figure above, learners from Nyeri District had more reading problems when compared to those from Nairobi District. This finding tallies with a study conducted by Callaway, Jerrolds, and Gwaltney, (1974) which claimed that learners who came from homes with extensive accounts of reading materials, rated highest in reading and language achievements. Maybe learners from Nairobi had less reading problems because they were constantly encouraged to read and also because of availability of more reading materials.

Furthermore, Nairobi District being an urban district, is expected to have a variety of reading resources than Nyeri District has.

#### 4.3.3 Methods Teachers Use to Assess Learners' Reading Abilities.

One of the research objectives was to find out methods teachers use to assess reading disabilities in learners. Several methods that the teachers used in assessing reading abilities are given below.

**Figure 4.11: Methods used by teachers in assessing learners' reading ability in Nyeri and Nairobi**



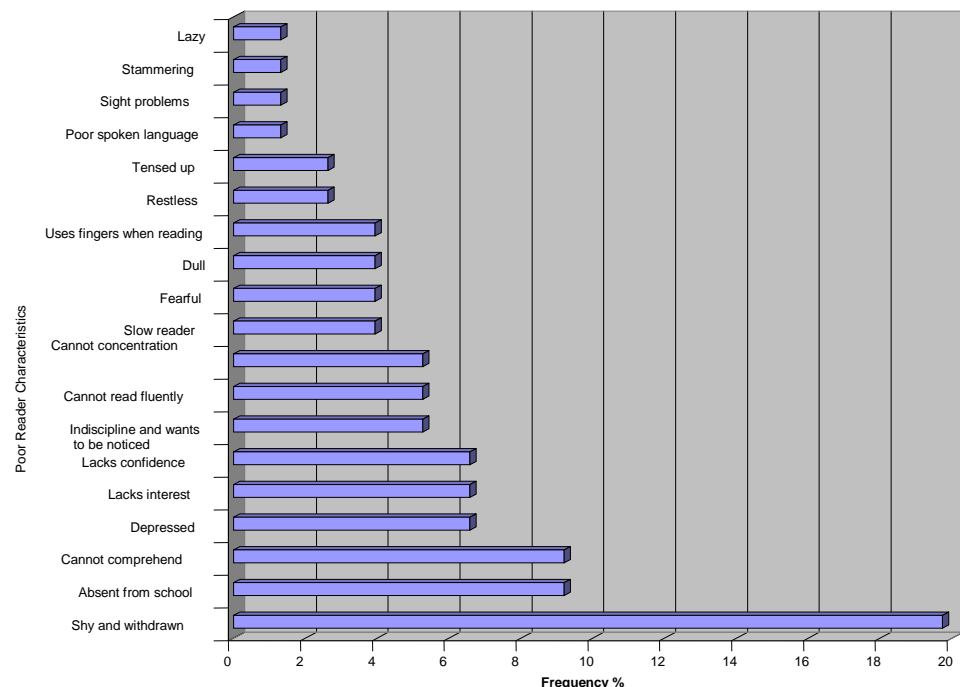
Teachers were asked to indicate the methods they had been using in assessing learners reading abilities in class 5. It is evident from figure 4.11 that almost all the teachers in the study have created their own methods of assessment which were not clear to the researcher. Only 3 (9%) assessed their children through observation although this technique was not explained. Seven (21%) assessed the learners by giving oral questions and 5 (15%) had the learners read as the teachers listened. None of those methods or strategies given by the

teachers were explained, an indication that the answers may have been guessed. Eight (23%) did not respond to the question meaning perhaps they did not have any methods they used. Even though only 3 teachers in the study assessed learners by observation, Salvia, et al., (2007) recommends this technique for gathering information about the learners in order to make academic and social instructional decisions.

#### 4.3.4 Teachers' Perception of Good and Poor Readers in Class 5

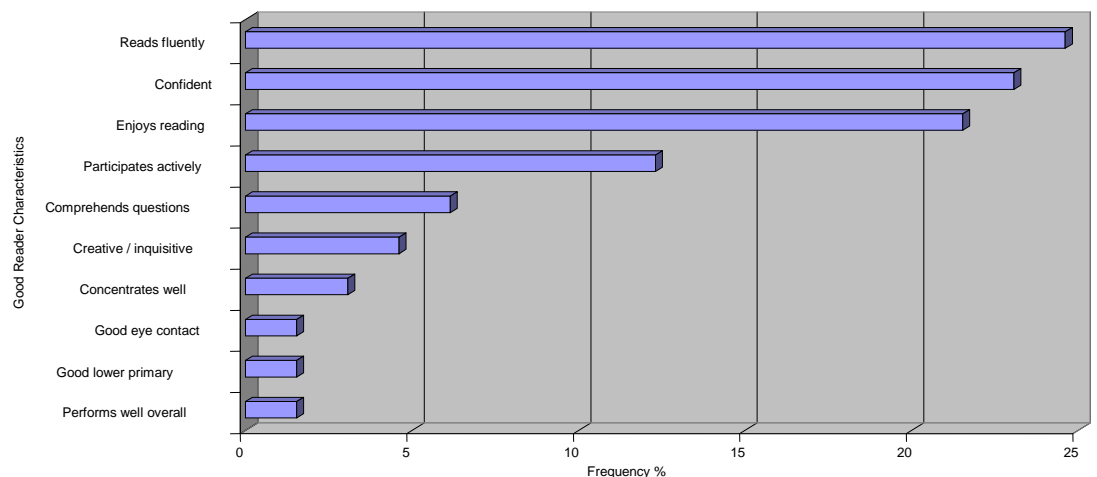
For the teachers to be able to assess reading abilities and make professional judgments on who are good and poor readers, they must have prior knowledge of good and poor characteristics of learners. They must also have knowledge on the impact of poor and good characteristics of reading on the overall pupils' performance.

**Figure 4.12: Poor reader characteristics and frequency as identified by teachers for class 5 learners**



The teachers' knowledge of the characteristics of poor readers are; shyness and withdrawal, lack of comprehension, lack of interest, lack of confidence, inability to read fluently, being fearful, poor concentration, being restless or tensed up and indisciplined, amongst others. Even though absenteeism and depression have been rated highly in the study, the two were usually as a result of continuous failure or any other problem outside reading performance. However, some few reading difficulties given by teachers were closely related to the ones cited in the literature review by Bond et al. (1984). This shows that if teachers were well trained in teaching reading, they would be better placed in identifying specific characteristics of poor and good readers in classrooms.

**Figure 4.13: Good reader characteristics and frequency as identified by teachers for class 5 learners**



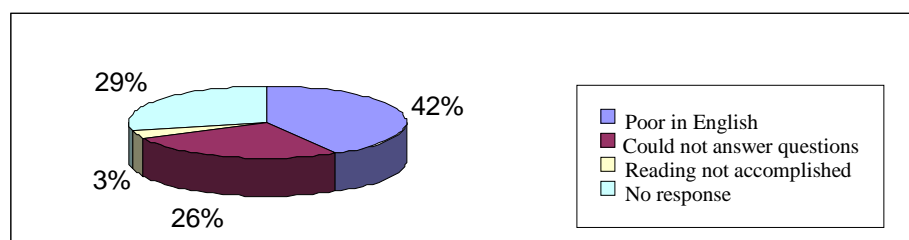
The study established that teachers of class 5 pupils were aware of a number of good characteristics of pupils' reading abilities such as: reading fluently, being confident, enjoying reading, active participation, comprehension of questions, being creative and inquisitive, having good eye contact, good

concentration, good lower primary reading background and learners' performing well overall. Looking at the teachers' response, reading fluently, enjoying reading and being confident had more than 20 frequencies each. If the teachers could easily identify the characteristics of good and poor readers, then the question is, **why were the two districts still having so many children with reading disabilities who simply could not read at their level?** Probably, the characteristics the teachers were aware of were out of their common knowledge and experience, rather than from training.

#### 4.4 Effects of Reading Disabilities on English Comprehension, Writing Composition and Other Subjects as per Teachers' Opinions

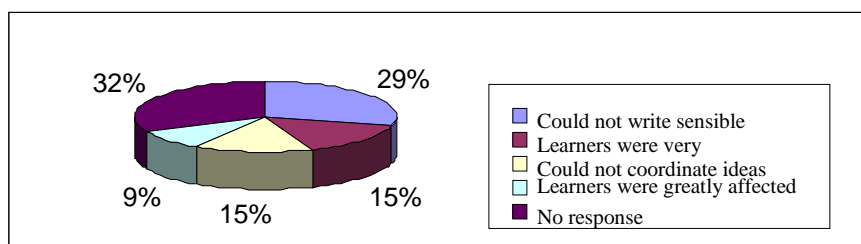
Teachers were asked to indicate in their own opinion, the impact of reading disabilities on the learner's overall performance on English comprehension, writing composition and other subjects. Figures 4.14 a, b and c indicate the teachers' responses on the effects of reading disabilities on English comprehension, writing composition and effect on other subjects as shown below.

**Figure 4.14 (a): Effects of reading disabilities on English comprehension by percentage**



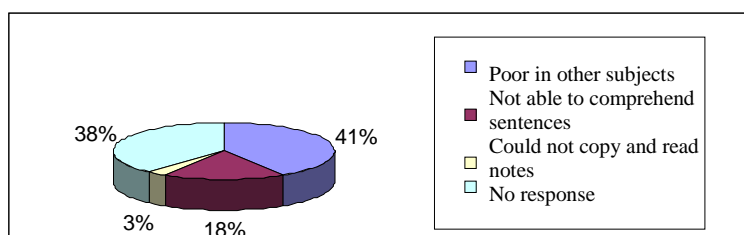
Teachers had full knowledge that reading disabilities adversely affected learners in English comprehension. Among the responses given, 42% said that such learners were poor in English, 26% said that learners could not answer questions while 3% said that reading was not accomplished in such learners.

**Figure 4.14 (b): Effects of reading disabilities on writing composition by percentage**



From the above figure, teachers said that 29% of the learners could not write sensible sentences, 32% were very poor in composition writing and 15% could not coordinate ideas, which indicated that the teachers had generally good knowledge of the effects of reading disability on writing composition.

**Figure 4.14 (c): Effects of reading disabilities on other subjects by percentage**



41% of the teachers said the learners were poor in other subjects because they were unable to read; another 18% said the learners were poor in other subjects

because they could not comprehend sentences and 3% said the learners could not copy and read notes. Even though only 3% of the respondents talked about learners' difficulties in copying and reading notes, this problem was highly experienced by learners with reading problems because they could not copy or read notes in subjects such as CRE, English, Social-Studies, Kiswahili and Mathematics, and hence general failure in academic performance.

The information given by teachers agree with Carnine et al. (1997) who suggest that reading difficulties are the principal cause of failure in schools. When a learner has difficulties with decoding and comprehending skills, he/she could not pronounce words or understand the meaning of words correctly or understand the meaning of words in isolation and in context respectively (Mercer & Mercer, 2001).

#### **4.5 Causes of Reading Disabilities**

Teachers' opinions on possible causes of reading disabilities were obtained through a questionnaire containing a checklist of 14 items while learners' data explored the relationship between wordlist scores at home and school environment.

##### **4.5.1 Causes of Reading Disabilities According to Teachers**

Teachers were given a checklist of 14 items to tick as the possible causes of reading disabilities in their opinion. They gave 139 responses as shown in table 4.4 below.

**Table 4.4: Most common causes of reading difficulties in class 5 pupils and percentage N=139**

Possible cause	No of responses =139 N	Percentage %
Past continuous failure	20	14
Child cannot communicate in English	14	10
Mother tongue interference	13	9
Lack of parents' support	13	9
Reading disabilities are inherited	13	9
Due to parents' illiteracy	12	9
Lack of motivation	11	8
Due to laziness	10	7
Effects of poverty	10	7
Poor learning environment	9	7
Due to poor teaching	5	4
Lack of text books and reading materials	5	4
Overloading of the curriculum	3	2
Chronic illness	1	1
<b>Total</b>	<b>139</b>	<b>100</b>

From the table 4.4 above, past continuous failure was rated highest 20 (14%) as a major cause of reading difficulties in class 5 pupils. Other common causes cited by teachers were children's failure to communicate in English 14 (10%), mother-tongue interference 13 (9%) lack of parental support 13 (9%), reading disabilities being inherited 13 (9%), parents' illiteracy level 13 (9%) and lack of motivation 11 (8%). Pupils' laziness, poverty and poor learning environment were also cited by the teachers to be crucial in causing reading difficulties.

Teachers responses to some extent agreed with the literature reviewed on causes of reading disabilities. According to related literature reviewed reading disabilities my result from several factors which include: physical, psychological, cognitive, language, neurological, perceptual, socio-economic ,

motivation and educational (Ekwall, 1976; Taylor, et al 1995). Teachers gave several responses from the list given indicating that they had an idea of what caused reading disabilities in learners. However, from the responses given more emphasis were placed on external factors indicating limited knowledge in the condition.

#### **4.5.2 Focus Group on Causes of Reading Disabilities**

During the focus group discussions, which the researcher also used a tape-recorder, teachers said that they not only needed to be taught about causes of reading difficulties in teacher training colleges but also how to prevent such causes especially the ones that were preventable.

- In the study, the teachers put more blame on the external factors as causes, of reading disabilities. Most teachers felt that they received learners from lower classes who were already non-readers and because of that poor foundation, they felt there was nothing much to do.
- Some teachers felt learners who could not communicate in English and also suffer due to mother-tongue interference could receive very little help at class 5. However, some schools had put in place mechanisms by refusing children to speak mother tongue except English and Kiswahili, especially in upper primary schools. Sometimes, this was done in form of punishment.
- To some extent, the teachers felt the home background where parents did not support their children in cultivating reading skills was the cause of reading disabilities. Learning and illiteracy level of the parents could be

contributing to reading disabilities in their children. Effects of poverty were also mentioned. Teachers from Nyeri felt that majority of the parents were small scale farmers or had small businesses which were not adequate for catering for their children.

- Some teachers felt reading disabilities are inherited and therefore there was nothing much they could do since the condition was an inherited one.
- Teachers felt that such poor readers were simply lazy; that was why they did not put any effort to perform better.
- Teachers said they were forced to hurriedly complete the curriculum due to the pressure placed on them by various stakeholders including Quality Assurance and Standards Officers (QASO) and to some extent the parents. Many causes of reading disabilities can be prevented if the teachers have knowledge about them during the teacher training. The issue of completing the curriculum before its specified time and hurriedly teaching to keep with time, naturally leaves out the learner who may be struggling with a certain skill, topic or subject, hence compounding learning problems in learners.
- The Ministry of Education's organs dealing with curriculum development implementation and supervision should agree on the issues, which affect learners. A policy should be put in place to guide teachers, curriculum developers and QASO personnel. In their responses, several teachers felt that only reading specialists should tackle teaching of reading in order to avoid causing reading disabilities in children at an early age.

Interestingly enough, few teachers felt reading disabilities may be as a result of poor learning environment, poor teaching, lack of textbooks and reading materials, overloading of the curriculum and lack of motivation. During the focus group discussions, teachers expressed that there was great need to address poor reading and modes of instruction at school level. They also felt that teachers should be more equipped with more methods of teaching reading during the training at teacher training colleges. The teachers argument agrees with Wheelock (1995) who asserts that improved learning depends on teachers who are knowledgeable about academic content and are able to employ a variety of teaching methodologies to help all students master the content. In the researcher's opinion, for reading to improve further in Kenyan schools, teachers require more knowledge in the subject.

The focus group discussions, proved quite useful in gathering in-depth information on teaching and assessing reading in class 5 and also the difficulties the teachers have continuously faced without a proper forum to express themselves. Issues on inadequate training, lack of support from the Quality Assurance and Standards Officers, lack of materials for remediation, hurriedly teaching the curriculum and focussing only on the bright learners were almost a common concern in all the schools.

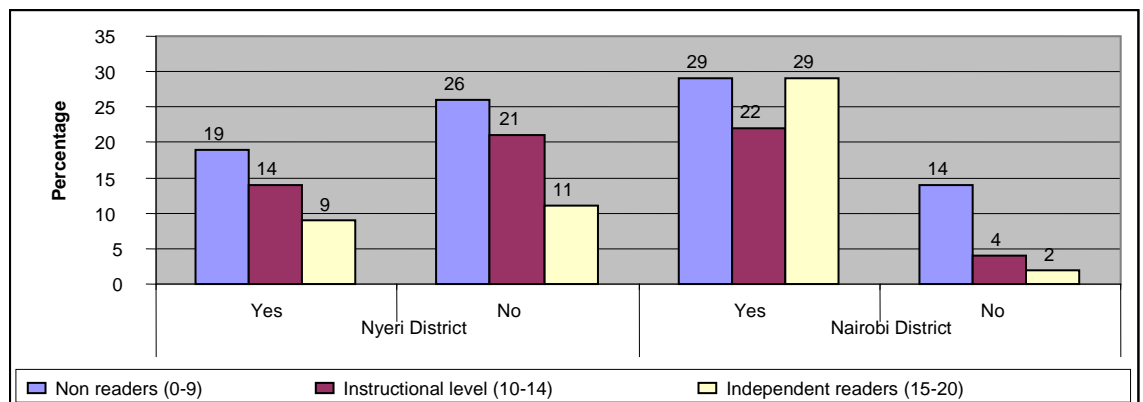
### 4.5.3 Causes of Reading Disabilities According to Learners

Pupils reading environment in the study considered the availability of electricity, reading table, language used at home and at school and how these affected learners' reading abilities. Other variables that were considered in the environment were the category of the school and how this affected learners' reading abilities

#### (i) Availability of electricity at home and its effects on reading ability of the learners:

The study established that majority of pupils (80%) from Nairobi had adequate electricity compared to their counterparts from Nyeri where only 42.5% used electricity at home.

**Figure 4.15: Availability of electricity at home and its effects on reading ability in Nyeri and Nairobi Districts**



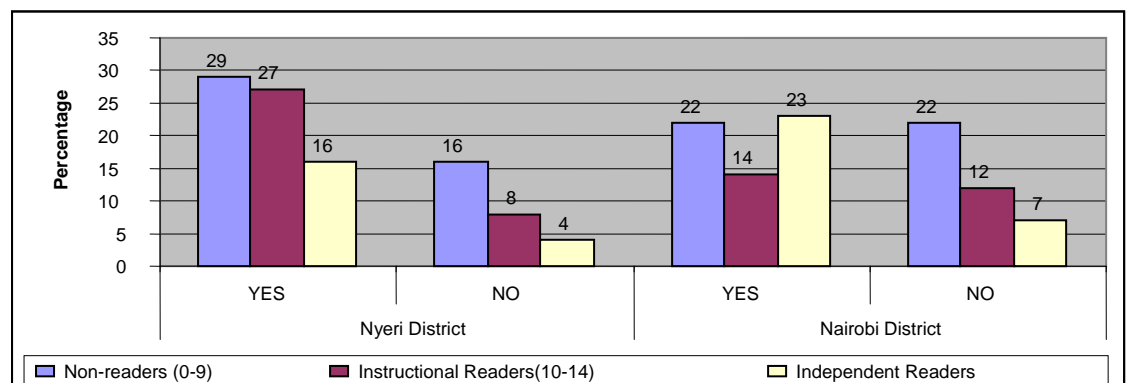
Nyeri being a rural district had fewer homes (19%) that used electricity than Nairobi, however, they may have been using another source of lighting like paraffin lamps. Nairobi District whose respondents (29%) used electricity had

more non-readers than Nyeri District. Nairobi had more non-readers even though they had electricity. This may mean that lighting system was not a significant factor as to cause reading disabilities in Nairobi or Nyeri. The independent readers in Nairobi District used more electricity (29%) than those of Nyeri District who used only (9%).

**(ii) Availability of reading table at home and its effects on pupils' reading ability:**

The respondents were asked to indicate whether they had reading tables at their homes and analysis is shown below in figure 4.16

**Figure 4.16: Number of correct words level 3 verses availability of reading table at home for Nyeri and Nairobi Districts**



From figure 4.16 above, Nyeri District had the highest (72%) number of learners who had reading tables at their homes. However, 29% of Nyeri sample could not read. It can be concluded that having reading tables may not necessarily contribute to reading ability or disability.

Nairobi District, on the other hand, had almost equal number of learners (22%) who were non-readers and independent readers (23%) who had reading

tables. This may mean that the presence or absence of reading tables did not affect the learners' reading levels. This may be true because majority of homes in Nairobi do not have extra room for reading tables due to economic factors and, therefore, the children could have learnt to do their studies in the available spaces in the homes.

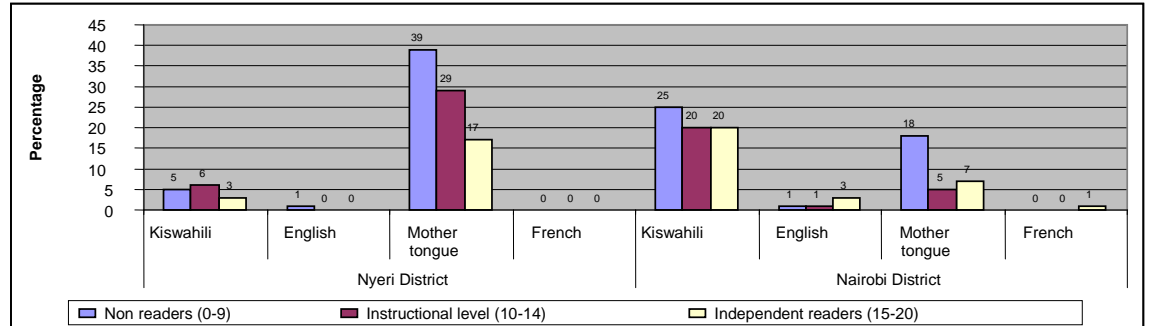
**(iii) Does language of communication at home affect learners' reading ability?**

**Table 4.5: Nyeri and Nairobi child's preferred language at home by percentage**

<b>Language of communication at home</b>	<b>Nyeri District %</b>	<b>Nairobi District %</b>
Kiswahili	14	65
English	1	5
Mother tongue	85	29
French	0	1
Total	100	100

In this study, four languages: Kiswahili, English, French and mother-tongue were considered. Table 4.5 above shows that in Nairobi the child's preferred language at home were Kiswahili 65%, mother-tongue 29% , English 5%, and French 1%. The same table shows the child's preferred language at home in Nyeri were: mother-tongue 85%, Kiswahili 14% and English 1%. From these data, it is clear most pupils prefer to speak in another language at home rather than English, which is their medium of communication at school and in which they learn how to read.

**Figure 4.17: Child's preferred language at home and wordlist at level 3-Nairobi and Nyeri Districts and frequency**

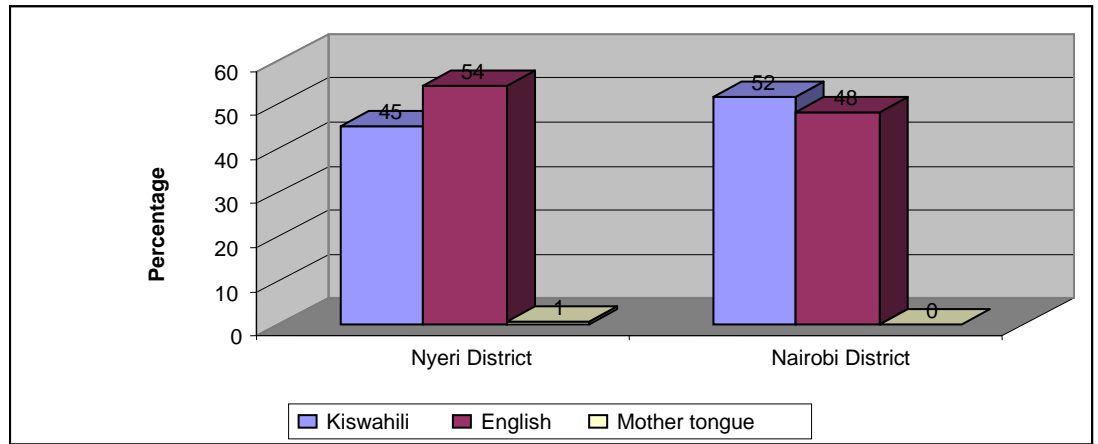


From figure 4.17, respondents from Nyeri District seem not to be comfortable speaking English and Kiswahili at home. The 3 reading level groups preferred speaking mother-tongue at home. In Nairobi, Kiswahili is preferred by all the 3 reading level groups. Interestingly, English is not a preferred language in both Nyeri and Nairobi Districts. Now that English was the language the learners used in school, they may have felt they needed a different language at home. However, lack of practice may have affected their reading performance, which was in English language.

**(iv) Does language spoken at school affect reading ability of the learner?**

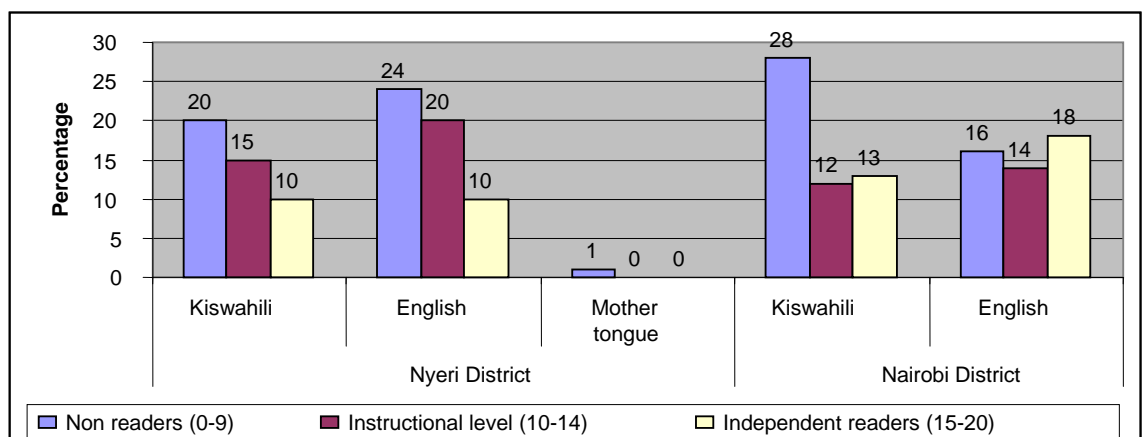
Respondents were asked to indicate the language they preferred in school, that is, English, Kiswahili or mother tongue. The findings are analyzed in Figure 4.18 below.

**Figure 4.18: Nyeri and Nairobi Districts child's preferred language at school by frequency**



From the learners' data, the study found that the preferred language in Nairobi District schools was Kiswahili 52%, and English 48% while in Nyeri District, Kiswahili 45%, English 54%, and mother-tongue 1%. As a language of instruction in school, English is only preferred in Nyeri District. On the other hand it is interesting to note that learners in Nairobi District did not prefer English language instead they preferred Kiswahili.

**Figure 4.19: Child's preferred language at school and wordlist at level 3 by frequency**



The results from Nyeri District level 3-wordlist show that there were 3 languages preferred by the learners at school: Kiswahili, English and mother-tongue. Out of 54 non-readers, 24 (20%) preferred Kiswahili, 29 (24%) preferred English and 1 (1%) preferred speaking mother tongue at school. Out of 42 pupils at instructional level, 18 (15%) preferred Kiswahili and 24 (20%) preferred English. Out of 24 pupils who performed at independent level, 12 (10%) preferred Kiswahili and 12 (10%) preferred English. The figure above shows that Kiswahili (28%) is preferred in Nairobi District while English (24%) is preferred in Nyeri by non-readers yet in reading this group lagged behind their peers up to 4 years or more.

According to the literature reviewed in the study, learners' success in school depends to large extent on how well the learners develop language ability (Heilman et al., 1981). This is further emphasized by Dechant (1982) who reveals that inadequate language development is a common cause of poor reading and reading must be regarded as a language-related process. Taylor et al. (1995) state that a child who comes to school speaking another language rather than the language used in school may have problems in reading. This is the case in the Kenya context where children learn school subjects using a second language rather than the one they are used to from home. However, the study could not get any relationship of the language preferred in school and reading abilities.

**(v) Does the school of study and category affect learners’ reading ability?**

The respondents were asked to say how they felt about the school of study and its category and their responses are analysed in figure 4.20 below.

**Figure 4.20: The school of study and level of reading difficulty and level 3 wordlist for learners by frequency**

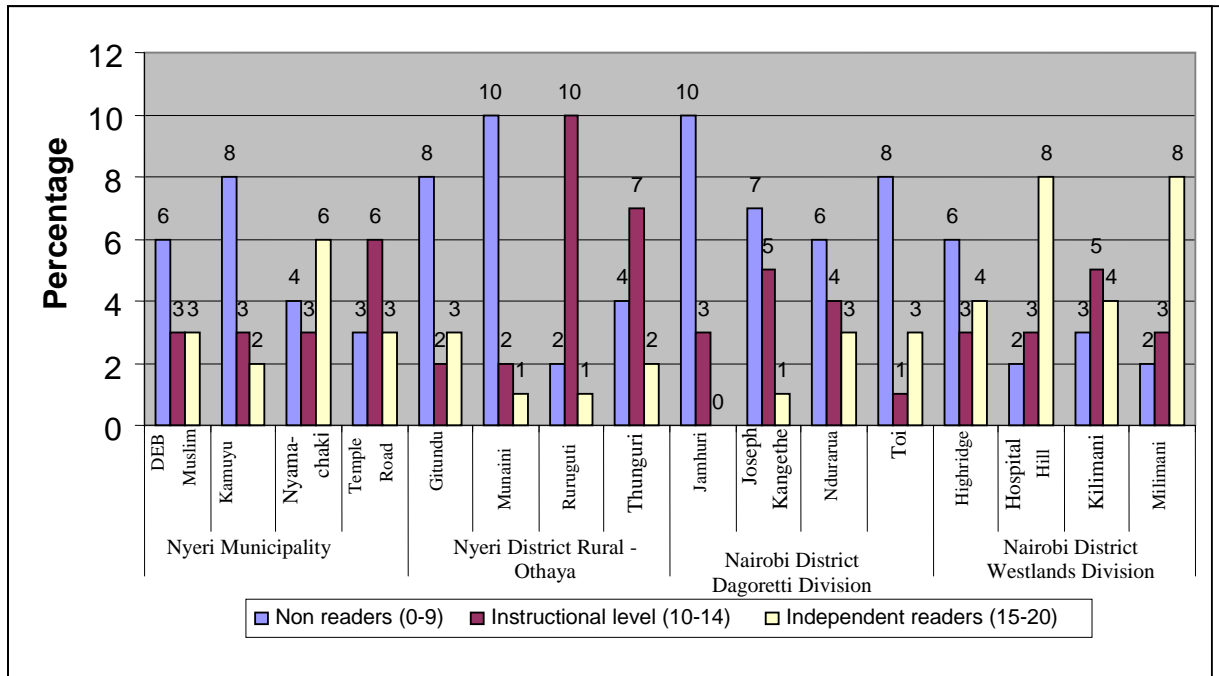


Figure 4.20 shows that out of 52 non-readers, 37(31%) came from poor schools and 15 (13%) came from good schools. Out of 31 pupils who could read at instructional level, 15 (13%) came from poor schools and 16 (14%) from good schools. Out of 37 pupils who could read at independent level, only 8 (7%) came from poor schools and the remaining 29 (24%) came from good schools.

The sample of the schools in Nyeri District were from Nyeri municipality (urban) and Othaya Division (rural). Figure 4.20 shows that out of 54 non-

readers, 21% came from Nyeri municipality (urban) while 16% came from Othaya Division (rural) schools. Of the 42 learners who read at instructional level, 15% came from Nyeri municipality and 22% from Othaya. Out of 24 learners who read at independent level, 11% came from Nyeri municipality and 7% from Othaya.

Wells (1990) reveals that when parents are empowered or have a choice to avoid schools that are perceived as “low quality”, the academic performance of their child turns out to be positive. The finding from Nairobi sample agree with Wells (1990) but data from Nyeri District do not agree with this Well’s finding.

**(vi) Does motivation affect the learners’ ability in reading?**

A reading attitude survey comprising 20 items was given to learners in the study to provide a quick indication of their attitude toward reading. They were to indicate the things they liked and did not like about reading. Data were collected testing the child’s attitude on reading, categorized under the scores of (1-Sad, 2-Happy, 3-Very happy) and total score percent was obtained. Table 4.6 below gives a summary of the scores for 20 attitude test variables shown in Appendix H (i) for Nyeri District and in Appendix H (ii) for Nairobi District.

**Table 4.6: Total attitude score and wordlist score level 3 for Nairobi and Nyeri Districts**

<b>Nairobi District</b>				
Wordlist Level three	Total score in attitude test			Total
	Sad (0-20)	Happy (21-40)	Very Happy (41-60)	
Non-readers(0-9)	0	10	42	52
Instructional Level (10-14)	0	5	26	31
Independent Readers(15-20)	0	4	33	37
Total	0	19	101	120
<b>Nyeri District</b>				
Wordlist Level three	Total score in attitude test			Total
	Sad (0-20)	Happy (21-40)	Very Happy (41-60)	
Non-readers(0-9)	0	14	40	54
Instructional Level (10-14)	0	2	40	42
Independent Readers(15-20)	0	4	20	24
Total	0	20	101	120

As results in Table 4.6 indicate, out of 52 non-readers in Nairobi, none was sad, 10 (19%) were happy and 42 (81%) were very happy when reading. Out of 31 learners reading at instructional level from Nairobi District, none was sad, 5 (16%) were happy 26 (84%) were very happy when reading. Out of 37 independent readers, none was sad, 4 (11%) were happy and the rest 33 (89%) were very happy to read.

Studies indicate that positive attitude motivates learners to aim higher, take challenges and develop ambition to achieve (Abosi, 2007). Learners need motivation in order to learn to read on their own. Other studies such as Maslow (1968; 1970), Smith (1983), and Eggen & Kauchak (1997) suggest that motivation, whether intrinsic or extrinsic is paramount to reading

achievement. This claim was only confirmed by the results analysis from Nyeri but not from Nairobi. In researcher's opinion, learners' reading ability may not have been affected because this is already a cosmopolitan city and the main activity for children is to go to school.

#### 4.6 Methods and Materials Used in Teaching Reading

Teachers were asked if they ever taught reading and 26 (76%) said they did, 3 (9%) said they did not and 5 (15%) left the space blank. Teachers were asked to state the methods they used in teaching reading. They had the following responses as shown in Table 4.7 below:

**Table 4.7: Methods used by teachers in teaching reading**

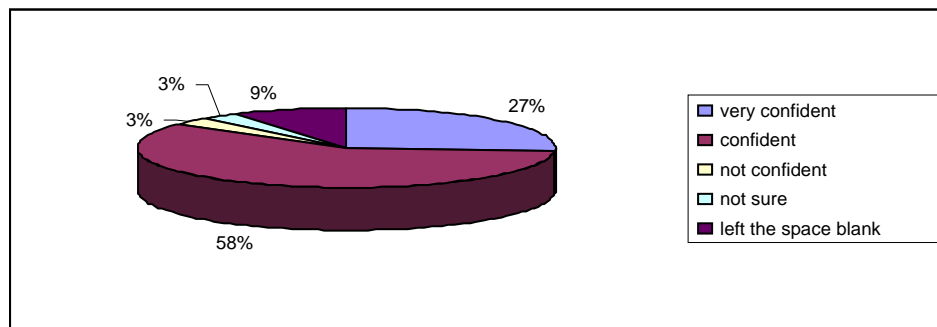
(N=72)

Methods Name	Teachers	%
<b>Phonic</b>	23	31.9
<b>Whole word method (look and say)</b>	23	31.9
<b>Alphabet method</b>	4	5.6
<b>Language experience</b>	3	4.2
<b>Others</b>		
<i>Flash cards</i>	3	4.2
<i>Sound</i>	3	4.2
<i>Modelling word</i>	1	1.4
<i>Individual/silent groups</i>	1	1.4
<i>Blank</i>	11	15.2
Total	72	100%

The results from the table show that 73.6% (total percentage of the 4 methods in bold) of the teachers used known methods of teaching reading, which are phonics, whole word, alphabet method and language approach. Another 11.2%

(total percentage of the 4 methods in italics) created their own methods of teaching reading while 11% left the space blank. They were further asked to indicate their level of confidence in teaching reading. Figure 4.21 below indicates that 9 teachers (26.5%) said they were very confident; 20 of them (58.8%) were confident; 1 (2.9%) not confident; 1 (2.9%) not sure and 3 teachers (8.8%) left the space blank.

**Figure 4.21 Teachers' level of confidence when teaching reading**



#### **4.6.1 Methods of Teaching Reading Taught in College**

As indicated in Table 4.8 trained teachers enumerated several methods of teaching reading they were taught in the teacher training colleges. Out of the many methods, only 5 (61%) (methods in bold) are actual methods of teaching reading, while the remaining 39% are non-existent methods.

**Table 4.8: Methods of reading taught in college**

Methods taught in college	Number	Number %
Sounds	5	7
Sound and read	1	1
<b>Phonics/ Phonetic *</b>	<b>18</b>	<b>24</b>
Flash cards	3	4
Imitating	1	1
Individual	2	3
<b>Look and say *</b>	<b>8</b>	<b>11</b>
<b>Whole word *</b>	<b>11</b>	<b>14</b>
<b>Alphabetic *</b>	<b>6</b>	<b>8</b>
Syllabus	1	1
Teaching by doing	1	1
Left right movement	1	1
Experiential	1	1
Modeling	1	1
Look and read	1	1
Phonology	1	1
<b>Language experience *</b>	<b>3</b>	<b>4</b>
Naming Pictures	2	3
Silent group	2	3
Sentence recognition	1	1
Blank	6	8
Total	76	100

Table 4.8 indicates that phonics/phonetic had the highest rating of 18(24%) out of total responses given, followed by whole word 11 (14%), look and say 8 (11%), alphabetic method 6 (8%) and finally language experience 3 (4%). The rest of the “methods” were teacher’s creation such as sounds which was not a method but an activity in reading rated at 5 (7%), flash cards which was a teaching material 3 (4%) individual 2 (3%) among others.

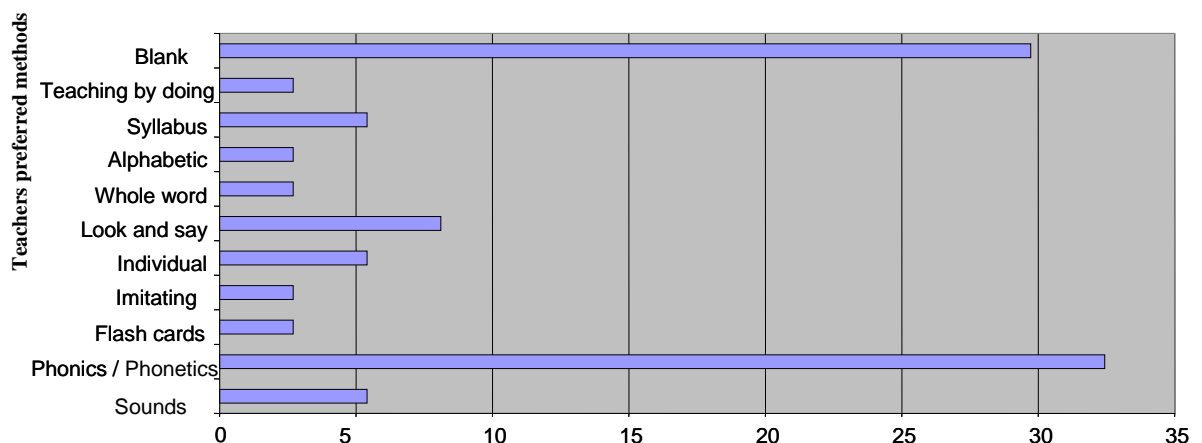
Looking at the responses by teachers on methods taught at their colleges, one would wonder whether some were really taught, or whether they had forgotten what they had learnt in colleges. The analysis of data actually show that the

teachers had scanty information on the actual methods of teaching reading. These findings are confirmed by Wheelock (1995) in a study for empowering teachers and learners which states that improved learning depends on teachers who are knowledgeable about academic content and are able to employ a variety of teaching methodologies. During focus group discussions, teachers said they were not given adequate knowledge and variety of methods to use when teaching reading. This explains why some learners graduate from primary schools without adequate skills in reading.

#### 4.6.2 Teachers' Preferred Methods of Teaching Reading

Teachers were further asked to indicate the methods of teaching reading that they preferred to use. The preferred methods included sounds, phonics, use of word cards, imitating, individual, look and say, syllabus, alphabetical and whole word methods. Figure 4.22 below displays these methods. From this figure, the teachers' responses are as confusing as the methods they say they were taught in college.

**Figure 4.22: Teachers' preferred methods of teaching reading**



For instance, they could not tell the difference between a method of teaching reading and a strategy of teaching reading. Thirty percent left the space blank. Some of the preferred methods of teaching reading given by teachers were phonics/phonetics with over 30%, others were “syllabus,” “look and say”, “individual,” and “sounds”, all which had over 5%.

#### **4.6.3 Materials Teachers Use While Teaching Reading**

Teachers were asked to name the teaching materials they used in reading. They cited several books they used in teaching English language and, therefore, it was difficult to tell whether they really used these materials for teaching English language or reading in English. Table 4.9 below gives the details: for example, primary English had a frequency of 11 (21%), New peak reader 11(2%) and new progressive English 10 (19%). While these basal reader series could be used as an approach and material to teach reading, teachers may have been using them as texts in teaching English language.

According to Lipson and Wixson (1997), teachers are expected to know the characteristics of the teaching/learning materials and the learners, in order to determine the level of difficulty. However, selection of materials can be a challenge to teachers especially if they are not trained on how to access the level of difficult of teaching/learning materials.

**Table 4.9: Books teachers use when teaching reading**

<b>Books used to teach reading</b>	<b>Frequency</b>	<b>Frequency%</b>
Primary English	11	21
New peak reader	11	21
New progressive English	10	19
Sound and read	5	10
Sound of sounds	4	8
Story books	3	6
Readers for slow learners	2	4
Improve your English	2	4
English Aid	2	4
Word perfect	1	2
Read and write	1	2
Total	52	100

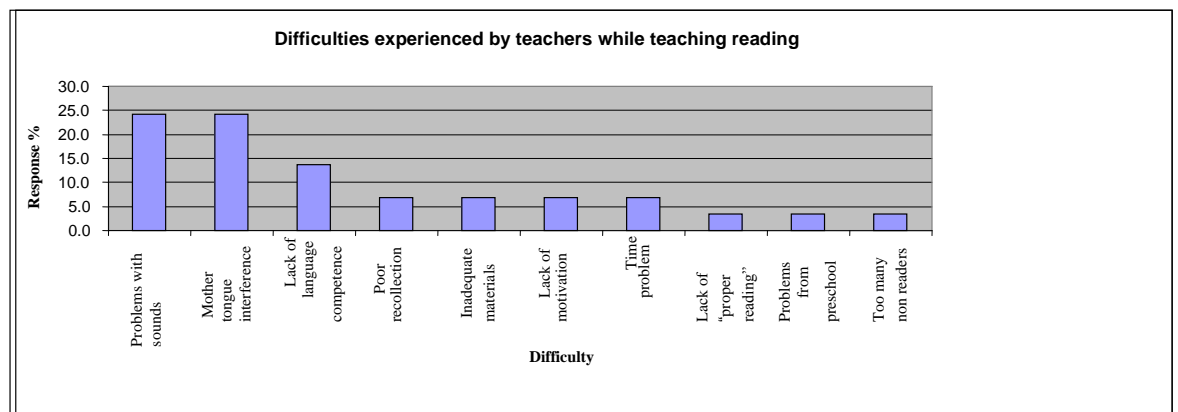
#### **4.6.4 Use of Supplementary Materials for Teaching Reading in Schools**

Teachers were asked to indicate the supplementary materials they use when teaching reading. They gave responses such as library and storybooks, magazines, objects, poems, pictures, read books one and two, comic books, English Aid, Cut-out letters and flash cards. From the responses given by the teachers above, it was quite clear that many teachers are not aware of the supplementary materials they could use for intervention. The possible reading materials were supposed to be interesting for an individual child. They should be lower than or at the class level of the child and commensurate to the mental age. Supplementary materials for teaching reading should include storybooks and magazines, self-correcting materials and computer assisted instruction materials (Mercer & Mercer 2001).

#### 4.7 Challenges in Teaching Reading

When teachers were asked to state the difficulties they experienced when using the various methods of teaching reading they had mentioned earlier, their (teachers') responses were, problems with sounds, mother tongue interference, lack of language competence, poor recollection, inadequate materials, lack of motivation, time problem, lack of "proper reading" skills, problems from pre-school and having too many non-readers. The distributions of these difficulties are shown by the graph below.

**Figure 4.23: Difficulties experienced by teachers while teaching reading**

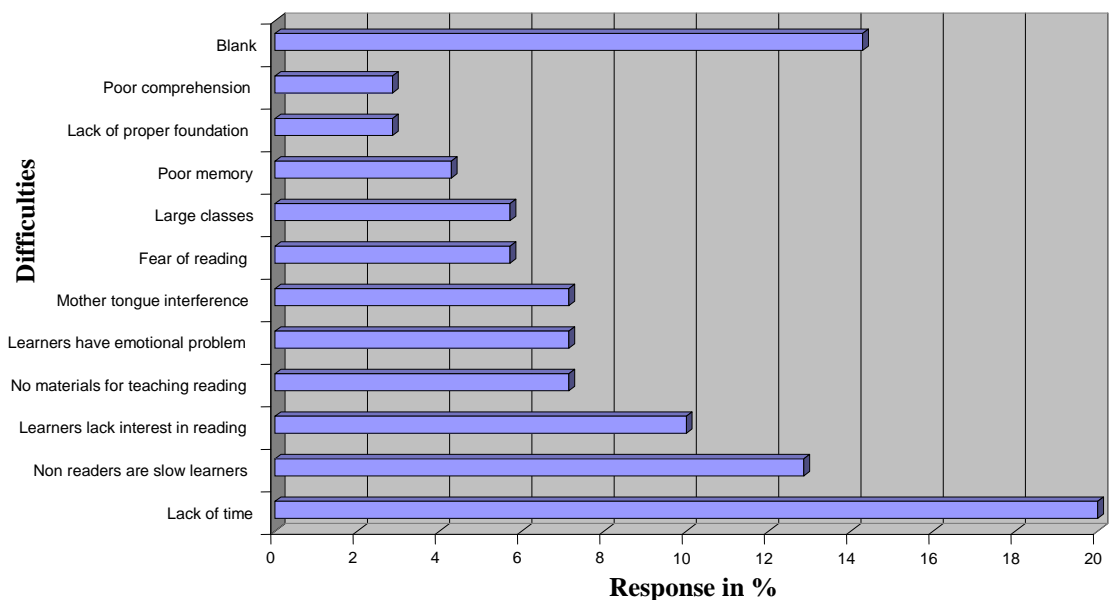


##### (i) Difficulties experienced by teachers while teaching reading to class 5 learners

Teachers were asked to give specific problems they were experiencing in teaching reading to class 5 learners. The answers were diverse which included problems with sounds, mother tongue interference and lack of language competence. These 3 challenges given by the teachers amount to over 50% and the figures are significant in teaching of reading. The responses given by teachers concur with Taylor et al. (1995) who asserts that children who come

to school speaking other languages rather than the language used in the school may have problems in reading. Study by Maneno (2008) found out that teachers were not able to correct phonological difficulties in children at school because they do not have skills.

**Figure 4.24: Difficulties experienced by teachers in teaching reading in class 5**



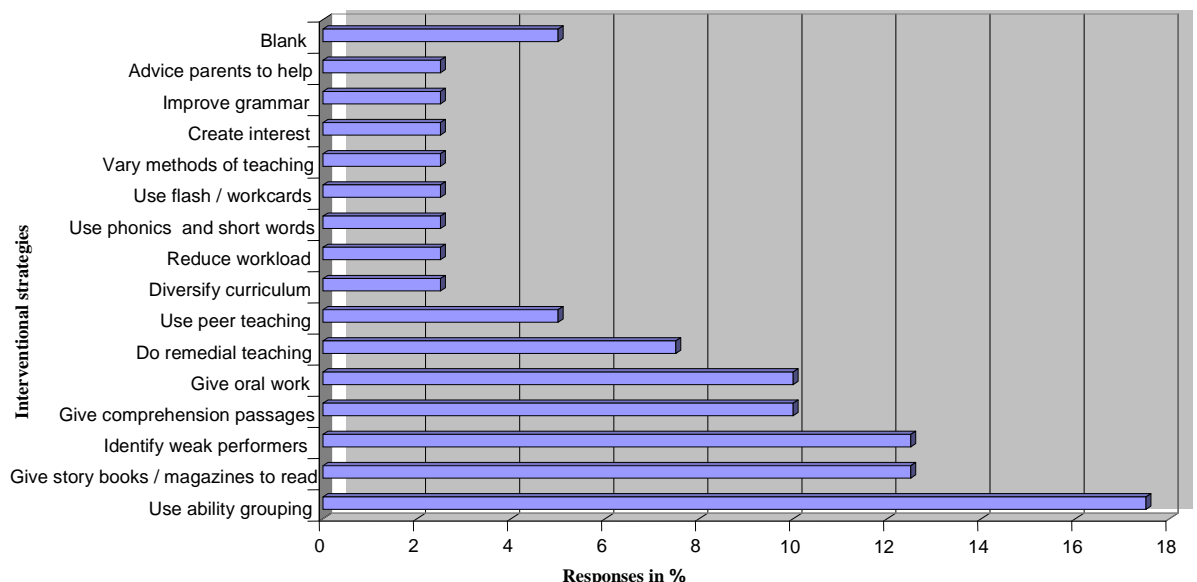
Scrutinizing the above responses by teachers in figure 4.24, one would conclude that the teachers' failure to teach reading is due to other external factors majoring on the learners' inabilities. All difficulties cited by teachers were either on learners' inadequacies or a problem caused by another thing or person. For example, approximately 20% of the teachers said the difficulties they experienced in teaching reading in grade 5 was due to lack of time. Over 12% of the teachers said the non-readers are slow learners and about 10% said such learners lack interest in reading. None of the teachers felt that the problems could result from the teachers' or schools' failure. With the

philosophy of inclusive education, it was the school system that should change to fit the learner's needs but not the other way round. In this study, there is clear evidence that teachers and the school may be the ones to blame for the mass reading failure of the learners being experienced in the schools in Kenya.

#### 4.8 Intervention Strategies Used Against Reading Disabilities.

Teachers were asked to indicate whether they carried out any intervention with learners who had reading disabilities. Thirty teachers gave the answer as yes while 4 left the space blank. They were also asked to give the strategies they use to remediate reading disabilities in learners. Among the strategies cited were use of ability grouping (about 18%), giving story books / magazines to learners, identification of weak learners (over 12%) and use of peer teaching (about 5%). Others were varying methods of teaching, creating interest and advising parents to help. These responses, cited in Figure 4.25 below, are good but are generally weak for a serious remedial programme. This may mean that teachers are not trained in intervention methods.

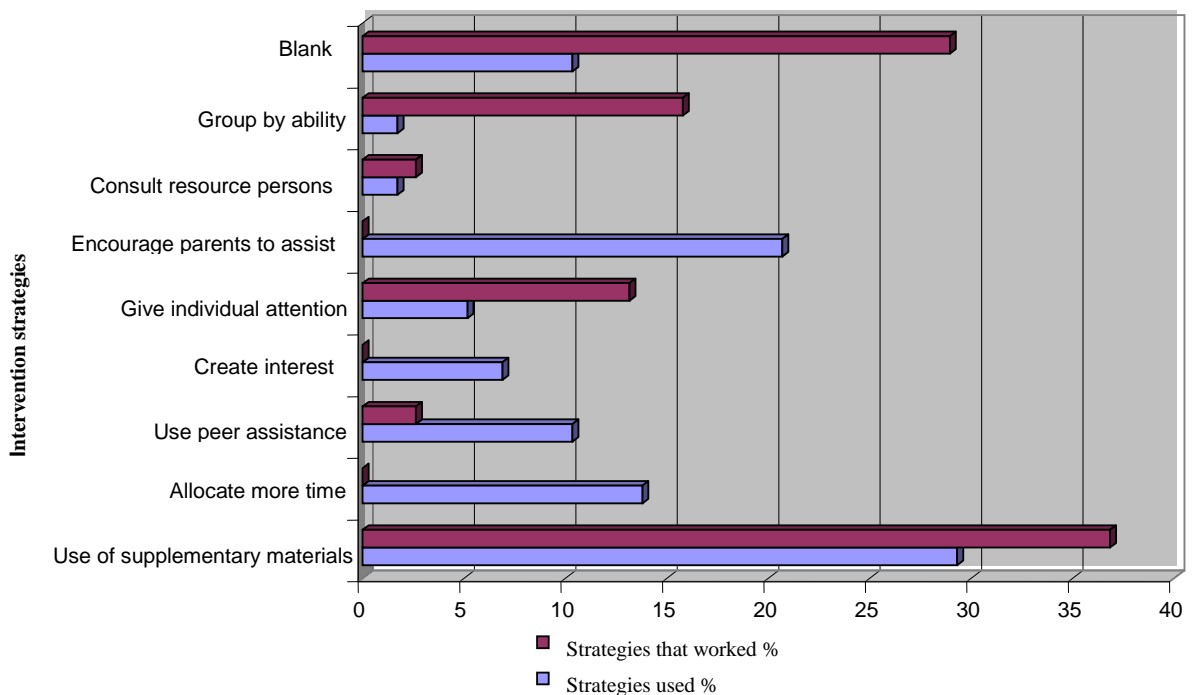
**Figure 4.25: Interventional strategies used by teachers**



#### 4.8.1 Interventional Strategies Used by Teachers and Those that Worked

Teachers were asked to indicate the strategies they have used to help poor readers in their class. They were also asked to indicate the strategies, which worked best for them. Figure 4.26 indicates teachers' responses from which the strategies they gave could work if they had full knowledge of proper remedial teaching and if they were given support. Such strategies that the teachers used included use of supplementary materials (about 30%), encouraging parents to assist (over 20%) and allocation of more time (about 15%). From the table below, there are some strategies that the teachers used but did not work; such were: allocation of more time, creating interest in the learners and encouraging parents to assist.

**Figure 4.26: Interventional strategies used by teachers in remediating reading- used and those that worked**



Teachers were asked to indicate the interventional methods they used and those that worked for them. From figure 4.26 above, there are big disparities on the two. For example teachers used grouping by ability but it did not work. This may mean that ability grouping done by teachers may not be for reading but for segregation. Other glaring areas were: encouraging parents to assist, giving individual attention, creating interest, using peer assistance and allocating more time. All these are good strategies but for the teachers in the study they never worked.

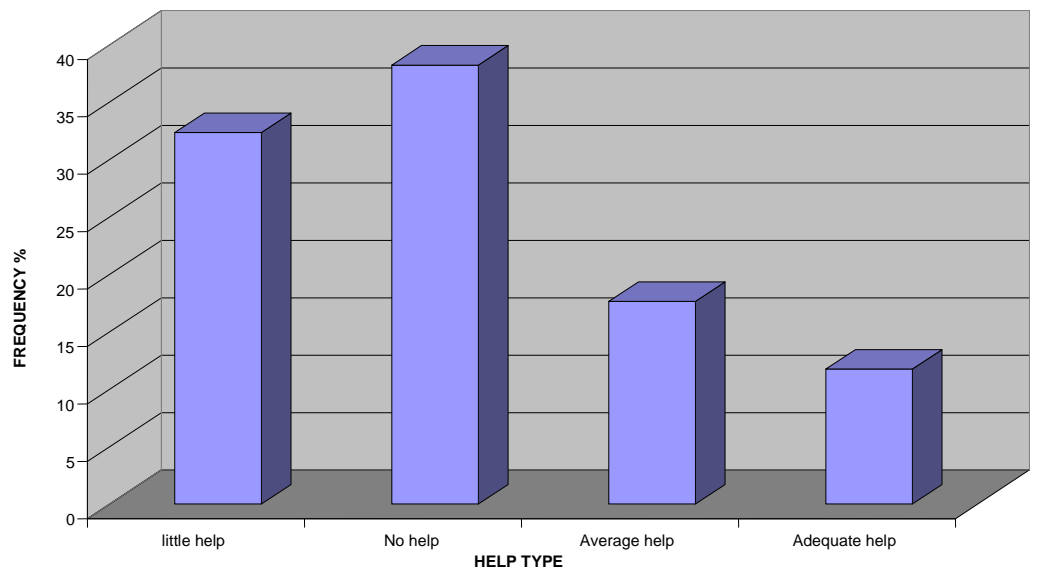
In the researcher's opinion, all the 5 strategies given by teachers which could not work were key to learning to read. Stoodt (1981) suggested that teachers need to create opportunities for learners to experience success by selecting materials that interest them and those in line with student's level of ability. Therefore, creating interest, allocating time and giving individual attention are of paramount importance.

A study on effects of parental involvement on intervention and peer tutoring of their children showed that learners who are given conducive conditions perceived themselves more socially confidential and adjusted more positively in school (Fantuzz 1995). The findings from the teachers in the study did not agree with Stoodt (1981) and Fantuzz, (1995). However the researcher agrees with all these educators that conducive conditions and inherent drive to read must show some positive results in a child. A child has to feel experience and see success in order to be motivated to do more.

#### 4.8.2: Help Given to Teachers on How to Assist Learners with Reading Disabilities by Frequency in Percentage

Teachers were asked whether they have any resource persons whom they could consult to help them address the problem they encountered in teaching poor readers. From the responses given by the teachers, 17 (50%) said they consulted other professionals as the TAC tutors 12 (35.3%) said they do not consult at all, while 5 (14.7%) left the space blank. From the teacher's responses, it may appear like there was little collaboration or consultation among them on methods.

**Figure 4.27: Help obtained from other professionals**



In Figure 4.27 above where teachers were asked to rate the type of help they got from other professionals (TAC tutors and QASO), the study found that there was no spirit of collaboration among teachers in the field. Only 4 (11.8%) teachers got adequate help, while 24 (70.5%) got little or no help at all.

Teachers were further asked to indicate the type of advice they received from the professionals and to state whether such advice ever worked with poor readers. They gave various answers such as: use of supplementary materials; giving remedial work, teaming up with parents and other teachers and using peer assistance. When asked what other assistance they required in order to help poor readers, they said they needed assistance in the methods of teaching; the number of learners be made manageable; they needed more materials; they needed more time for teaching reading and that they needed specialists to work with poor readers.

#### **4.8.3 Suggestions by Teachers on How to Improve Reading in Class 5 in Schools**

Teachers were asked to give suggestions on how to improve reading among the class five learners in order to reduce the number of learners with reading disabilities in the schools. The teachers gave a vast and rich amount of information on how to improve reading in the schools, information that they hardly use.

The information includes the following: provision of adequate and appropriate reading materials; reading lessons be taught adequately as from pre-primary to class 2; availability of resource persons to teach reading; reduction of class size; learners with reading difficulties should be given individual attention; development of activities to inspire/ motivate reading in learners; provision of a library in school; implementation of a reading policy in the schools; in-

service English course to teachers teaching reading; parental intervention; plenty of oral work for learners; provision of more teaching methods and materials in reading; giving more time to slow learners; frequent assessment in reading and taking mobile libraries to schools; engagement of teachers who are specially trained to teach reading; avoiding mid-year teacher transfers; encouraging group and peer reading; schools should improve teacher-learner relationship; creating good learning environment; not introducing English and Kiswahili languages to learners at once and schools changing their attitudes toward learners with reading difficulties.

#### **4.9: Section Three: Analysis of Hypotheses**

Six null hypotheses were tested in the study using chi-square test at  $p < 0.05$  statistical level of significance and the findings are recorded as follows:

##### **4.9.1 H<sub>0</sub>1: There was no significant difference between reading ability and the nature of lighting system at home among respondents from Nyeri and Nairobi districts**

The study shows there was no correlation between availability of electricity as a lighting system at home in Nyeri District at level three ( $p < 0.914$ ) which was greater than the acceptable value of  $p < 0.05$ . However, it showed in Nairobi District that there was a strong relationship between availability of electricity at home at level 3 reading ( $p < 0.05$ ) which was less than the normal  $p$  value of 0.05. The study therefore, confirmed there was a relationship between availability of electricity at home and reading ability in learners in Nairobi District but not Nyeri District.

**4.9.2 H<sub>0</sub>2: There was no relationship between availability of the reading table at home and learner's reading ability in Nairobi and Nyeri districts.**

From the results presented in Nyeri district, data, sing chi-square test at significant level of  $p < 0.05$  the result was  $P < 0.233$ . The results showed no relationship between availability of reading tables and the learners' reading abilities in Nyeri district. It can be concluded, therefore, that tables may not necessarily contribute to reading ability or disability in learners. In Nairobi district, the results showed a relationship between availability of reading table and the learner's reading ability at significant level of  $P < 0.045$ . However Nairobi district had almost equal number of learners; non-readers (22%) and independent (23%) levels who had reading tables. This may mean that the presence or absence of reading tables could not affect the learner's reading levels.

**4.9.3 H<sub>0</sub>3: There was no relationship between learners reading ability and the preferred language of communication at home and school in Nyeri and Nairobi Districts**

From the results presented from Nairobi District data, using chi-square test at significant level of  $p < 0.05$ , the result was  $p < 0.086$ . This value was not strong enough to enable the study to conclude that the pupil's preferred language of communication at home had any relationship with the child's reading ability. The study therefore, concluded that there was no relationship between the pupil's preferred language at home and reading ability in Nairobi District.

From the results presented from Nyeri District data, using chi-square test at significant level of  $p < 0.05$ , the result was  $p < 0.751$ . This value was not strong enough to enable the study to establish that there was a relationship between

the learners' preferred language of communication at home and learners' reading ability. The study therefore, concluded that there was no relationship between the pupil's preferred language at home and reading ability in Nyeri District.

#### **4.9.4 H<sub>0</sub>4: There is no relationship between the learner's reading ability and the school of study and its category**

The study was to find out whether there was a significant relationship between the school of study and its category with the learners' ability to read. Using chi-square test at significant level of  $p < 0.05$ , the result was  $p < 0.001$ . This finding shows that in Nairobi District, there was a strong relationship between the school of study and reading ability. The study, therefore, concluded that the school of study affected the level of reading difficulty among learners from Nairobi District. However, in Nyeri District, there was no significant relationship ( $P < 0.070$ ). The study, therefore, concluded that the category of study did not affect the level of reading in learners in Nyeri District. The reason may be that Nyeri District was a representative of rural schools where good and bad schools may be categorized by their division. This has to do with a particular school instead of a region or a division.

#### **4.9.5 H<sub>0</sub>5: There was no relationship between learners' attitude towards reading and reading abilities in Nyeri and Nairobi Districts**

The study went further to find out whether there was a significant relationship between reading ability and pupil's attitude using chi-square test at significant

level of  $p < 0.05$ . The result from the analysis showed  $F(4.91)$  and  $p < 0.562$ . This result showed that in Nairobi District, there was no relationship between the attitude of the learner and reading ability. The study therefore, concluded that the attitude of the learner did not affect the level of reading difficulty in Nairobi District.

Using chi-square test at significant level of  $p < 0.05$ , the result was  $F(4.0)$   $p < 0.022$ . This finding shows that in Nyeri District, there was a relationship between the attitude of the pupil and reading ability. The study, therefore, concludes that the attitude of the pupil affects the level of reading difficulty in Nyeri District.

**4.9.6 H<sub>06</sub>: There was no significant relationship between teachers' ability to identify specific reading errors and learners' actual performance on omitted, substituted mispronounced and added words in Nyeri and Nairobi Districts**

A chi-square test at  $p < 0.05$  was used to analyze data based on this hypothesis. The specific findings are shown below.

**(i) Omitted words**

The results for Nairobi District were chi-square = 22.527 and  $p < 0.004$ , which shows there was a significant relationship in omission of words, hence, the null hypothesis that the teachers' opinion on children's omission of letters and words do not relate with the actual performance of the pupils, was not accepted. The study therefore, concludes that there was a relationship between

learners who omit letters or words as judged by teachers' opinions and the scores on passage reading at level one for Nairobi District

On the other hand, the results for Nyeri District were chi-square = 7.742 and  $p < 0.459$ , show there was no significant relationship in omission of letters and words to enable us to accept the null hypothesis that the teachers' assessment of pupils who omit letters or words relate with their actual score on letters or words omitted from passage at level one. The study, therefore, concluded that there was no relationship between pupils who omit letters or words as judged by teachers' opinions and the scores on passage reading at level one for Nyeri District.

**(ii) Substituted words**

On substitution for Nairobi District, the chi-square = 8.441 and  $p < 0.392$  and for Nyeri District, the chi-square = 7.610 and  $p < 0.472$ . These results showed no significant relationship to enable us to accept the null hypothesis that the teachers' assessment of pupils who substitute letters or words relate with their actual score on letters or words substituted from passage reading at level one.

The study, therefore, concluded that there was no relationship between learners who substitute letters or words as judged by teachers' opinions and the scores on passage reading at level one for Nairobi and Nyeri Districts.

**(iii) Mispronounced words**

For pronunciation, aspects in Nairobi District, the chi-square = 5.477 and  $p < 0.706$  and the chi-square was = 3.94 and  $p < 0.862$  showing that there was no significant relationship to enable us to accept the null hypothesis that the teachers' opinions on children's mispronunciation of letters and words relate with the actual performance of the pupils.

The study therefore, concludes that there is no relationship between pupils who mispronounce letters or words as judged by teachers' opinions and the scores on passage reading at level one for Nairobi and Nyeri Districts.

**(iv) Added words**

On insertion in Nairobi District, the chi-square= 6.45,  $p < 0.597$  and for Nyeri, the chi-square=6.39,  $p < 0.642$ , thus showing no significant relationship, hence we did not accept the null hypothesis that the teachers' opinions on children's addition of letters and word, relate with the actual performance of the pupils. The study, therefore, concludes that there was no relationship between pupils who add letters or words as judged by teachers' opinions and the scores on passage reading at level 1 for both Nairobi and Nyeri.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.0 Introduction**

In the previous chapter, the collected data were analysed, results presented and discussed. In this chapter, the main objects are to present the summary of the findings, and make conclusions and recommendations of the study. The chapter comprises three sub-sections, namely, summary of findings, conclusions and recommendations.

#### **5.1 Summary of Findings**

The summary of the findings is based on objectives of the study.

##### **5.1.1 Demographic Characteristics of Respondents**

The mean age of the learners in the study was 12 years with the youngest at 10 years and the oldest at 17 years. The mean score for age in Nairobi District was 12.42 years, with the youngest learners being 10 years and the oldest 17 years while in Nyeri District, learners' age ranged between 11 years and 18 years. Majority of learners in both Nyeri and Nairobi Districts had only one sibling meaning the families were small. Both Nyeri and Nairobi districts had majority of learners obtaining 250 marks and below as first borns, Nyeri District having higher percentage (43%).

On the proportion of non-readers in class 5 according to teachers, in Nairobi District, there were 39 boys who could not read at class level while in Nyeri District, 64 could not read at class level at the time of the study. Nyeri District had higher number of learners who could not read passages and sentences with a frequency of 108 and 85 respectively.

### **5.1.2 Reading Abilities and Disabilities**

The minimum time taken to read level (class) one passage of 88 words was 1 minute and a maximum time of 7 minutes. The mean time taken to read the passage was 2 minutes and 19 seconds. The standard deviation was 1 minute and 43 seconds. The minimum time taken to read a passage of 277 words from class 4 was 2 minutes while the maximum time taken was 14 minutes. The mean time taken was 7 minutes. The standard deviation was 4.39 minutes. Twenty-one percent of learners could not write sensible sentences, 32% were very poor in composition writing and 15% could not coordinate ideas. Forty-one percent of the teachers said the learners were poor in other subjects because they were unable to read; another 18% said the learners were poor in other subjects because they could not comprehend sentences and 3% said the learners could not copy and read notes. Thirty-one (92%) of teachers of class 5 pupils said they thought there was a strong relationship between reading proficiency and class work scores while 2 (6%) did not respond to that question, 1 (3%) felt there was no relationship between reading proficiency and classwork scores. They further explained by saying that lack of reading proficiency affects a child in other subjects such as CRE, English, Social

Studies, Kiswahili and Mathematics, whereby learners perform poorly. That the terminal goal of proficiency in reading was to translate into desirable scores through understanding and inspiring models of meaning. They also said that those with reading problems in most cases have comprehension problems hence low scores. Learners answer questions according to how they understand them. If a child is able to read, he/she can also read questions and answer them correctly; Reading is the basis of good performance in other subjects and finally non-readers are not able to perform well.

In Nyeri District, of the 54 pupils who were non-readers, 37 (69%) of them were male and 17 (31%) were female. Out of 42 pupils who could read at instructional level, 26 (62%) were male and 16 (38%) were female. Out of 24 pupils who could read at independent level 15 (63%) were male and 9 (37%) were female.

### **5.1.3 Methods of Reading Assessment**

On identification of learners with reading disabilities, 88% of the teachers in the study assessed learners' reading abilities, while 6% did not. Over half (55%) of the teachers in the study tested their learners weekly, 18% tested their learners monthly and 12% termly. Only 3 teachers (9%) assessed their children through observation but the observation technique was not explained. Seven teachers (21%) assessed by giving oral questions. Five teachers (15%) had the learners read as they listened.

The teachers' knowledge of the characteristics of poor readers include; shyness and withdrawal, lack of comprehension, lack of interest, lack of confidence, inability to read fluently, fearful, poor concentration, restless, tensed up, lack of discipline, absenteeism and depression. The study established that teachers of class 5 pupils were aware of a number of good characteristics of pupils' reading abilities which included learner performing well overall, good eye contact, good concentration, creativity and inquisitiveness, comprehension of questions, active participation, confidence, reading fluency and enjoyment of reading.

#### **5.1.4 Effects of Reading and Performance**

Forty-one percent of the teachers said the learners were poor in other subjects because they were unable to read; another 18% said the learners were poor in other subjects because they could not comprehend sentences and 3% said the learners could not copy and read notes. Thirty-one percent of teachers of class 5 pupils said they thought there was a strong relationship between reading proficiency and classwork scores. While 2 (6%) did not respond to that question, 1 (3%) felt there was no relationship between reading proficiency and classwork scores.

#### **5.1.5 Causes of Reading Disabilities**

Teachers indicated that the possible causes of reading disabilities included past continuous failure and child's inability to communicate in English, mother-tongue interference, lack of support by parents and also hereditary factors

among others. Causes of reading disabilities according to learners included lack of availability of lighting system and reading table at home. Other causes included language used at home and school and the type of school the learners attended.

From the responses, teachers were aware of possible causes of reading disabilities, however, items like past continuous failures which had been rated highest were more of a secondary factor comprising several factors which may be some or all the other factors mentioned. The factors mentioned by the teachers so far were all external. The implication of that was that teachers may not want to be held accountable for the reading problems experienced by the learners. They would rather be comfortable apportioning the blame to external factors over which they had no control. The reason could be that they lacked full knowledge of the internal factors that cause reading disabilities and therefore, they find themselves helpless in helping learners overcome these problems. While most of the items in the checklist may have been a cause of reading disabilities, "laziness" had not been directly found to be a cause but it was one of the terms used by teachers to label learners.

#### **5.1.6 Methods and Materials Used in Teaching Reading**

Twenty-six (76%) of teachers said they taught reading, while 3 (9%) said they did not. Majority (73.6%) of teachers used known methods of teaching reading which included phonics, whole word, alphabet method and language approach, while another 11.2% created their own methods of teaching reading. Teachers

were asked to indicate their level of confidence in teaching reading, 9 teachers (26.5%) said they were very confident; 20 teachers (58.8%) were confident; 1 (2.9%) not confident; and 1 teacher (2.9%) was not sure.

When teachers were asked to indicate the supplementary materials they used when teaching reading, they gave the following responses, library and story books; magazines, “objects”, ”poems”, pictures, reading book one and two, comic books, English Aid, Cut-out letters and flash cards.

### **5.1.7 Challenges in Teaching Reading**

Difficulties experienced by teachers when teaching reading included problems with sounds, mother-tongue interference, lack of language competence, poor recollection, inadequate materials, lack of motivation, time problem,” lack of proper reading”, problems from pre-school and having too many non-readers. Teachers cited learners’ problems and external factors as their main challenges hindering them from teaching reading. Teachers neither associated their challenges to inadequate training nor to their lack of preparation.

### **5.1.8 Intervention Strategies Used Against Reading Disabilities**

Intervention strategies used by teachers were use of ability grouping, giving story books / magazines to learners, identification of weak learners, use of peer teaching, varying methods of teaching, creating interest and advising parents to help.

### **5.1.9 Testing of Hypotheses**

According to results of hypotheses testing, there is a relationship between availability of electricity at home and reading ability in learners in Nairobi District but not in Nyeri district. There was no relationship between the pupil's preferred language at home and reading ability in Nairobi and Nyeri Districts respectively. There was a relationship between the learner's reading ability and the school of study and its category in Nairobi District but in Nyeri district there was no relationship. The results of analysis indicated that the attitude of the pupil did not affect the level of reading difficulty in Nairobi District. However, in Nyeri District, the attitudes of the pupil did affect the level of reading difficulty in Nyeri District. There was a relationship between pupils who omit letters or words as judged by teachers and the actual scores on passage reading at level one for Nairobi District. Such a relationship was not observed for the Nyeri District case. There was no relationship between pupils who substitute letters or words as judged by teachers and actual scores on passage reading at level 1 for both Nairobi and Nyeri districts respectively. There was no relationship between pupils who mispronounce letters or words as judged by teachers' opinions and the scores on passage reading at level 1 for both Nairobi and Nyeri. There was no relationship between pupils who added letters or words as judged by teachers' opinions and the scores on passage reading at level 1 for both Nairobi and Nyeri districts respectively.

## 5.2 Conclusion

The study arrived at the following conclusions based on the research findings. The study concluded that the learners who scored low in the wordlist and reading passage were equally poor performers academically. This was in line with the conceptual framework of the study which indicated that both internal and external factors cause reading difficulties, hence, poor academic performance. On the question of whether teachers have knowledge of causes of reading disabilities, the study concluded that the teachers in schools are not fully informed on the possible causes of reading disabilities and, therefore, they cannot prevent the occurrence of the above conditions. On the questions of knowledge and skills of identifying reading disabilities, the study concluded that teachers are not aware of the various methods that could be used in identifying learners with reading difficulties. Therefore there is a dire need to train the primary school teachers on the methods of identifying reading difficulties in learners to avoid learners continued failing in school subjects. These skills which the teachers do not have are actually the foundation of good teaching and stable learning of all school subjects.

On the question of whether teachers teach reading and if they know the methods appropriate for teaching reading, the study concluded that most teachers do not teach reading in class 5, and only a few teach it in class 1 to 3. Teachers do not have the knowledge and skills of the appropriate methods. It is quite unfortunate, therefore, that so many Kenyan children are being wasted because of the teachers' incompetencies. The "hangover" of teaching for

examination has left out too many children who can perform equally well if only teachers can teach for learning instead of teaching the curriculum. On the question of remediating against reading disabilities, the study concluded that teachers do not have adequate knowledge and skills while others felt there is no time. They also did not have supplementary materials they could use for remedial work.

The study also concluded that the teacher training colleges, both at tertiary and universities must devise better methods of training teachers. Most teachers in primary schools have P1 certificate qualifications, others have Approved Teacher Certificate and a few have bachelor degrees but those qualifications are not useful to the pupils with reading difficulties and the curriculum they are teaching. Finally, proper workable policies such as the time to be allocated for reading as a subject in all classes, skills and knowledge needed for teaching reading should be addressed.

### **5.3 Recommendations**

Based on the results, the following are the recommendations that require short and long-term address by different stakeholders.

#### **5.3.1 General Recommendation**

Reading is so critical to success in a learner's life that failure to read, not only constitutes an education problem, but also hinders the individual from enjoying a healthy and fulfilling life. It is, therefore, of paramount importance

for the government of Kenya to put in place policies and proper mechanisms of ensuring that reading is taught in schools at all levels and proper assessment of reading difficulties is conducted.

### **5.3.2 Ministry of Education**

- Reading is an ongoing process and therefore, it is recommended that it be taught all through primary levels (class 1 to 8) and be within the cognitive and reading developmental stages.
- A policy be put in place on teaching reading both at early childhood and primary class levels. Such a policy should ensure smooth transition of learners' movement from pre-school to primary school.
- Teachers who are already teaching lower primary and pre-school be in-serviced in teaching reading to avoid more wastage of Kenyan children.
- The Vision 2030 aims at reducing the class size from ratio of 1:47 to 1:40 but this can still be brought down to 1:35 to enable individualization especially with remedial reading lessons.
- The Ministry of Education to supply not only textbooks but also supplementary reading materials to schools. Teachers could also be in-serviced in preparing locally made materials for teaching reading.
- Ministry of Education to enhance proper remedial teaching both within regular classroom situation and "pull-out" programmes with specialists.

### **5.3.3 Kenya Institute of Education**

- Teacher training syllabus on reading whether in mother-tongue, Kiswahili or English be adequately developed to cater for individual learners and equip teachers adequately, especially in classes 1, 2 and 3.
- Reading readiness curriculum be developed for early childhood programmes against the mental age of the child.
- Assessment tools in reading skills be developed in Kenya and teachers be trained on their administration and interpretation for teaching rather than for just ranking.
- A course on children with learning disabilities which include reading difficulties be included in the primary teacher education curriculum.

### **5.3.4 Directorate of Quality Assurance and Standards and Teacher Advisory Centre tutors**

- More time be given to teaching, assessing reading and remediating reading disabilities, both at the primary teacher education colleges and primary schools.
- The Teachers Advisory Centres (TAC) tutors be re-trained in order to assume a more responsible duty at schools on teaching and assessing of reading.

### **5.3.5 Parents and Other Stakeholders**

Parents and schools should always work as a team in order to avoid “pushing” the children beyond their limit for the sake of passing examinations. They

should realize that children with reading disabilities can realize their potential in academic and life if they moved at their pace.

- Diversified methods and interesting materials need to be put in place both in schools and homes.
- Schools should have more library reading hours guided by the teachers.

#### **5.4 Areas for Further Research**

- Basically, even though the study was a fair presentation of urban and rural schools, it was limited to low achievers and, therefore, there is need to do a study with full presentation of good, average and poor performers.
- A study is required to identify in-depth causes of reading difficulties in Kenya.
- This study did not work on prevalence of children with learning disabilities, writing disabilities, reading disabilities and mathematics disabilities in Kenya and therefore, a study is recommended.
- This study covered only two provinces. A similar study should be replicated in other provinces.

## REFERENCES

- Abosi, O. (2007). Educating Children with learning disability in Africa. In *Learning Disabilities Research & Practice*, 22 (3), 196 – 201.
- Anderson, P.S., & Lapp, D. (1988). *Language Skills in elementary education* (4<sup>th</sup> ed.). New York: Macmillan.
- Arasa, J. N. (2004). *Cognitive correlates of English reading achievement among the standard three pupils in the slums of Nairobi*. A Ph.D Research Thesis. Kenyatta University.
- Balow, I. H., & Balow, B. (1964). Lateral dominance and reading achievement in the second grade. *American Educational Research Journal*. 139-143.
- Baumarind, D. (1989). Rearing competent learners. In W. Damon (ed.), *Child Development Today and Tomorrow*. (pp. 349-377). San Francisco: Jossey-Bass.
- Beard, R. (1987). *Developing reading 3-13*. London: Hodder and Stoughton.
- Beirne-Smith, M., Ittenbach, R.E., & Patton, J. R. (1998). *Mental retardation* (5<sup>th</sup> ed.). Upper Sadalle River. NJ. Merrill/Prentice Hall.
- Beldin, H.O. (1976). Difference between good and poor readers. Paper presented at the annual meeting of the college *Reading Association*. Miami Beach.
- Bempechat, J. (1990). The role of parent involvement in learner's academic achievement *A review of the literature trends and issues No. 14*. New York: Columbia University (ERIC Document Reproduction Service No. ED 322 285).
- Berger, M., Yule, W., & Rutter, M. (1975). Attainment and adjustment in two geographical areas: The prevalence of specific reading retardation. *Br. T. Psychiatry* 126:570-519.
- Bickel, W.E., & Bickel, D.D. (1986). Effective schools, classrooms, and Instruction: Implications for special education. *Exceptional Learners*, Vol. 52. No. 6 489-500.

- Bond, G.L., Tinker, M.A., Wasson, B.B., & Wasson, J.B. (1984). *Reading difficulties: their diagnosis and correction*. (5<sup>th</sup> ed.) Englewood Cliffs, New Jersey: Prentice Hall.
- Bowey, J. (1995). Socio-economic status differences in preschool phonological sensitivity and first-grade reading achievement. *Journal of Educational Psychology*.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University
- Caldwell, J. S. & L. (2005). *Intervention Strategies to follow – Informal Reading Inventory Assessment: so what do I do now?* Boston: Pearson
- Callaway, B., Jerrolds, B., & Gwaltney, W. (1974). The Relationship between reading and language achievement and certain sociological adjustment factors. *Reading Improvement 11*. 19-26.
- Carnine, D., Silbert, J., & Kameenui, E. J. (1997). *Direct Instruction Reading* (3rd ed.). New Jersey: Merrill/Prentice Hall.
- Chall, J. (1983). *Stages of reading development*. New York: Mc Graw-Hill.
- Chall, J. (1987). Reading development in adults, *Annals of Dyslexia*, 37, 240-251.
- Chall, J., S (1989). Learning to read: The Great Debate 20 years later – A response to “Debunking the great phonics myth” *Phil Delta Kappan*, 70, 521-538.
- Chapman, L.J., & Czerniewska, P. (1978). *From process to practice*. London: Routledge and Kegan Paul.
- Chege, E. W. (1999). *Reading Comprehension and its relationship with academic performance among standard eight pupils in rural Machakos*. A Masters Thesis at Kenyatta University.
- Choate, J. S., Enright, B. E., Miller, L. J., Poteet, J. A., & Rakes, T. A. (1992). *Curriculum-based assessment and programming* (2<sup>nd</sup> ed.), Boston: Allyn and Bacon.
- Clark, R. (1983). *Family Life and School Achievement in boys*. Chicago. University of Chicago press.

- Clay, M. M. (1985). *The Early Detection of Reading Difficulties* (3rd ed.). Auckland, New Zealand: Heinmann.
- Creswell, J. W. (2005), *Educational Research Planning, Conducting, and Evaluating quantitative and Qualitative Research* (2<sup>nd</sup>.) Ohio: Prentice Hall.
- Dechant, E.V. (1982). *Improving the Teaching of Reading* (3<sup>rd</sup> ed.). Englewood Cliffs. NJ: Prentice-Hall.
- Downing, J., & Thackray, D. (1975). *Reading Readiness*. (2<sup>nd</sup> ed.). Sevenoaks: Hodder and Stoughton.
- Dreikrurs, R., Grunwald, B., & Pepper, F. (1998). *Maintaining sanity in the classroom: Classroom management techniques*. (2<sup>nd</sup> Ed.). Philadelphia. Taylor and Francis. Durkin, D., (1983). *Teaching them to read*. (4<sup>th</sup> ed.) Boston: Ally & Bacon.
- Durkin, D. (1983). *Children who read early*. New York: Teachers College Press.
- Dweck, C.S. (1975). The role of expectations and attributions in the alleviation of learned helplessness. *Journal of Personality and Social Psychology*. 31. 647-685.
- Eggen, P., & Kauchak, D. (1997). *Educational Psychology: Windows on Classrooms* (3rd ed.). New Jersey : Prentice Hall Inc.
- Eisenberg, L. (1978). *Definition of Dyslexia. their Consequences for Research and Policy*.
- Ekwall, E.E. (1976). *Diagnosis and Remediation of the Disabled Reader*. Boston, Massachusetts: Allyn and Bacon.
- Engelbrecht, Krieglara & Booysen. (1996) . *Perspective on Learning Difficulties International Concerns and South African Realities* (editors) J. L. Van Schaik Pub. Pretoria.
- Fantuzz, J.W., Davis, G.Y., & Ginsburg, M.D. (1995). Effects of parent involvement in isolation or in combination with peer tutoring on student self-concept and mathematics achievement. *Journal of Educational psychology*. V88 No. 2 272-292.

- Farmer, M. E. (1993). A comparison of the sequential processing abilities of dyslexia and normal readers, using visual and auditory tasks (Visual tasks). Dalhousie University. Canada. (0328). *Dissertation Abstracts International*. 56-(01B) p 522. No: AA INN
- Gaddes, W. (1985). *Learning Disabilities and Brain Function: Neuropsychological approach*. (2nd ed.). New York. Springer - Verlag.
- Gathumbi, A. W. Vikiru, L. I., & Bwire A. M. (2009). *Comprehensive English Literacy norms: The teacher's Resource for Teaching English Language* Vol. I, Phoenix Pub. Nairobi, Kenya
- Glaud, V.E. (1992). Evaluating the congruence among three methods of reading disability identification (Learning Disabilities). University of Georgia (0077). *Dissertation Abstracts International* Volume 54-02A.
- Gearheart, B.R. (1985). *Learning Disabilities: Educational Strategies*. (4<sup>th</sup> ed.). St. Louis. Missouri: Times mirror/Mosby College.
- Goldsteni, K. (1934). *The organism*. New York: American Book Company.
- Goodglass, H., & Barton, M. (1963). Handedness and differential perception of verbal stimuli in left and right visual field. *Perceptual and Motor Skills* 17. 851-854.
- Goldova, D.I. , & Lepper, M.R. (1996). Intrinsic motivation and the process of learning: Beneficial effects of contextualization personalization and choice. *Journal of Educational Psychology* V88 No. 4 715-738.
- Gough, P.B., & Tunmer, W.E. (1986). Decoding, reading and reading disability. *Remedial and Special Education*, 7, 6-10.
- Gunn, B.K. (1996). An investigation of three approaches to teaching, phonological awareness to first-grade students and the effects on word recognition (Reading Disabilities). University of Oregon (0171) *Dissertation Abstracts International*. Volume 57-09A. p3889. No: AA 19706736.
- Gunning, T. G. (1996). *Creating Reading Instruction for all Children* (2<sup>nd</sup> ed.) Boston, Allyn and Bacon.

- Heilman, A.W. Blair, T.R. & Rupley, W.H. (1981). *Principles and practices of teaching*. (5<sup>th</sup> ed.) Columbus. Ohio: Charles E. Merrill.
- Hillerich, R.L. (1964). Eye-hand dominance and reading achievement. *American Educational Research Journal*. 1. 121-126
- Hillman, C.L. (1990). The Effectiveness of a structured tutoring program used with migrant students. Western Michigan University (0257). *Dissertation Abstracts, 1987-1991, International Volume 51-05A 1561 No. AA19026678*.
- Hittleman, D.R. (1983). *Developmental Reading, K-8: Teaching from a Psycholinguistic Perspective* (2<sup>nd</sup> Ed.). Boston: Houghton Mifflin.
- Howard, J.K. (1996). The comparative effectiveness of a phonological awareness and decoding. Training treatment on students with and without several lexical retrieval defects. PEABODY College for Teachers of Vanderbilt University (0074). *Dissertation Abstracts International*. Volume 57-09 p3890. No: 19704801.
- Iversen, S. & Tunmer. (1993). Phonological processing skills and the reading recovery program. *Journal of Educational Psychology*, 85. 112-120.
- Kang'ethe, R. W. (1998). *The Analysis of Oral Reading, Error Patterns of the Reading Disabled and the Normally Achieving Children on the Wide Range Achievement Test Reading Subtest*. Unpublished Masters Thesis University of Toronto, Canada.
- Kenya Institute of Education.(2002) syllabus. *Ministry of Education, primary education syllabus vol 1*. Kenya. Kenya Institute of education.
- Kenya Institute of Education. (K.I.E.), (2003). *New Progressive Primary English: Pupils Books (Series 1 to 5)*-Nairobi: Kenya, Oxford University Press.
- Kenya Institute of Education. (2004). *Primary Teacher Education Syllabus. (Volume one)*. Kenya: Kenya Institute of Education.
- Kephart, N. (1971) . *The Slow Learner in the Classroom*. (Rev. ed.). Columbus, O.H: Charles E. Merrill.

- Kirk, S.A., & Elkins, J. (1975). Characteristics of Learners Enrolled in the Child Service Demonstration Centers. *Journal of Learning Disabilities* 8. 630-637.
- Kirk, S.A., Gallagher, J. J., & Anastasiow, N.J. (2003). *Educating Exceptional Learners* (10<sup>th</sup> Ed). Boston, New York: Houghton Mifflin.
- Kirk, S.A., Kliebhan, J.M., & Lerner, J.W. (1978). *Teaching Reading to Slow and Disabled Learners*. Boston.: Houghton Mifflin.
- Kirigia, K. E. (1991). *Assessment of English Reading comprehension of pupils completing primary education*. A case study of Meru Municipality zone. A Masters Research Thesis, Kenyatta University.
- Kombo, D. K., & Tromp, L. A. (2006). *Proposal and Thesis Writing: An Introduction*. Kenya: Paulines Publications Africa.
- Layton, L., & Deeny, K. (1996). Promoting Phonological Awareness in Pre-school Learners: *Learning Disorders Remediation and Education*. (29- 145). Module 5: Niilo Maki Institute, University of Jyvaskyla, Finland.
- Lerner, J. (2006). *Learning Disabilities and Related Disorders: Characteristics and Teaching Strategies*. (10<sup>th</sup> ed.). Boston: Houghton Mifflin
- Lerner, J. (2000). *Learning Disabilities: Theories Diagnosis, and Teaching Strategies*. (8<sup>th</sup> ed.). Boston: Houghton Mifflin
- Lerner, J., (1997). *Learning Disabilities. Theories, diagnosis and teaching strategies* (7th Ed.) Boston: Houghton Mifflin.
- Lerner, J. (1981). *Learning Disabilities, Theories, Diagnosis and Teaching Strategies* (3rd Ed.) Boston.: Houghton Mifflin.
- Leslie, L., & Caldwell, J. (2006). *Qualitative Reading Inventory – 4*. Boston. Pearson Education Inc.
- Lipson, M. Y., & Wixson, K. K. (1997). *Assessment & Instructional of Reading and Writing Disability: An Interactive Approach* (2<sup>nd</sup> ed.). New York, Longman.
- MacMillan, D.L. (1982). *Mental Retardation in School and Society* (2nd Ed.). Boston: Little, Brown.

- Malatesha, R.N., & Aaron, P.G. (1982). *Reading Disorders: Varieties and Treatments*. New York. Academic Press.
- Maneno, R., J. (2008). *Identification Processes of Articulation and Phonemic Disorders in Children with Communication Disorders in primary Schools*. Nairobi Province Kenya. A Ph.D Thesis at Kenyatta University.
- Maslow, A. (1968). *Toward a Psychology of Being*. Princeton NJ. Van Nostrend.
- Maslow, A. (1970). *Motivational and Personality* (Rev. ed.). New York: Harper and Row.
- McKenna, M, C., & Stahl, S.A. (2003) *Assessment for Reading Instruction*. New York. The Guilford Press.
- Mercer, C.D. (1983). *Students with Learning Disabilities* (2<sup>nd</sup> Ed.). Columbus. Ohio: Charles E. Merrill.
- Mercer, C.D. (1997). *Students with Learning Disabilities* (5<sup>th</sup> Ed.). Columbus. Ohio: Charles E. Merrill.
- Mercer, C. D., & Mercer, A. R. (2001). *Teaching Students with Learning Problems*. (6<sup>th</sup> Ed). Columbus. Ohio: Charles E. Merrill.
- Michelson, D.W. (1987). Instructional Malpractice and Education Liability: A Study to Analyze Court Decisions to Determine the Administrative and/or Educational Issues or Practice Which Lead to Litigation, Michigan State University (0128). *Dissertation Abstracts International Volume* 48-03A p 551, No. AA 187 14348.
- Ministry of Education, Science and Technology.(2001). *Education for All (EFA) in Kenya. A National Handbook on EFA 2000 and Beyond*. Kenya Nairobi.
- Ministry of Education. (2006). *Nyeri District Primary Schools, 2006 Results Analysis*. Report of Kenya: Nairobi
- Ministry of Education. (2006). *Nairobi Primary Schools, 2006 Results Analysis*. Report of Kenya. Nairobi.
- Ministry of Education. (2003). *Report of the Task force on the implementation of Free Primary Education (PFE)*. Nairobi.

- Mossman, P.J. (1996). Segmental Awareness, Automatic Naming and Memory Coding in Relation to Young Learners's Word Reading (Phonological processing). The University of Regina, Canada. (0148) *Dissertation Abstract International*, Volume 57-12B p 7752 No: AA INN 14532.
- Mugenda, O. M, & Mugenda, A.G. (2003). *Research Methods: Quantitative & Qualitative Approaches*. Nairobi: ACTS Press.
- Newman, H. (1969). *Reading: Process and Product*. Forest Hills. New York: Prestige Educational.
- Newmann, F.M., & Wehlage, G.G. (1993). Five standards of authentic Instruction. *Educational leadership*, 50, 7 8-12.
- Njoroge, C. W. (2000). *Factors Affecting Availability Acquisition and Utilization Acquisition and Utilization of Resources in the Teaching of English in selected Kenyan Second Schools*. A Masters Research Thesis. Kenyatta University.
- O'Connor, S.C., & Spreen, O. (1988). The Relationship Between Parents' Socio-economic Status and Education Level, and Adult Occupational and Educational Achievement of Learners with Learning disabilities. *Journal of Learning Disabilities* 21, 148-153.
- Orodho, J.A. (2005). *Techniques of Writing Research Proposals & Reports in Education and Social Sciences*. (2<sup>nd</sup> ed.). Nairobi. HP Enterprises.
- Payne, J.S., Polloway, E.A., Smith, J.E., & Payne, R.A. (1977). *Strategies for Teaching the Mentally Retarded*. Columbus, Ohio: Charles E. Merrill.
- Pearson, D.P. (1978). Some Practical Applications of a Psycholinguistic Model of Reading, in *What Research Has to Say About Reading Instruction*, by Jay Samuels (eds.) Newark International Reading Association.
- Peck, B.B., & Stackhouse, T. (1973). Reading Problems and Family Dynamics. *Journal of Reading Disabilities*. 506-511.
- Piaget, J. (1983). Piaget's theory in P.H. Mussen (Ed.), *Handbook of Child psychology* (vl 1). New York Wiley.
- Pinnel, G.S. (1989). Reading Recovery: Helping at Risk Learners Learn to Read. *Elementary School Journal*. 90. 161-184.

- Republic of Kenya. (1988). *Kamunge Report of the Presidential Working Party on Education and Manpower training for the Next Decade and Beyond*. Government Printers, Nairobi.
- Republic of Kenya. (1999). *Kenya National development Plan (2002-2008)*. Government printers.
- Republic of Kenya. (2005). *Sessional paper no. 1 of 2005 on a Policy framework for education, training and research*. Nairobi: Government Printers.
- Republic of Kenya, (1999). Koech report: *Totally Integrated Quality Education and Training – TIQET: Report of the Commission of Inquiry into the Education System of Kenya*. Kenya, Nairobi
- Republic of Kenya. (2007). *Kenya Vision: A Globally Competitive and Prosperous Kenya*: Nairobi, Kenya.
- Rupley, W.H., & Blair, T.R. (1979). *Reading Diagnosis and Remediation: A primer for Classroom and Clinic*. Chicago Rand Mc Nally.
- Ruto, S. J., Ongwenyi, Z. M., Mugo, J. K. (2009) *Educational Marginalization in Northern Kenya UNESCO*, Global Monitoring Report 2010.
- Salvia, J., & Ysseldyke, S. (2007). *Assessment in Special and Inclusive Education*. (10<sup>th</sup> ed.) Boston: Houghton Mifflin.
- Shanker, J. L., & Ekwall, E. E. (2003). *Locating and Correcting Reading Difficulties* (8<sup>th</sup> ed.) New Jersey. Merrill Prentice Hall.
- Shea, T.M., & Bauer, A.M. (1994). *Learners with Disabilities. A Social Systems Perspective of Special Education*. Madison, Wisconsin. WCB Brown and Benchmark.
- Shumow, L., Vandell, D.L., & Kang, K. (1996). School Choice, Family Characteristics and Home – School - Relations Contributors to School Achievement. *Journal of Educational Psychology*. V88 No. 3. 451-460.
- Smith, D. D., & Luckasson, R. (1995). *Introduction to Special Education Teaching in an Age of Challenge*. (2<sup>nd</sup> Ed.). Boston: Allyn and Bacon.
- Smith, R.S. (1983). *Learning Disabilities. The Interaction of Learner, Task, and setting*. Boston: Little, Brown.

- Snowling, M., & Hulme, C. (1989). A Longitudinal Case Study of Developmental Phonological Dyslexia. *Cognitive Neuropsychology*, 6, 379-401.
- Spreen, O., Risser, A. H., & Edgell, D. (1995). *Developmental Neuropsychology*. New York.: Oxford University Press.
- Stanovich, K. E. (1988). Explaining the differences between the dyslexic and the garden variety poor reader: The phonological core variable – difference model. *Journal of Learning Disabilities*, 21, 590-612
- Stoodt, B. D. (1981). *Reading Instruction*. Boston: Houghton Mifflin.
- Taylor, B., Harris, L.A, Pearson, P.D., & Garcia, G. (1995). *Reading Difficulties. Instruction and Assessment* (2nd Ed.). New York.: Mc Graw-hill.
- Tinker, K.J. (1965). The role of laterality in reading disability: Reading and Inquiry Conference Proceedings of the International Reading Association. 10. 300-303.
- Tompkins, G. E. (2004). Literacy for the 21<sup>st</sup> century: *Teaching Reading and Writing in Grades 4 through 8*. Columbus, Ohio: Pearson Prentice Hall.
- Torgesen, J.K., Wagner, R.K. & Rashotte, C.A., (1997). Approaches to the Prevention and Remediation of Phonologically Based Reading Disabilities. *Learning Disorders Remediation and Education. Module 5 p. 289-304*. Niilo Maki Institute, University of Jyvaskyla.
- UNESCO. (2005). *Education For All (EFA) in Africa Paving the Way for Action*. Dakar Regional office for Education in Africa
- Vellutino, F. R. (1979). *Dyslexia: Theory and research*. Cambridge. MA, MIT press
- Wasik, B.A. ,& Slavin, R.R. (1993). Preventing Early Reading Failure with one to one Tutoring: A Review of Five programs. *Reading Research Quarterly*. 28. 179-200.
- Wells, A. S. (1990). Public School Choice: Issues and Concerns for Urban Educators. *Eric/Cue Digest* No. 63

- Wheelock, A. (1995). *Empowered Teachers, Empowered Learners – Reform in Progress in Louisville’s High Middle School*. Columbia University. NCREST Teachers College.
- Wilson, R.M. (1972). *Diagnostic and Remedial Reading for classroom and clinic*. (2<sup>nd</sup> ed.). Columbus: Charles E. Merrill.

**INTRODUCTION LETTER****Questionnaire for Teachers on Identification of Learners with Reading Disabilities**

Dear Sir/Madam,

My name is Ms Mary Runo and I am conducting a PhD research on reading habits of primary school pupils. I am particularly interested in Standard five children who are experiencing reading difficulties in your school/class in Nairobi and Nyeri Districts. In your everyday encounter with these children, something probably bothers you about a child's inability to perform as expected. Sometimes you don't know what the problem is hence remediation becomes difficult. For this reason, I would like to ask you a few questions that may help us to understand these children better. I assure you that all information given here will be treated with utmost confidentiality and only be used for research purposes.

Please spare some of your precious time to answer these questions. It is not necessary to write your names.

Thanking you in advance.

**Mary Runo**  
**Student, Special Education Department**  
**Kenyatta University**  
**Date: 2<sup>nd</sup> January 2007**

## APPENDIX A

### A Questionnaire for Teachers on Identification of Learners with Reading Disabilities

#### A. Directory Information

*Please provide the following information by filling in as requested*

- (i) Your age bracket: Below 20 [ ] 21-30 [ ] 31-40 [ ] 41-50 [ ] above 50 [ ]
- (ii) Gender: Male [ ] Female [ ]
- (iii) Name of your school \_\_\_\_\_ Location \_\_\_\_\_ Division \_\_\_\_\_  
District \_\_\_\_\_ Province \_\_\_\_\_
- (iv) Your professional grade P3 [ ] P2 [ ] P1 [ ] S1 [ ] Diploma [ ] AT [ ]  
B.Ed [ ] Untrained [ ] Other (specify)  
\_\_\_\_\_
- (v) Year of graduation from teacher training college \_\_\_\_\_
- (vi) Area of specialization \_\_\_\_\_
- (vii) Indicate your number of years of teaching experience in lower and upper primary by ticking in the relevant place below:
- Lower primary classes (Std 1 to 3)**  
1-3yrs [ ] 4-to 7yrs [ ] 8-10yrs [ ] 11-14yrs [ ] Over 15yrs [ ]
- Middle Primary classes (Std 4 to 5)**  
1-3yrs [ ] 4-to 7yrs [ ] 8-10yr [ ] 11-14yrs [ ] Over 15yrs [ ]
- Upper primary classes (Std 6-8)**  
1-3 [ ] 4-7 [ ] 8-10 [ ] 11-14 [ ] Over 15 [ ]
- (ix) What is the total number of pupils in your class \_\_\_\_\_?
- (x) Indicate the number of boys and girls in the class: No. of Boys \_\_\_\_\_  
No. of Girls \_\_\_\_\_

#### B. Information on Teaching of Reading and assessment

1.
  - a. Number of pupils in your class? Boys \_\_\_\_\_ Girls \_\_\_\_\_
  - b. Number of repeaters in your class Boys \_\_\_\_\_ Girls \_\_\_\_\_
  - c. How many of them cannot read at class level? Boys [ ] Girls [ ]
  - d. How many students in your class cannot read?  
Words \_\_\_\_\_  
Sentences \_\_\_\_\_  
Passages \_\_\_\_\_
2. Indicate whether or not you teach reading by ticking accordingly.  
Yes [ ] No [ ]

2b. If yes, indicate by ticking the description that best describes your level of confidence in the teaching of reading.

- Very confident
- Confident
- Not confident
- Not sure

c. State all the methods of teaching reading that you were taught in college if you went to college? \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

d. Which of the methods mentioned above do you prefer?  
 \_\_\_\_\_  
 \_\_\_\_\_

3a. Do you ever assess pupils' reading ability? Yes \_\_\_\_\_ No \_\_\_\_\_

b. What methods do you use to assess students' reading ability?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

c. Briefly describe how you assess pupils' reading ability  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

d. How often do you test children's reading ability?  
 Every week               
 Every month              
 Every term                
 Every year             

4a. Which basal do you use when teaching reading/class textbook?  
 \_\_\_\_\_  
 \_\_\_\_\_

b. What are the weaknesses and strengths of the basal reader/textbook?  
 \_\_\_\_\_  
 \_\_\_\_\_

c. Which other supplementary material do you use in teaching reading?  
 \_\_\_\_\_  
 \_\_\_\_\_

5a. Do you experience difficulties in teaching reading to your std 5 pupils?  
 Yes                           No   

b. If yes, list some of the difficulties you encounter in your class.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- c. What strategies have you used to help poor readers in your class?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- d. Which strategies have worked best for you?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- e. What difficulties do you encounter in teaching poor readers?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- 6a. Do you have any resource person or persons you can consult to help you address the problems you encounter in teaching poor readers?  
 \_\_\_\_\_  
 \_\_\_\_\_
- b. How would you rate the help you get from the ones you have mentioned above?  
 (i) Adequate help [ ]  
 (ii) Average help [ ]  
 (iii) Little help [ ]  
 (iv) No help at all [ ]
- c. What advice (if any) have you tried that has worked?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
7. Are there areas you still need assistance?  
 Yes [ ] No [ ]
- Specify  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
8. How would you rate the importance of teaching reading efficiently in lower primary classes (1 - 3)?  
 (i) Very important [ ]  
 (ii) Important [ ]  
 (iii) Average [ ]  
 (iv) Less important [ ]  
 (v) Not important [ ]
9. How does the Continuous Assessment Test (CATs) assist you in improving teaching of reading in your class?  
 (i) Very much [ ]  
 (ii) Much [ ]  
 (iii) Average [ ]  
 (iv) Not much [ ]  
 (v) Continuous assessment is not relevant in the teaching of reading [ ]

b. How often do you give Continuous Assessment Tests (CATs) in reading to your learners?

- (i) Monthly [ ]
- (ii) Once a term [ ]
- (iii) Twice a term [ ]
- (iii) Once a year [ ]
- (iv) Other(s), (specify)

---



---



---

10a. Which of these methods of teaching reading do you use most frequently and why?

- Phonics method (Decoding Phonetic method) [ ]
- The alphabetic method [ ]
- Whole word method [ ]
- Language experience approach [ ]
- Other(s), specify

---



---



---

Why?

---



---



---

b. What difficulties do you experience when using each of the methods you have mentioned above?

---



---



---

11. Which textbooks do you use as reference in your class when teaching reading?

---



---



---

**C. Information about children characteristics**

12 a. Are there pupils who have repeated class 5?  
 Yes [ ] No [ ] Not sure [ ]

b. How many have repeated in total? \_\_\_\_\_

c. How many of the repeaters if any are boys and how many are girls?  
 No of girls \_\_\_\_\_ No of boys \_\_\_\_\_

13a. How many pupils in your class have reading difficulties?  
 Boys \_\_\_\_\_ Girls \_\_\_\_\_

b. How many of these pupils are repeaters in class 5?  
 Boys \_\_\_\_\_ Girls \_\_\_\_\_

c. List the common characteristics of children with reading difficulties that you have identified?

---



---



---

14. What are the characteristics of a good reader in class?

---



---



---

15. What are the characteristics of a poor reader in class?

---



---



---

**D. Methods of Assessment and Remediation**

16. What do you think is the most common cause of reading difficulties in your class 5 pupils? (Tick one or more)

- (i) Child cannot communicate in English [ ]
- (ii) Mother tongue interference [ ]
- (iii) Lack of motivation [ ]
- (iv) Laziness [ ]
- (v) Chronic sickness [ ]
- (vi) Lack of text books and reading materials [ ]
- (vii) Past continuous failure in school work [ ]
- (viii) Lack of support by parents [ ]
- (ix) Effects of poverty [ ]
- (x) Genetic (Inherited problem) [ ]
- (xi) Parents' illiteracy level [ ]
- (xii) Overloading of the curriculum [ ]
- (xiii) Poor teaching [ ]
- (xiv) Poor learning environment [ ]
- Other (s), specify [ ]

---



---



---

17. In your opinion, how does inability to read impact on your pupils overall performance in other subjects?

English comprehension \_\_\_\_\_

Writing composition \_\_\_\_\_

Other subjects \_\_\_\_\_

18a. What does your school policy say in assisting pupils who cannot read at all?

Lower \_\_\_\_\_

Middle \_\_\_\_\_

Standard 5 \_\_\_\_\_

b. Suggest what additional help can be provided to improve the standards of reading performance in your school.

---



---



---

19a. What strategies do you use to remediate reading difficulties in the children in your class?

---

---

---

b. What are the most effective ways that you have used to help poor readers?

---

---

---

20. What recommendations do you have to improve reading among the standard 5 pupils?

---

---

---

21a. Do you think there is a relationship between reading proficiency and class work scores?

---

---

---

b. What other suggestions do you have that would enable primary schools to reduce the number of pupils with reading difficulties?

---

---

---

**APPENDIX B****Checklist on Reading Errors (To be filled by the teachers)**

Child's Name \_\_\_\_\_ School \_\_\_\_\_

Zone \_\_\_\_\_ Sub-Location \_\_\_\_\_

Division \_\_\_\_\_ District \_\_\_\_\_ Province \_\_\_\_\_

What are the most common difficulties you notice in class 5 pupils who are unable to read?

---



---



---

Go through the following list and tick in the column that corresponds to the frequency of each difficulty according to your experience.

Child	1. Not at all	2. Less Frequent	3. Average	More Frequent	Most frequent
1. Omits a letter, word or sentence of (e.g. Jane- a cat)					
2. Substitutes a word or letter for another (e.g. The house, horse was big)					
3. Mispronounces words of (pottle or bottle)					
4. Adds letters or words (e.g. the cat ran (fast) after the rat.					

**Child's Academic Progress Records (to be filled by the child's teacher)**

- (i) State the number of days the child has been absent from class for the last one year.

---

State the reasons for the child's absence

---



---



---

- (ii) Describe the child's academic performance

---



---

- (iii) Any other information not contained in (i-iii )

---



---

## APPENDIX C

### Reading Attitude Survey

Dear learner, **THIS IS NOT A TEST**. There are therefore no **Right** or **Wrong** answers to the questions that follow. In **Section one** you are required to give the general information about yourself. In **section two**, you are required to circle the face that describes how you feel about reading. There are three alternatives of feelings to select from. These are **Very happy, happy** and **'sad'**.

The face on your left is labelled **'very happy'**, then next one is **'happy'** face, followed by **'sad'** face on the right. You will also be required to fill a small questionnaire with the help of the research assistants.

#### Record form for individual children:

**Instructions: Child fills in his/her own particulars with the help of the researcher:**

#### Section one:

##### a) Child's particulars

Child's name \_\_\_\_\_  
 School \_\_\_\_\_ Class \_\_\_\_\_  
 Province \_\_\_\_\_ District \_\_\_\_\_ Division \_\_\_\_\_  
 Location \_\_\_\_\_ Zone \_\_\_\_\_  
 Child's birth date \_\_\_\_\_ Age \_\_\_\_\_  
 Gender: **Male** \_\_\_\_\_ **Female** \_\_\_\_\_  
 Names of the father \_\_\_\_\_  
 Occupation \_\_\_\_\_  
 Names of the mother \_\_\_\_\_  
 Occupation \_\_\_\_\_

##### b) Child's Status at Home

Number of siblings: Brothers \_\_\_\_\_ Sisters \_\_\_\_\_  
 Child's order of birth in the family  
 1<sup>st</sup> [ ]      2<sup>nd</sup> [ ]      3<sup>rd</sup> [ ]      4<sup>th</sup> [ ]      5<sup>th</sup> [ ]      6<sup>th</sup> [ ]  
 Other (Specify) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

What kind of light do you use at night to read at home? (E.g. Electricity, Lamp etc)  
 Specify: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Do you have a reading table or a reading corner at home?

Yes [ ]

No [ ]

State the language you prefer to use at home and at school

(i) **At school**

(ii)

**At home**

Vernacular (specify) \_\_\_\_\_ [ ]

Vernacular (specify) [ ]

Kiswahili [ ]

Kiswahili [ ]

English [ ]

English [ ]

Other [ ]

Other [ ]

## Section Two: Reading Attitude Survey

### Elementary (Primary) Reading Attitude Survey

School \_\_\_\_\_ Grade/Class \_\_\_\_\_ Name \_\_\_\_\_

1. How do you feel when you read a book on a rainy day?



Very happy



Happy



Sad

2. How do you feel when you read a book in school during your free time?



Very happy



Happy



Sad

3. How do you feel about reading for fun at home?



Very happy



Happy



Sad

4. How do you feel about getting a book for a present?



Very happy



Happy



Sad

5. How do you feel about spending free time reading?



Very happy



Happy



Sad

6. How do you feel about starting to read a new book?



Very happy



Happy



Sad

7. How do you feel about reading books during the holiday?



Very happy



Happy



Sad

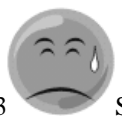
8. How do you feel reading instead of playing?



Very happy



Happy



Sad

9. How do you feel about going to the library to read?



Very happy



Happy



Sad

10. How do you feel about reading different kinds of books?



Very happy



Happy



Sad

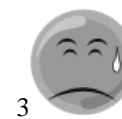
11. How do you feel when the teacher asks you questions about what you read in class?



Very happy



Happy



Sad

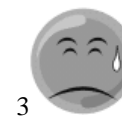
12. How do you feel when you are given a reading assignment/homework?



Very happy



Happy



Sad

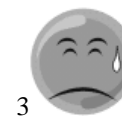
13. How do you feel about reading in school?



Very happy



Happ



Sad

14. How do you feel when someone is reading a book for you?



Very happy



Happy



Sad

15. How do you feel when it's time for reading English in class?



Very happy



Happy



Sad

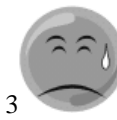
16. How do you feel about the stories you read in reading class?



Very happy



Happy



Sad

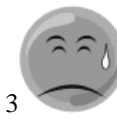
17. How do you feel when you read out loudly in class?



Very happy



Happy



Sad

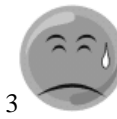
18. How do you feel about using a dictionary?



Very happy



Happy



Sad

19. How do you feel about reading for tests?



Very happy



Happy



Sad

20. How do you feel about taking a reading test?



Very happy



Happy



Sad

**APPENDIX D –WORDLIST LEVELS 1-5****Child's Name:**


---

<b>LEVEL 1</b>	<b>LEVEL 2</b>	<b>LEVEL 3</b>	<b>LEVEL 4</b>	<b>LEVEL 5</b>
1. good	1. village	1. subject	1. narrow	1. monitor
2. house	2. politely	2. neat rows	2. affection	2. heifer
3. knife	3. colourful	3. whisper	3. cruelty	3. bulk
4. pupil	4. open	4. syringe	4. neglect	4. dull
5. numbers	5. dawn	5. bandage	5. burst	5. lantern
6. grandchild	6. position	6. responsibility	6. depart	6. relations
7. thumb	7. clothes-line	7. beg	7. dignity	7. newsmen
8. mud	8. shopping	8. grown ups	8. plough	8. beach
9. weather	9. elbow	9. beyond	9. celebrate	9. landscape
10. uniform	10. toothbrush	10. opposite	10. community	10. horizon
11. sweep	11. wheelbarrow	11. pedestrian	11. workers	11. conversation
12. clock face	12. fare	12. pilot	12. computer	12. route
13. comb	13. scarf	13. countryside	13. queue	13. package
14. handkerchief	14. slippers	14. moonlight	14. trolley	14. honesty
15. aeroplane	15. hippopotamus	15. wound	15. wrap	15. boutique
16. shopkeeper	16. stripes	16. fishmonger	16. receive	16. corrosion
17. giraffe	17. showers	17. parcel	17. paper	17. headgear
18. branch	18. weed	18. dial	18. punch	18. seal
19. fishermen	19. tractor	19. internet	19. athletics	19. culture
20. lake	20. gourd	20. inadequate	20. coach	20. sympathy

Number of words correct in Level 1 \_\_\_\_\_, Level 2 \_\_\_\_\_, 3 \_\_\_\_\_,  
 Level 4 \_\_\_\_\_, Level 5 \_\_\_\_\_

**APPENDIX E (i)**  
**Reading Passage Level 1**

**Child's Name:** \_\_\_\_\_

**LEVEL ONE**

**Reading**

Yesterday was Saturday. In the morning it was warm and sunny. Juma was in the field. He played with his friends.

Later it was cold and windy. There were black clouds in the sky. It rained. Juma and his friends ran home.

Juma was wet and cold. The sitting room was dry.

Mother gave Juma some milk. The milk was warm. Juma was very happy.

In the afternoon the rain stopped. It was sunny. Juma and his friends walked back to the field. They played hide-and-seek.

**Answer these questions**

1. Was it raining in the morning?
2. What did the friends do in the morning?
3. Why did Juma run home?
4. Was it sunny in the afternoon?
5. Was the milk cold?
6. The friends played.....-and-seek.

Words  
Omitted  
\_\_\_\_\_

Substituted  
\_\_\_\_\_

Mis-  
pronounced  
\_\_\_\_\_

Added  
\_\_\_\_\_

Time taken in  
reading  
\_\_\_\_\_

No. of correct  
answers out of  
**6**  
\_\_\_\_\_

**Total no. of  
words missed**  
\_\_\_\_\_

Total no. of  
words in the  
passage  
\_\_\_\_\_

**APPENDIX E (ii)**  
**Reading Passage Level 2**

**Child's Name:** \_\_\_\_\_

**LEVEL TWO**

**Reading**

Juma, Wambui, Kadogo and Kola are walking in the park with Kola's father. 'Look at this tree,' says Kola's father. 'It is very old. It is two hundred years old.'

'Wow!' say the children. They look up at the tree. 'It has lovely red flowers,' says Wambui. 'Yes, it has,' says Kola's father. 'How many different flowers can you see on the tree?'

'I can see red and yellow flowers,' says Kola. 'I can see some plastic bags,' says Kadogo. 'Plastic bags can stay on your trees and bushes for a long time. They make the place look very dirty. We must put plastic bags in bins,' says Kola's father.

'I am good at climbing trees. Can I remove those plastic bags from the tree?' asks Kola. 'No, we will do that on Saturday,' says Kola's father.

**Answer the questions**

1. How many people are walking in the park?
2. How old is the tree?
3. Where should we put old plastic bags?
4. Who is good at climbing trees?
5. What will the friends do on Saturday?
6. Why is it good to put rubbish in a bin?

Words Omitted

\_\_\_\_\_

Substituted

\_\_\_\_\_

Mis-  
pronounced

\_\_\_\_\_

Added

\_\_\_\_\_

Time taken in  
reading

\_\_\_\_\_

Number of  
correct  
answers out of  
**6**

\_\_\_\_\_

**Total no. of  
words missed**

\_\_\_\_\_

Total no. of  
words in the  
passage

\_\_\_\_\_

## APPENDIX E (iii)

## Reading Passage Level 3

Child's Name: \_\_\_\_\_

**LEVEL THREE****Sidney falls from a mango tree**

Sidney and his friends climbed a mango tree. They had seen some ripe mangoes. They also wanted to look for eggs in a nest on one of the branches. They saw eggs. When Sidney was putting the eggs in his pocket, he fell and hurt himself. His friends called his parents.

His parents took him to hospital in an ambulance. They found a long queue of patients. They did not follow the queue. The nurses carried Sidney on a stretcher to the doctor's room. He was placed on a flat table.

The doctor checked Sidney. She wrote everything about Sidney's injury. He had broken an arm and a leg.

He was placed on a wheelchair and taken to the injection room. They found a nurse there. The nurse took a syringe and a needle from the cupboard. He gave Sydney an injection. Sydney gave one loud yell when the needle touched the skin.

The broken arm and leg were then dressed in a plaster. His wounds were dressed in a clean bandage. Sidney lost a lot of blood. Sidney was told to visit the hospital for dressing after four days. He was advised not to go to school for one week.

"Make sure you stay away from the birds and their eggs," the doctor told him.

Words  
Omitted  
\_\_\_\_\_Substituted  
\_\_\_\_\_Mis-  
pronounced  
\_\_\_\_\_Added  
\_\_\_\_\_Time taken in  
reading  
\_\_\_\_\_Number of  
correct  
answers out of  
**10**  
\_\_\_\_\_**Total no. of  
words missed**  
\_\_\_\_\_Total no. of  
words in the  
passage  
\_\_\_\_\_

1. Why is it not safe to climb trees?
2. What do you think happened to the eggs?
3. What happened to Sydney when he fell from the mango tree?
4. Why did Sydney and his friends climb the mango tree?
5. Who took Sydney to the hospital?
6. What did the doctor do to Sydney?
7. What did the nurse take out of the cup board?
8. What did the nurse do to Sydney?
9. Why did Sydney give 'one loud yell'?
10. What was done to Sydney's broken arm and leg?

## APPENDIX E (iv)

## Reading Passage Level 4

Child's Name: \_\_\_\_\_

## LEVEL FOUR

**It is a tyre burst**

Munyi and Koome were delighted when they got on the beautiful sleek bus. It had side mirrors. There was a big colour television at the front and a toilet at the back. A courteous conductor checked their tickets and reminded them to fasten their seat belts.

After watching TV for two hours, the boys fell asleep. They were woken by a loud bang. It sounded like a gunshot. The bus veered off the road and landed in a ditch. Everyone scrambled out in panic. 'It is a tyre burst,' the driver said when he got out of the bus.

When the tyre was changed, everyone got on the bus again. It was only when everyone got into the bus again that Koome realized that his brother was missing.

'Conductor, please don't start the journey without my brother!' Koome called out.

As they were all wondering what to do next, an elderly woman cried out. 'Help, there is a python here!' Everyone jumped up. 'I think someone is transporting a snake on this bus,' she said, pointing at a sisal sack under the seat.

'I stepped on the sack and felt something warm wriggle. It must be a snake!' the woman shouted.

'Throw the sack outside!' someone said.

'Please don't harm me,' a voice said from inside the sack.

Munyi crawled out of the sack looking dusty and frightened.

'Isn't this the boy we were looking for?' someone asked.

'What were you doing in a sack under the seat, young man?' the conductor asked.

'I heard gunshots and thought we were being attacked. So I hid in the sack.'

Everyone burst out laughing.

**Questions**Words Omitted  
\_\_\_\_\_Substituted  
\_\_\_\_\_Mis-pronounced  
\_\_\_\_\_Added  
\_\_\_\_\_Time taken in  
reading  
\_\_\_\_\_Number of  
correct answers  
out of **10**  
\_\_\_\_\_**Total no. of  
words missed**  
\_\_\_\_\_Total no. of  
words in the  
passage  
\_\_\_\_\_

1. What three things show that the bus was modern?
2. What did the conductor ask them to do?
3. Why did the bus stop?
4. When did Koome realize that his brother was missing?
5. What made the woman think that there was a snake in the sack?
6. Why did Munyi hide in the sack?
7. What did Munyi do when they woman shouted?
8. What did the conductor ask Munyi?
9. What sounded like gunshots?
10. If you found a snake in a bus what would you do?

## APPENDIX F: Tables containing more findings

### Learners who could not read at class 5, words, sentences and passages (teacher's data)

	School	Division	No of pupils in the class	Boys who cannot read at class level	Girls who cannot read at class	Total Number of pupils who cant read at class level	%	No. of pupils who cannot read words %	No. of pupils who cannot read sentences and %	No. of pupils who cannot read passages %	No. of repeaters in class 5 (boys)	No. of repeaters in class 5 (girls)
1.	Toi	NBI/Dag	70	6	7	13	18.5	13	13	13	2	1
2.	Ndururua	NBR/Dag	62	3	2	5	8	8	3	2	0	0
3.	Ndururua	NBI/Dag	56	2	6	8	14.3	1	4	2	0	0
4.	Kilimani	NBI/Park	48	2	1	3	6.3	1	3	4	3	2
5.	Jamhuri	NRB/Dag	50	4	2	6	12	1	6	6	0	0
6.	Joseph/Kang'ethe	NRB/Dag	50	0	0	0	0	0	0	0	0	0
7.	Joseph/Kang'ethe	NBI/Dag	60	2	1	3	5	3	4	5	0	0
8.	Jamhuri	NRB/Dag	52	-	-	-	0	2	2	4	0	0
9.	Jamhuri	NRB/Dag	48	7	6	13	27.1	3	7	7	0	0
10.	Hospital Hill	NBI/Park	49	0	0	0	0	0	0	0	0	0
11.	Highridge	NBI/Park	51	3	2	5	9.8	3	5	10	3	2
12.	Highridge	NBI/Park	51	3	2	5	9.8	3	5	10	3	2
13.	Kilimani	NBI/Park	49	0	3	3	6.1	2	2	2	0	0
14.	Milimani	NBI/West	51	3	2	5	9.8	4	2	8	0	0
15.	Joseph/Kang'ethe	NBI/Dag	60	1	1	2	3.3	0	3	5	2	1
16.	Thunguri	Nyeri/Othaya	37	1	2	3	8.1	0	0	3	0	0
17.	DEB Muslim	Nyeri/MOC	48	5	2	7	14.6	2	3	7	2	1
18.	Ruruguti	Nyeri/Othaya	29	7	4	11	37.9	0	0	0	5	1
19.	Ruruguti	Nyeri/Othaya	28	7	8	15	53.6	0	15	15	4	2
20.	DEB Muslim	Nyeri/MOC	55	3	5	8	14.5	0	3	5	0	0
21.	Thunguri	Nyeri/Othaya	37	11	4	15	40.5	15	15	15	0	0
22.	Gitundu	Nyeri/Othaya	50	5	6	11	22	1	3	7	0	2
23.	Munaini	Nyeri/Othaya	30	0	0	15	50	5	5	7	0	0
24.	Munaini	Nyeri/Othaya	32	5	1	6	18.8	5	9	11	0	0
25.	Temple Road	Nyeri/MOC	43	6	1	7	16.3	0	3	5	0	0
26.	Temple Road	Nyeri/MOC	41	7	7	14	34.1	2	13	14	0	0
27.	Ndururua	NBI/Dag	60	2	1	3	5	0	3	3	0	0
28.	Ndururua	NBI/Dag	58	1	-	1	1.7	1	1	1	2	0
29.	Nyamachaki	NYR/MOC	52	1	-	1	1.7	1	6	6	0	0
30.	Nyamachaki	NYR/MOC	52	2	-	2	3.8	1	6	6	0	0
31.	Nyamachaki	NYR/MOC	56	0	0	0	0	0	1	1	2	1
32.	Nyamachaki	NYR/MOC	52	0	0	-	0	0	0	0	1	0
33.	Nyamachaki	NYR/MOC	52	0	0	0	0	0	0	0	1	0
34.	Kamuyu	NYR/MOC	52	4	2	6	12	1	3	6	0	0
	Total - 16	4	1,611	103	78	181	11.2%	78	148	190	30	15

### APPENDIX G

#### Ten cases of learners who could read at independent level in class four

Item tested	N 73	N 81	N 90	N 114	N 102	N 155	N 163	N 164	N 225	N 228
Omits letter, word or sentence	4	4	3	4	4	4	1	1	3	3
Substitutes letter or word	4	1	3	3	3	3	1	2	1	1
Mispronounces words	3	2	3	4	4	4	1	1	2	2
Adds letters or words	4	3	4	5	3	3	1	1	1	2
Teacher's comment on pupil ability	60	60	60	60	80	40	40	80	80	60
Actual performance on wordlist	85	85	90	80	90	80	85	95	95	80
Score on passage	90	80	80	80	80	80	80	80	100	80
Words omitted	6	7	0	6	1	0	1	1	0	1
Words substituted	2	6	2	1	2	2	4	0	0	3
Words mispronounced	5	0	2	6	2	0	2	0	2	4
Words added	2	0	0	0	0	0	1	0	0	0

### APPENDIX H (i)

#### Summary for attitude scores for Nyeri District pupils

	Attitude Feeling Tested	Feeling Category		
		Sad	Happy	Very Happy
1	Feeling when reading on a rainy day	35.8	32.5	31.7
2	Feeling when reading a book in school during free time	10.0	37.5	31.7
3	Feeling when reading for fun at home	3.3	37.5	59.2
4	Feeling when getting a book for a present	4.2	32.5	63.3
5	Feeling when spending free time reading	12.5	43.3	44.2
6	Feeling when starting to read a new book	2.5	30.8	66.7
7	Feeling when reading a book during the holiday	5.0	44.2	50.8
8	Feeling when reading and not playing	34.2	35.8	30.0
9	Feeling when going to read in the library	5.8	35.8	58.3
10	Feeling when reading different kinds of books	5.0	44.2	50.8
11	Feeling when teacher asks questions about what you have read	3.3	45.0	51.7
12	Feeling when given a reading assignment	0.0	43.3	56.7
13	Feeling when reading in school during free time	1.7	32.5	65.8
14	Feeling when somebody else is reading for you	36.7	36.7	26.7
15	Feeling when it is English reading time	0.8	33.3	65.8
16	Feeling about stories read in reading class	0.8	40.8	58.3
17	Feeling when you read loudly in class	27.5	36.7	35.8
18	Feeling when you use a dictionary	3.3	35.8	60.8
19	Feeling when reading for a test	0.8	37.5	61.7
20	Feeling when taking a reading test	7.5	37.5	55.0
	<b>Average score for all the tests taken</b>	<b>10.2</b>	<b>37.9</b>	<b>51.9</b>

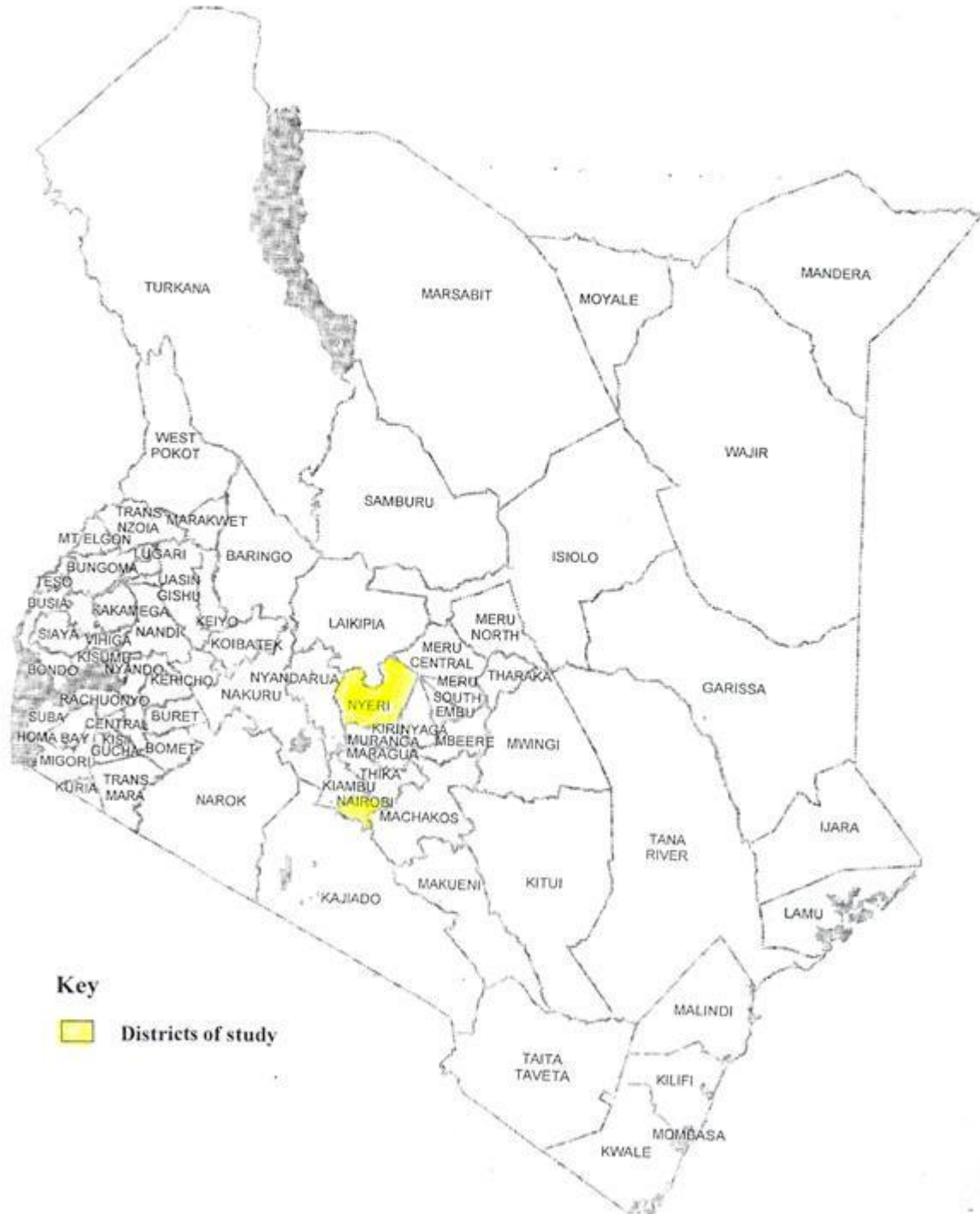
## APPENDIX H (ii)

**Table 4.4a Summary for attitude scores for Nairobi District pupils**

	Attitude Feeling Tested	Feeling Category		
		Sad	Happy	Very Happy
1	Feeling when reading on a rainy day	21.7	45.8	32.5
2	Feeling when reading a book in school during free time	10.0	34.2	55.8
3	Feeling when reading for fun at home	3.3	48.3	48.4
4	Feeling when getting a book for a present	2.5	26.7	70.8
5	Feeling when spending free time reading	5.8	51.7	42.5
6	Feeling when starting to read a new book	5.0	32.5	62.5
7	Feeling when reading a book during the holiday	10.8	47.5	41.7
8	Feeling when reading and not playing	22.5	40.0	37.5
9	Feeling when going to read in the library	6.7	35.8	57.5
10	Feeling when reading different kinds of books	1.7	34.2	64.2
11	Feeling when teacher asks questions about what you have read	5.8	46.7	47.5
12	Feeling when given a reading assignment	4.2	40.0	55.8
13	Feeling when reading in school during free time	2.5	34.2	63.3
14	Feeling when somebody else is reading for you	48.3	25.8	25.8
15	Feeling when it is English reading time	0.8	38.3	60.8
16	Feeling about stories read in reading class	1.7	36.7	61.7
17	Feeling when you read loudly in class	35.8	35.8	29.2
18	Feeling when you use a dictionary	5.8	44.2	50.0
19	Feeling when reading for a test	5.0	42.5	52.5
20	Feeling when taking a reading test	5.0	33.3	61.7
	Average score for all the tests taken	10.2	37.9	51.9

Districts of Study: Nyeri and Nairobi

184



**MINISTRY OF SCIENCE AND TECHNOLOGY**

Telegram: SCIENCE TECH, Nairobi  
 Telephone: Nairobi 318581  
 Email: [psunst@education.go.ke](mailto:psunst@education.go.ke)  
 When replying please quote



**JOGOO HOUSE "B"**  
**HARAMBEE AVENUE**  
 P.O. BOX 9583-00200  
 NAIROBI  
 17<sup>th</sup> July 2007

*Ref. MOST 13/001/ 37C 450/2*

**Mary Rono**  
**Kenyatta University**  
**P.O Box 43844**  
**NAIROBI**

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on, *'Identification of Learners with Reading Disabilities in two Districts in Kenya'*

This is to inform you that you have been authorized to carry out research in Nairobi and Nyeri Districts for a period ending 31<sup>st</sup> December, 2010.

You are advised to report to the Provincial Commissioner, the Provincial Director of Education, the Director KISE, the District Commissioner, the District Education Officer Nyeri District and the Town Clerk Nyeri Municipality before embarking on your Research.

On completion of your research, you are expected to submit two copies of your research report to this office.

  
**M. O. ONDIEKI**  
**FOR: PERMANENT SECRETARY**

Copy to:  
 Provincial Commissioner  
 Nairobi

The Provincial Director of Education  
 Nairobi

The District Commissioner  
 Nyeri District

The District Education Officer  
 Nyeri

The Town Clerk  
 Nyeri Municipality  
 Nyeri

The Director KISE  
 Nairobi