

BARRIERS TO INCLUSIVE EDUCATION FOR LEARNERS  
WITH VISUAL IMPAIRMENTS IN FOUR PRIMARY SCHOOLS  
IN KISII COUNTY, KENYA

BY  
NAMWAKI WAKUBE JANET

E55/12592/2009

A RESEARCH THESIS SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENT FOR THE AWARD  
OF THE DEGREE OF MASTER OF EDUCATION (SPECIAL  
NEEDS EDUCATION) IN THE SCHOOL OF EDUCATION OF  
KENYATTA UNIVERSITY

OCTOBER, 2013

**DECLARATION**

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

Signature:..... Date:.....

Namwaki Wakube Janet  
E55/12592/2009

This thesis has been submitted for review with our approval as the University Supervisors.

Signature:..... Date:.....

Dr. Joel Chomba  
Lecturer, Department of Special Needs Education, Kenyatta University

Signature:..... Date:.....

Dr. Violet Wawire  
Lecturer, Department of Educational Foundations, Kenyatta University

## **DEDICATION**

To teachers of learners with visual impairments, for their dedication to serve these learners, despite the many challenges they encounter during their work. It is also dedicated to the learners with visual impairments for confirming to the humanity that there are abilities in those with visual impairments.

## **ACKNOWLEDGEMENTS**

I would like to acknowledge and sincerely appreciate my supervisors, Dr. Joel Chomba and Dr. Violet Wawire, for their constant and tireless devotion in guiding me throughout the research writing period.

I can't forget the input from lecturers and fellow postgraduate students in the Special Needs Education department, which constantly gave me encouragement to soldier on. I salute them all.

Special thanks to my husband John Guto and children Esther, Cathy, Ken, Caroline, Joshua, Hellen and Benjamin for giving me encouragement to move on despite the challenges I encountered during the study. Mr. Antony Bojana deserves special gratitude for editing the final work.

Thanks to my dear parents Elisha and Mallap for taking me to school and also teaching me the value of hard work.

I cannot forget to register my sincere appreciation to Eunice who was ever ready with her computer to work on the document to the final end.

To those and others not mentioned here, I say may God bless you abundantly.

## TABLE OF CONTENTS

|  |           |
|--|-----------|
| DECLARATION .....  | ii        |
| DEDICATION .....   | iii       |
| ACKNOWLEDGEMENTS .....                                   | iv        |
| LIST OF TABLES .....                                     | ix        |
| LIST OF FIGURES .....                                    | x         |
| ABBREVIATIONS AND ACRONYMS .....                         | xi        |
| ABSTRACT .....   | xii       |
| <b>CHAPTER ONE: INTRODUCTION</b> .....                   | <b>1</b>  |
| 1.1 Background to the Study .....                        | 1         |
| 1.2 Statement of the Problem .....                       | 4         |
| 1.2.1 Purpose of the Study .....                         | 5         |
| 1.3 Objectives of the Study .....                        | 6         |
| 1.4 Research Questions .....                             | 6         |
| 1.5 Significance of the Study .....                      | 7         |
| 1.6 Scope and Limitations of the Study .....             | 8         |
| 1.6.1 Scope .....  | 8         |
| 1.6.2 Limitations of the Study .....                     | 8         |
| 1.7 Assumptions of the Study .....                       | 9         |
| 1.8 Theoretical and Conceptual Frameworks .....          | 9         |
| 1.8.1 Theoretical Framework .....                        | 9         |
| 1.8.2 Conceptual Framework .....                         | 11        |
| 1.9 Operational Definition of Terms .....                | 13        |
| <b>CHAPTER TWO: REVIEW OF RELATED LITERATURE</b> .....   | <b>15</b> |
| 2.0 Introduction .....                                   | 15        |
| 2.1 Background to Inclusive Education .....              | 15        |
| 2.2 Teachers' and School Administrators Attitudes .....  | 17        |
| 2.2.1 Pupils Attitudes Towards Inclusive Education ..... | 20        |
| 2.3 Teachers Training in SNE .....                       | 21        |

|   |           |
|---|-----------|
| 2.4 Special Educational Resources Available for Learners with VI..... | 23        |
| 2.5 Use of the Special Curriculum in the Four Primary Schools.....    | 24        |
| 2.6 Environmental and Physical Barriers.....                          | 26        |
| 2.7 Related Studies in Inclusive Education.....                       | 27        |
| 2.8 Summary of the Literature Review.....                             | 29        |
| <b>CHAPTER THREE: METHODOLOGY .....</b>                               | <b>31</b> |
| 3.0 Introduction.....   | 31        |
| 3.1 Research Design.....  | 31        |
| 3.1.1 Study Variables.....  | 32        |
| 3.2. Location of the Study.....                                       | 32        |
| 3.3 Target Population.....  | 33        |
| 3.4 Sampling Techniques and Sample Size .....                         | 33        |
| 3.4.1 Sampling Technique .....  | 33        |
| 3.4.2 Sample Size.....  | 34        |
| 3.5 Research Instruments .....  | 35        |
| 3.5.1 Questionnaires.....   | 35        |
| 3.5.2 Interview Schedule.....   | 36        |
| 3.6 Pilot Study.....  | 37        |
| 3.6.1 Validity .....  | 37        |
| 3.6.2 Reliability.....  | 37        |
| 3.7 Data Collection Procedures.....                                   | 38        |
| 3.8 Data Analysis .....   | 39        |
| 3.9 Logistical and Ethical Considerations .....                       | 40        |
| <b>CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND</b>                  |           |
| <b>DISCUSSION OF THE FINDINGS.....</b>                                | <b>41</b> |
| 4.0 Introduction.....   | 41        |
| 4.1 Demographic Characteristics of the Sample.....                    | 41        |
| 4.1.1 Distribution of Sighted and Learners with VI by Age.....        | 41        |
| 4.1.2 Gender of Teachers and School Administrators .....              | 43        |

|  |           |
|--|-----------|
| 4.1.3 Age Distribution of Teachers and School Administrators .....                                 | 44        |
| 4.2 Opinions of Teachers, School Administrators and Learners Towards Inclusive Education .....     | 45        |
| 4.2.1 Teachers' and School Administrators Opinions Towards IE for Learners with VI .....           | 45        |
| 4.2.2 Opinions of Learners With and Without Visual Impairments Towards Inclusive Education.....    | 50        |
| 4.3 Teachers Training Backgrounds .....  | 55        |
| 4.3.1 Experience in Teaching Learners with VI .....  | 57        |
| 4.3.2 Training in SNE .....  | 58        |
| 4.4 Availability of Teaching/ Learning Resources for Learners with VI .....                        | 60        |
| 4.4.1 Enrolment of Learners with VI .....  | 61        |
| 4.4.2 School Administrators' Responses on the School Dropout.....                                  | 62        |
| 4.3.3 Teachers' and School Administrators Views on Special Resource in the Schools .....           | 64        |
| 4.3.4 Sighted and Learners with VI Views on the Resources.....                                     | 66        |
| 4.5 Use of Specialist Curriculum in the Four Primary Schools .....                                 | 68        |
| 4.6 The Status of the Physical Environment in the Four Schools.....                                | 71        |
| 4.6.1 Actual Status of the School Environment in the Four Schools.....                             | 72        |
| 4.7 Barriers to Inclusive Education for Learners with VI.....                                      | 75        |
| 4.7.1 Barriers to Inclusive Education As Stated by the Teachers and the School Administrators..... | 75        |
| 4.7.2 Barriers to Inclusive Education from Learners with VI.....                                   | 77        |
| 4.8 Summary .....  | 79        |
| <b>CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS.....</b>                                  | <b>80</b> |
| 5.0 Introduction.....  | 80        |
| 5.1 Summary of Research Findings .....   | 80        |
| 5.1.1 Demographic Characteristics of the Sample.....   | 81        |

|   |     |
|---|-----|
| 5.1.2 The Opinions of Teachers, School Administrators and Learners Towards Inclusive Education..... | 81  |
| 5.1.3 Teachers Training Backgrounds .....   | 83  |
| 5.1.4 Status of the Teaching/Learning Resources for the Learners with VI.....                       | 83  |
| 5.1.5 The Use of the Special Curriculum.....  | 84  |
| 5.1.6 The Status of the Physical Environment.....   | 85  |
| 5.1.7 Barriers to Inclusive Education.....  | 85  |
| 5.2 Conclusions.....  | 86  |
| 5.3 Recommendations.....  | 87  |
| 5.3.1 Recommendation to the Government .....  | 87  |
| 5.3.2 Recommendations to the four Primary Schools in Kisii County.....                              | 88  |
| 5.3.3 Recommendations to the Policy-Makers .....  | 88  |
| 5.4 Recommendations for Further Research.....   | 88  |
| REFERENCES .....  | 90  |
| APPENDICES .....  | 96  |
| Appendix I: Introduction Letter .....   | 96  |
| Appendix II: Questionnaire for Headteachers .....   | 97  |
| Appendix III: Questionnaire for Teachers .....  | 102 |
| Appendix IV: Questionnaire for Sighted Pupils .....   | 106 |
| Appendix V: Interview Guide for Learners with Visual Impairments .....                              | 108 |
| Appendix VI: Authorization Letter.....  | 110 |
| Appendix VII: Research Permit.....  | 111 |



## LIST OF TABLES

|   |    |
|---|----|
| <b>Table 3.1:</b> Sampling Frame .....  | 35 |
| <b>Table 4.1:</b> Age distribution of the learners with and without VI.....                 | 42 |
| <b>Table 4.2:</b> Gender of teachers and school administrators .....                        | 43 |
| <b>Table 4.3</b> Age distribution of teachers and school administrators.....                | 44 |
| <b>Table 4.4:</b> Teachers’ opinions towards IE for learners with VI .....                  | 46 |
| <b>Table 4.5:</b> School administrators’ opinions towards IE of learners with<br>VI .....   | 47 |
| <b>Table 4.6:</b> How sighted learners assist learners with VI.....                         | 51 |
| <b>Table 4.7:</b> Professional qualification of the school administrators .....             | 56 |
| <b>Table 4.8:</b> Experience in teaching learners with VI.....                              | 57 |
| <b>Table 4.9:</b> Teachers and school administrator straining in SNE .....                  | 58 |
| <b>Table 4.10:</b> Enrolment of learners with VI in four schools.....                       | 61 |
| <b>Table 4.11:</b> Reasons for the low enrolment of learners with VI .....                  | 61 |
| <b>Table 4.12:</b> Number of learners with VI who had dropped out .....                     | 62 |
| <b>Table 4.13:</b> Views of teachers’ on resource/material for the learners with<br>VI..... | 64 |
| <b>Table 4.14:</b> Views of the school administrators on resources in the<br>schools.....   | 65 |
| <b>Table 4.15:</b> Special resources available in the four schools.....                     | 66 |
| <b>Table 4.16:</b> Special resources used by the learners .....                             | 67 |
| <b>Table 4.17:</b> Use of specialist curriculum in the selected primary schools....         | 69 |
| <b>Table 4.18:</b> Special skills learnt in schools.....                                    | 70 |
| <b>Table 4.19:</b> Status of physical environment in the schools .....                      | 72 |
| <b>Table 4.20:</b> Opinions of teachers on the physical environment .....                   | 73 |
| <b>Table 4.21:</b> Barriers to inclusive education for learners with VI .....               | 76 |
| <b>Table 4.22:</b> Barriers to inclusive education .....                                    | 77 |

**LIST OF FIGURES**

|  |    |
|--|----|
| <b>Figure 1.1:</b> Barriers to inclusive education for learners with VI.....                 | 12 |
| <b>Figure 4.1:</b> Interaction between sighted and learners with VI.....                     | 50 |
| <b>Figure 4.2:</b> Responses of learners with VI on being included in the<br>mainstream..... | 52 |
| <b>Figure 4.3:</b> Type of secondary school learners with VI would prefer to<br>join.....    | 54 |
| <b>Figure 4.4:</b> Professional qualification of teachers .....                              | 56 |

**ABBREVIATIONS AND ACRONYMS**

|               |   |
|---------------|---|
| <b>CEC</b>    | Council for Exceptional Children  |
| <b>EFA</b>    | Education For All   |
| <b>FPE</b>    | Free Primary Education  |
| <b>GoK</b>    | Government of Kenya   |
| <b>ICEVI</b>  | International Council of Education for Children with Visual<br>Impairment |
| <b>IDEA</b>   | Individuals with Disability Education Act                                 |
| <b>KCPE</b>   | Kenya Certificate of Primary Education                                    |
| <b>KIE</b>    | Kenya Institute of Education  |
| <b>KIEP</b>   | Kenya Integrated Education Programme                                      |
| <b>PTE</b>    | Primary Teacher Education   |
| <b>PWDs</b>   | Persons with Disabilities   |
| <b>SNE</b>    | Special Needs Education   |
| <b>SPSS</b>   | Statistical Package for Social Sciences                                   |
| <b>TTCs</b>   | Teachers Training Colleges  |
| <b>UN</b>     | United Nations  |
| <b>UNESCO</b> | United Nations Educational Scientific and Cultural Organization.          |
| <b>VI</b>     | Visually Impaired   |
| <b>WHO</b>    | World Health Organization   |

## **ABSTRACT**

The goal of inclusion is not to eliminate differences, but to enable all students to fit in to an educational community that validates and values their individuality. This is why inclusive education advocates for full participation of learners with visual impairments in all activities within a regular school. This requires analysis of the constraints and challenges faced by primary schools in implementing inclusion. These barriers to inclusive education account for the major concern in this study. The purpose of the study was, therefore, to investigate how these barriers hinder implementation of inclusive education. The study was based on four primary schools in Kisii County. Kisii County was appropriate for this study because it has got very low enrolment of learners with visual impairments in primary schools. This study was guided by Vygostky's social/ cultural learning theory. The study reviewed literature to support the research topic. The study adopted a descriptive research design which utilized both qualitative and quantitative techniques for data collection. The target population consisted of all school administrators, teachers, sighted learners and learners with visual impairments from the four primary schools. The sample size was 60 respondents. Purposive sampling and simple random techniques were used to sample respondents for the proposed study. Data collection instruments included questionnaires and an interview guide. The questionnaires consisted of both closed and open-ended questions which gave room for opinions. An interview guide was also used for learners with visual impairments. Data were organized descriptively and thematically. The findings indicated that there were barriers to Inclusive Education for learners with VI in the four primary schools in Kisii County. They included; lack of training in SNE by most teachers, lack of resources/materials and other facilities, unmodified environment, negative attitude towards inclusive education and towards learners with VI. The study recommended that; the Kenya Intergraded Education Programme to ensure that special education services and resources are made adequate to learners with VI in Kisii County, teachers trained in Special Needs Education should make sure that all educational materials for learners with visual impairments are provided in the appropriate media for instance in large print or in braille and finally, special education teachers in charge of the resource rooms should assist on how to modify the physical environment in schools including learners with visual impairments.

## **CHAPTER ONE**

### **INTRODUCTION**

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

According to the United Nations Universal Declaration of Human Right (1948), all children have a right to education regardless of their handicap, ethnic backgrounds or social status. This implies removal of barriers that may hinder education progress for these learners in an inclusive setting. This was also echoed by the World Conference Education For All (1990) held in Jomtien Thailand, which emphasized diversification of education to accommodate all learners with disabilities, where it urged all countries to promote universal provision of primary education.

In addition, the Salamanca Statement (UNESCO, 1994) reported great concern for learners with special needs being enabled to learn in a conducive environment. This included adjustment of anything in the education sector that hindered imparting knowledge and skills to the learners, such as those with visual impairments. The purpose of this study which was carried out in Kisii County was to identify barriers which hinder learners with VI from being included in the regular mainstream. The call for inclusive education has attracted increased involvement of governments and interested groups to seek access to education for the majority of persons with disabilities who are still unreached (UNESCO, 1994).

The inclusive education movement has its origin in relatively rich developed countries that had already applied both extensive and sophisticated regular and special education systems. In the 1960s for instance, a number of Scandinavian countries shifted the emphasis of their educational provisions for learners with special needs from separate special schooling to what came to be known as integration - that is the placement of such learners in regular schools (Meijer, 1996). The Scandinavian countries were followed in the 1970s by countries like the United States of America and the United Kingdom (Lipsky & Gardtner, 1996).

The creation of inclusive schools has become a promising way forward for all countries (Kisanji, 1998). According to Pivik and MacComus (2002), inclusion involves the reorganization of mainstream schools in such a way that every school is capable of accommodating all learners regardless of their disabilities. This is because regular schools with an inclusive orientation are the most effective means of combating discriminatory attitudes, creating a welcoming community, building an inclusive society and achieving education for all. The schools provide an effective education to the majority of children and improve the efficiency and ultimately the cost of effectiveness of the entire education system.

African countries such as Nigeria, Ghana, Congo and Algeria have integration for learners who are physically and visually handicapped by setting units within the regular schools and adapting the curriculum to facilitate direct integration.

However, their governments are now advocating for inclusive education for those learners (UNESCO, 2001). One of the challenges facing education services for learners with VI is the inclusion of these learners in a regular school. ICEVI (2010) argues that children who are blind in Africa are particularly educationally vulnerable. They are more likely to begin school late, repeat classes and drop out of school early. This is because of factors such as lack of sufficient regular support from special teachers, lack of teaching learning materials and effective systems of identification, placement and monitoring.

With regard to the education of children with special needs in Kenya, some of the commissions on education since independence came up with various recommendations. The Kamunge Commission (1988) was the first commission that went to special institutions and interviewed many stakeholders on special education. The commission investigated specific categories of learners with special needs education. It also stressed on proper training of regular teachers and the use of an appropriate curriculum for learners with disabilities. Efforts to improve access to provision for basic primary education to learners with visual impairments can only be achieved by educating them in regular inclusive classrooms as the right for every individual to equal educational opportunities (UN, 1992).

According to the Task Force Report (2003), there was need for the Kenya Government to implement inclusive education so that it could cater for the

increased educational demands of learners with special needs. Out of about 8 million children who were in primary schools that time, it was estimated that there were about 1.9 million children in the regular classes without the necessary support because most teachers were not aware of implementing inclusive education. The report also revealed that those children with disabilities who had been identified, assessed and placed in schools were only 26, 885 in the year 2003. Out of that number, only 4,802 (0.2%) were learners with visual impairments. The small number of primary schools including learners with visual impairments and the low enrolment of these learners indicate that there are barriers to the inclusive policy that need further investigation thus the need for this study which was carried out to identify barriers to inclusive education for learners with visual impairments in four selected primary schools in Kisii County.

### **1.2 Statement of the Problem**

Learners with VI are educationally vulnerable when they are in an inclusive setting because they are likely to begin school late, repeat years and drop out of school early (ICEVI, 2010). The projection of Kenya Census (2009) indicated that there were 331,594 persons with VI in Kenya. WHO estimated the number of persons with VI in Kenya to be 620,000 in 2011 (GoK, 2010).

Very few children with special needs education are attending integrated programmes in Kisii County. According to the statistics available at Kisii County Resource Centre, by September, 2011, 577 children had been identified and



assessed as having visual impairments. Of these, only 50 learners were enrolled in schools. Kisii County has over 20 special units for learners with SNE, but only 2 are for learners with visual impairments. The government pointed out that despite the strides it has made to improve the curriculum, inclusive education implementation was still a big challenge (Republic of Kenya, 2002). This was because comprehensive information about the way teachers, learners and administrators were coping with the situation to enhance learning had not been put forward. It was, therefore, essential to explore in-depth information and identify the factors or barriers that hinder school administrators, class teachers, parents and other stakeholders from effective implementation of inclusive education for learners with visual impairments in regular primary schools.

Various studies have been carried out on inclusive education for learners with disabilities. The authors saw that there was need for research to be done on inclusive education for different categories of disabilities in an inclusive setting for comparison purposes (Burugu, 2005; Omurwa, 2007). These necessitated the need for carrying out the current study whose aim was to identify barriers to inclusive education for learners with VI in four primary schools in Kisii County.

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

The purpose of this study was to establish barriers faced by teachers, school administrators and learners with and without visual impairments, when

implementing inclusive education for learners with VI in four primary schools in Kisii County.

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

- i. To investigate the opinions of teachers, school administrators and learners towards inclusive education of learners with VI in the four primary schools in Kisii County.
- ii. To find out the training backgrounds of teachers in the area of inclusive education in the four primary schools in Kisii County.
- iii. To establish the availability of teaching/learning resources for the support of effective inclusion of learners with VI in the four primary schools in Kisii County.
- iv. To find out the levels of the use of special education curriculum in the four primary schools in Kisii County.
- v. To examine the conditions of the physical environment for provisions for the needs of learners with VI, in the four primary schools in Kisii County.

### **1.4 Research Questions**

- i. What are the opinions of teachers, school administrators and learners towards inclusive education for learners with VI in Kisii County?
- ii. What are the training backgrounds of teachers in the area of inclusive education in the four primary schools in Kisii County?

- iii. What special educational teaching/learning resources are available to support effective inclusion for learners with VI in the four schools in Kisii County?
- iv. What are the levels of the use of special education curriculum in the four primary schools in Kisii County?
- v. Is the physical environment conducive to learners with VI in the four primary schools in Kisii County?

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

It was hoped that the results of this study may guide the Ministry of Education in reforming and structuring programmes for inclusive education for learners with VI so as to improve the service delivery. It was also hoped that the study could give insights to problems experienced by the teachers and learners in an inclusive setting, and come up with suggestions and possible solutions to the problems. Lessons learnt from this study were to be used to improve the implementation of the inclusive policy. The findings would also improve the teachers attitudes and enhance the enrolment of learners with VI in the regular schools. Finally, it was hoped that the study would motivate teachers in regular schools to find it necessary training in the area of inclusive education, so as to acquire knowledge and skills to teach learners with VI.

## **1.6 Scope and Limitations of the Study**

### **1.6.1 Scope**

This study sought to establish barriers to inclusive education for learners with VI. The study was confined to Kisii County in four primary schools. Kisii County was selected because very few primary schools in this county include learners with VI and it is not among the 19 counties which receive services for learners with VI from the Kenya Integrated Education Programme (KIEP). Kiomiti and Kerina primary schools were selected because they had enrolled learners with VI who were total blind and those who were low vision. Isamwera and St. Agnes Nyakoe primary schools had enrolled learners with VI who were low vision. The learners who were total blind had dropped out of the two schools.

The study looked at inclusive education for boys and girls with visual impairments in primary schools. They included learners who were total blind and those who were low vision. The study did not look at inclusive education for other categories of disabilities, but was specifically organized for learners with VI. Learners with VI were the researcher's concern because most of them are forced to join primary schools in other counties due to the small number of schools offering inclusive education for these learners in Kisii County.

### **1.6.2 Limitations of the Study**

The study only dealt with one category of disability, the learners with VI, hence the findings were not to be generalized to pupils with other types of disabilities.

The distance from one school to the other was overwhelming. Other schools including learners with VI in the neighbouring county were left out due to financial and time constraints.

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

The basic assumptions of the study were;

- i. Learners with VI were enrolled in the regular schools, where their special needs were met.
- ii. The four schools had resource rooms where the special skills were taught.
- iii. School administrators, teachers and learners in the four schools, were willing to participate in the study.

## **1.8 Theoretical and Conceptual Frameworks**

### **1.8.1 Theoretical Framework**

The theoretical framework of the study was based on Vygotsky's theory of social/cultural learning (Vygotsky, 1978). The theory states that cognitive development of a child is enhanced when they work in the Zone of Proximal Development which is within the range of tasks that a child cannot perform independently but can be accomplished by the help of a more competent person. Vygotsky explains that more competent persons provide assistance to the children as they learn new skills and become proficient. Vygotsky defines the Zone Proximal Development as the distance between the actual development level as determined by independent problem solving, and the level of potential

development as determined through problem-solving under guidance or in collaboration of more capable peers, teachers and other educators.

The theory is relevant to the study in that inclusion refers to educating learners with VI in the regular schools with support, so that the learners can overcome the barriers they face when learning with their sighted peers. For instance, teachers in the regular school were not prepared both physically and socially for the learners with VI who were meant to fit in the programme. This is because the teachers did not know how to teach those learners due to lack of skills. The sighted learners were not prepared to receive the learners with VI because they lacked the skills of interaction. Teachers, sighted learners and even parents did not understand the potentials of the learners with VI. The learners with VI therefore experienced difficulties or barriers in the inclusion programmes due to extensive demand, rigid and inflexible curriculum and lack of essential special resources and materials.

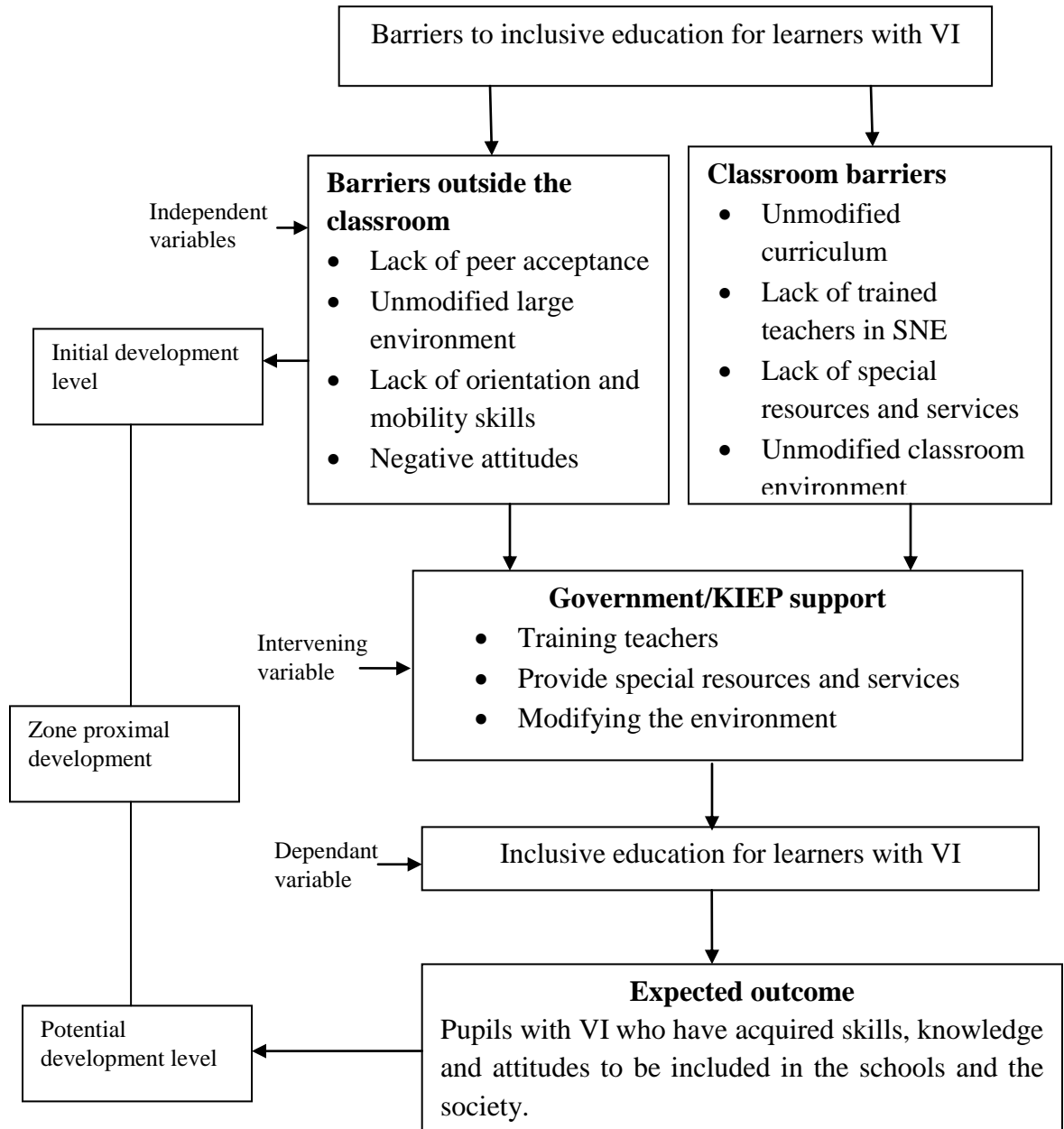
When in an inclusive setting, the teachers act as trained and more competent persons to impart knowledge skills and attitudes to learners with VI. KIEP through the government comes in and initiates intervention measures that removes barriers to the inclusive programme by adaptation of educational materials, provision of equipment such as Braille machines, slates and stylus, physical environmental modification is done to allow the learners with VI to move independently in the environment and lastly provision of resource room teacher

services which allow learners with VI to access the specialist skills which include Braille and Orientation and Mobility. The interventions are made to allow the schools to move through the Zone of Proximal Development, where the teachers will become flexible, competent and highly experienced in teaching learners with VI. Hence the learners with VI from those schools will have acquired skills, knowledge and positive attitudes to enable them to participate in social economic and political affairs of the schools and the community.

### **1.8.2 Conceptual Framework**

Fig 1.1 shows three variables and how they interact. At the initial development level there were the independent variables which were barriers to inclusive education. They included classroom barriers and barriers outside the classroom. The classroom barriers were the unmodified curriculum, lack of trained teachers in SNE, lack of special resources and unmodified classroom environment. Barriers outside the classroom were unmodified large environment, lack of peer acceptance, lack of Orientation and Mobility techniques and negative attitudes. Their presence or absence determined whether or not successful inclusion for learners with VI could be achieved. There was also an intervening variable which was the government support through KIEP. It come to influence positively the achievement of inclusion of learners with VI. The successful inclusion of learners with VI was the dependent variable since its achievement was provision of special resources and services and the removal of barriers to inclusive education.

**Figure 1.1: Barriers to inclusive education for learners with VI**



**Source:** Ideas adapted from Vgotsky's social cultural theory



## **1.9 Operational Definition of Terms**

**Barriers:** Any obstacle or anything that hinders development, e.g towards education

**Blind:** The term used to refer to those learners who have only light perception or have no vision and must learn through Braille and related media through the use of Braille.

**Braille:** A system in which raised dots allow people who are blind to read with their finger tips. Each quadrangular has six dots. The arrangement of the dots denotes different letters and symbols.

**Children with special education needs:** All those children and youths whose needs arise from disabilities or learning difficulties, (UNESCO, 1994).

**Curricula:** Planned and guided learning experiences under the direction of the school. These experiences should have intended education outcomes.

**Disability:** Is a condition which makes an individual not to function normally in a particular socio-cultural context with respect to age or sex.

**Impairment:** An identifiable defect in the basic functions of an organ or any biological part of the body e.g. missing limbs.

**Inclusive education:** This is educational provision that ensures that all children with and without special needs received appropriate educational services within their neighborhood schools.

**Integration:** The process of enabling children with special needs to mix and learn together with non-handicapped children, under the same physical setting.

**Intervention:** A general name for all of the efforts made on behalf of the people with disabilities with the overall goal of eliminating or at least reducing the obstacles that keep a handicapped person from full and active participation in the society.

**Low vision:** a condition where a learner has significant vision loss, even after treatment and /or standard refraction, and has a visual acuity of less than 6/18 to light perception, or visual field of less 10% from the point of fixation but who is able to use vision for planning or execution of tasks.

**Mainstreaming:** A process where learners are put in regular schools. This calls for reviewing of educational policies, curriculum, schools and system, modification of the environment and teaching strategies which suit children with special needs.

**Segregation:** Separation or isolation.

**Special education:** Any form of educational help, wherever it is provided to overcome educational difficulty.

**Special needs education:** This is education which provides appropriate modification in the curriculum, teaching methods educational resources and the learning environment, in order to cater for the individual differences in learning.

**Special school:** This refers to a school that is organized to exclusively provide educational services to learners with special needs.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.0 Introduction**

Related literature in this chapter begins with the background information on inclusive education. Also reviewed are the barriers to inclusive education which include the attitudes of teachers and learners towards inclusive education for learners with VI, the training backgrounds of teachers in SNE. The other barriers included special resources available for learners with VI, the use of the special curriculum and the status of the physical environment to meet the needs of the learners with VI.

#### **2.1 Background to Inclusive Education**

The philosophy of inclusive education is focused on educating all learners in the same classroom, where each learner's unique educational needs are met through adaptation of equipment, specialized instruction and trained personnel (Meijer, 1996). Inclusive education therefore involves all children with disabilities learning together with their peers without disabilities in the same physical environment, thus extending the scope of the regular schools so that they can include a greater diversity of children (Butod, 2009). Jha (2002) asserts that the society in an inclusive community has people of varying abilities/disabilities races and languages, as a result learners should be prepared to fit in it.

The inclusive education philosophy came after the integration movement, but differs from it. In integration, the child must make adjustments to the requirements of the school. In inclusion, it is the school that must make adjustments to accommodate or include the learner (Wang, 2009). For Ainscow (1995) integration means going to school (as a visitor), while inclusion means participating in school life. The goal of inclusion is not to create differences but to enable all learners to belong to an educational community that validates and values their individualities (Knight, 1995).

The World Conference on special needs education, the Salamanca Conference, (UNESCO, 1994) met in Spain to consider the fundamental policy shifts required to promote inclusive education. The statement proclaims that every child has a fundamental right to education and those with special education needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs. The conference called upon all governments and urged them to enrol all the children in regular schools unless there were mandatory reasons to do otherwise. The proposed study looked at factors which hinder the learners with visual impairments in Kisii County from being enrolled in regular primary schools.

Njoroge (1991) posits that education of learners with visual impairments in Kenya has been offered mainly in segregated settings. He further contends that serving students in residential schools is inadequate because it isolates them from the

society where they are expected to live and work. The first school for learners with visual impairments in Kenya was Thika School for the Blind, which was established in 1946.

According to the Task Force (2003), integration was introduced in Kenya in the mid-1970s following the global trends. In this regard, special units for the learners with VI were established under the Kenya Integrated Education Programme (KIEP). The government of Kenya is currently providing free primary education to all its citizens including those learners with special needs (Ministry of Education, 2001). In this concern, the government formed a Task Force to carry out an appraisal exercise on special needs education to enable it to plan and provide quality education to these learners (Task Force, 2003). The Task Force recommended that with the increase in demand for special needs education, the Government of Kenya was to implement inclusive education for all. As a result, this study might give a clear picture of what is happening in these schools ten years after the Task Force report.

## **2.2 Teachers' and School Administrators Attitudes Towards Inclusive Education for Learners with VI**

Attitudes are important because they influence so much of our personal lives. Attitudes include desires, convictions, feelings, views, opinions, beliefs, hopes, judgments and sentiments (Moshoriwa, 1998). The greatest barriers to inclusion are caused by society not by particular medical requirements (Spandagou, Evans, David, & Cathy, 2008). The authors state that one of the barriers affecting

implementation of inclusion is teacher's attitude. There is substantial research examining teachers' attitudes towards inclusion and persons with disabilities. Although it appears that teachers tend to be in favour of inclusion as a social and educational principle, their support of the practical implementation of inclusion, is dependent on the type and severity of the disability.

According to Emod, Algazo, Hanza and Ibrahim (2003), the literature has revealed that one of the important predictors of successful implementation of inclusive education for learners with disabilities in the regular classroom is the attitude of the general education teachers. The results of studies by (Burton, 1992) as cited by (Emod et al., 2003) indicate that attitudes held by both regular and special educators towards learners with disabilities determine success or the failure of inclusion. The authors assert that, if the educators hold a positive attitude towards these learners, it allows and encourages establishment of policies that guarantee the students rights to be educated in regular classrooms, whereas , negative attitudes towards these learners in all aspects limits their opportunities to be included in the regular classroom. Burton's study examined the attitudes of both the teachers teaching in regular schools and those in special schools. The current study only examined attitudes of teachers teaching in regular schools. In accordance to Burugu (2005), a positive attitude from professionals involved with the child and concerned with his/her care and education, fused with a realistic potential attitude towards achievement and expectations can effectively set the

pace for the realization of the child's full potential within the mainstream school system.

In the study by Booth and Ainscow (2002) on teachers' attitudes towards inclusive education for learners with disabilities in Australia, it was found that teachers were more positive about learners with disabilities whose programmes focused on social inclusion than those requiring physical changes in their schools or classrooms. These teachers were more accepting to learners with physical disabilities than to learners with VI, who require necessitated academic modification. Such findings indicate that the type of disability and the demands it eventually makes on the teacher will influence the teacher's attitudes towards including a child with a disability in a regular setting.

Moshoriwa (1998) states that while a learner with VI can be included physically in a regular classroom, he/she may remain socially and academically excluded because of the attitudes of the teachers, school administrators and even the sighted learners. In the end, this learner does not live an independent life in his/her adulthood. As a result, this study went out to establish the attitudes of teachers and the school administrators towards inclusive education of learners with VI, and to find out the type of social interaction taking place between teachers and the learners with VI in the four primary schools.

### **2.2.1 Pupils Attitudes Towards Inclusive Education**

The whole idea of integration and inclusion of children with special needs is that they should become normal members of the class and the school, so that they are not isolated from their society where they are expected to live and work (Njoroge, 1991). This depends on the relationship they form with other learners. Burugu (2005) points out that the attitude of the non-handicapped learners in a mainstreamed educational environment can be critical to the success of the learners with a handicap in such a type of setting. This is because non-handicapped learners can project deep feelings of inadequacy on to the handicapped and regard them as causing fear, anxiety and roots of prejudice. The handicapped may also develop a guilty complex and view his/her handicap as a punishment thus turning aggressive against his/her environment because of fear and anxiety. Lack of previous experience with children with disabilities and lack of knowledge about disabilities can lead children without disabilities to feel uncomfortable in the presence of a person with a disability, and in turn cause them to avoid contact if possible. In extreme cases, ignorance concerning disability can result in quite damaging prejudice, hostility and rejection (Butod, 2009). Nevertheless, Westwood (1997) says that peers tend to become more accepting of children with disabilities when they better understand the nature of the disability.

According to (ICEVI, 2010), the results of studies of integration and inclusion do not support the belief that merely placing a child with a disability in the



mainstream spontaneously improves the social status of that child. There is actually a danger that the child will be marginalized, ignored or even openly rejected by the peers. Inclusive schooling provides the opportunity for friendship to develop in terms of proximity and frequency of contact, and in terms of potential continuity. It creates the best possible chances for children with disabilities to observe and imitate the social interaction and behaviours of others, prompting the researcher to establish the relationship between the learners with VI, and their sighted peers and how they assisted one another in the four primary schools in Kisii County.

### **2.3 Teachers Training in SNE**

The classroom teachers are described as the indispensable professionals who will carry the primary responsibility for inclusion of students with handicaps in the regular classrooms and schools (Njoroge, 1991). Butod (2009) cites various requirements that teachers need in order to support special needs education and inclusion. These requirements include training, time, personnel, resources and teaching materials such as curriculum and other equipment. Butod also stresses the significance of training the regular teachers and instructors who will teach those learners. Teachers are the people who will implement and take charge of the implementation.

In a study by Pivik and McComus (2002) on barriers to inclusive education, most respondents reported unintentional attitudinal barriers related to lack of

knowledge, education and lack of understanding on the side of the teachers. This resulted in learners receiving inappropriate substitute work when teachers were too busy to adapt the curriculum thus, excluding learners with VI from certain classes. Attitudes and the abilities to teach learners with visual impairments in regular classrooms are a learnt process which is greatly influenced by the amount of contact teachers have with these learners (Emod, et al., 2003). These authors argue that, if teachers gain more knowledge about including students with visual impairments, and how their learning needs can be addressed, they may have less negative attitudes about inclusion.

According to Smith, Polloway, Patton and Dowdy (2001), teachers for learners with special needs education need to have skills necessary to meet instructional needs of these learners. Teaching all students the same way will not be effective. A study by the Council for Exceptional Children in Eastern Europe (CEC, 2003) indicates that most teachers agreed that one of the key areas in ensuring the education for children with disabilities is well catered for was to equip the teachers with basic knowledge and skills on how to teach these children. This could be done through training of teachers in special needs education. Wang (2009) on the other hand adds that professional training is not the only necessary and essential quality, but educators should also possess experience, passion, ability and patience when teaching the children with disabilities. Therefore, this study was to establish strategies used in the four schools that are directed at providing the needed competencies to the teachers for more effective work with the learners

with VI. It was also to identify the challenges that teachers face when teaching learners with and without VI together.

#### **2.4 Special Educational Resources Available for Learners with VI**

The growing feeling that learners with special needs should be educated alongside their peers in mainstream schools raised many questions on how to make the necessary additional resources available in the schools. Different countries have adapted different solutions to this problem. A study done by Pijil and Dyson (1998) reveals that some countries like Germany have a particular financing system, known as the pupil bond budget. The pupil bond budget revolves resources or funding entirely to the school, hence the school then chooses on how to use the funds to meet the needs of the child with a disability.

Heward (2006) observes that there is no category of handicapped learners that requires greater coordination and provision of resources than in the area of persons who are blind and usually impaired. UNSECO (2004) notes that, the learners with SNE must be provided with learning materials that meet their individual needs. The task force report (2003) notes that learners with SNE need provision of the following materials and facilities in the regular schools. Assistive functional devices such as Braille machines, low vision devices and audio visual equipments; support services such as occupational therapy, physiotherapy and counselling; mandatory medication such as drugs for the epileptic, hyperactive and autistic children. Lastly, the environmental adaption such as construction of

ramps, adapted toilets and pavements are also essential. ICEVI (2010) states that, most of the material/resources are quite expensive and are not locally available.

After the introduction of Free Primary Education in Kenya, it implied that the government would train, recruit and pay teachers and support staff salaries. It would also provide teaching learning materials (MoEST, 2004). The Task Force Report (2010) moreover notes that the government has allocated approximately ksh 1020 for every child in a year in regular schools. An additional ksh 2000 has been provided to every child with SNE in a unit or special school. According to the report, this money is inadequate. Wang (2009) observes that schools need funds to support provision for enough facilities, teaching materials, appropriate curriculum and learning activities. This study went out to establish whether the special educational resources and materials were available in the four schools to support the inclusion for learners with VI.

### **2.5 Use of the Special Curriculum in the Four Primary Schools**

According to Hergarty (2002) curriculum implementation is not a single activity. It is an intervention network of varying activities. They include translating curriculum designs into classroom activities. It is also connected with teachers preparations, supportive personnel services and parental and community involvement. Zestrow (2003) observes that sometimes the curriculum implementation in an inclusive setting is hampered by the degree to which the teacher's commitment is continuously interfered with. This comes about when the

teachers are stressed to accommodate the diverse range of learning needs of different learners with SNE in a regular classroom. This is because the regular curriculum is inflexible and it does not meet the diverse needs of these learners.

According to (Jha, 2002), children with disabilities face barriers within schools and classrooms owing to organization of the curriculum and teaching methodologies. Jha stresses that to make inclusion work for children with special needs, the curriculum should undergo total restructuring and radical changes. The utilization of separate curriculum further promotes exclusion of learners with special needs, from those who can learn normally (Butod, 2009). Jha (2002) states that, in any education system, the curriculum is one of the major barriers or tools to facilitate the implementation or development of more inclusive systems. In many contexts, the curriculum is centrally designed and rigid, leaving little flexibility for local adaptation. Curriculum in many developing countries is not child-friendly or relevant to the needs of the children, it is content-based and children learn by rote and memorization.

Wang (2009) explains that certain dilemma and difficulties are encountered in designing common curriculum that will meet all the learners' needs. Wang gives examples that learners with disabilities may require special methods of instructions to compensate for disability, or they may need special equipment or communication technology to enable them to learn from the unmodified curriculum. According to the Task Force report (2003), learners with special

needs have diverse needs and cannot be expected to use the same curriculum as their peers. The report established that there was a division for SNE in the Kenya Institute of Education (KIE), where the curriculum in SNE was developed. WHO (1992) supported the fact that the learners with VI need a specialized curriculum to support the implementation of the regular curriculum which includes Orientation and Mobility, Activities of Daily Living, typing and braille skills and sometimes physiotherapy.

Inclusive schools follow flexible curricula that would respond to the diverse needs of children and child pedagogy as is highlighted by (UNESCO, 1994). An inclusive school should, therefore, be barrier free in all aspects in order to accommodate all learners. Consequently, curriculum barriers that can still create problems in regular schools to learners with special needs should be carefully identified and subsequently removed before enrolling such learners (Engelbretch & Booysen, 1998). This study was therefore to find out difficulties curriculum implementers in the four schools encounter when teaching both sighted and learners with visual impairments in the same class.

## **2.6 Environmental and Physical Barriers**

Most schools that take in children who have special education needs require some modifications to buildings and the larger environment to make inclusion possible (Burugu, 2005). According to Pivik and McComas (2002), environmental barriers include doors, pathways, washrooms, stairs and lockers. There has to be enough

space between desks for easy movements of the learners in class. Along with the environmental barriers, there are physical barriers, where the vast majority of centres of learning are physically inaccessible to many learners. In poor, environment, particularly rural areas, these centres are often inaccessible largely because buildings are poorly constructed.

Learners with VI need lighting depending on individual learners needs. Classroom design and arrangement should be adequate and spacious for storage facilities for Braille writers, Braille books and other facilities (Ngugi, 2007). The study established the physical and environmental barriers that hinder inclusive education for learners with VI in the four primary schools.

## **2.7 Related Studies in Inclusive Education**

Over the years, there has been concern worldwide on the best ways to educate learners with special needs, with the realization that educating these learners in totally segregated settings was ineffective and inefficient. Various studies have been carried out concerning inclusion of learners with special needs into the mainstream in regular primary schools.

A study was conducted by (Pivik & MuComus, 2002) in Canada to examine how inclusive their schools were, to cater for the needs of learners with disabilities and their parents. Purposive sampling was done to select 15 students with mobility limitation (9-15 years) and 12 parents, who were asked to identify barriers based on a series of focus group meetings. The students were organized into three focus

groups, based on the level of education and gender. Concurrent with, but separate from the student focus groups, 12 parents of the student participants also took part in focus groups.

The results of this study showed that with few exceptions, the comments and suggestions from both the students and the parents did not differ. Barriers found across the eight schools where the students learnt, were categorized into the following themes; Environmental barriers; intentional attitudinal barriers; unintentional attitudinal barriers; limitations inherent to the physical disability. This study only looked at inclusion of learners with physical handicaps and the researcher did not study the barriers faced by teachers and school administrators. The current study was done in Kenya, Africa and it focused on barriers of inclusive education from the perspectives of teachers, learners and school administrators.

Another study by (Ogollah, 2008) on attitudes of regular primary school teachers towards inclusive education in schools in Kenya was done in 20 sampled primary schools. The researcher used 20 school administrators, and 120 teachers. The researcher only dealt with attitudes of teachers but left out other factors like the status of the resources, materials and other equipment needed for learners with special needs. The current study looked at the specific needs of learners with visual impairments, including examining availability of necessary resources for those learners.



## **2.8 Summary of the Literature Review**

It is important to include learners with VI in regular schools to learn with their sighted peers. This will enable them to compete, socialize and learn from one another and their performance will also improve due to the diverse abilities. Several factors have been noted to affect inclusive education for learners with VI. This include the attitudes of teachers, school administrators and learners towards inclusive education, the teachers' training in SNE, the availability of the special educational resources, the use of the special curriculum and the status of the physical environment to suit the needs of the learners with VI. In Kenya, the literature available indicates that for a long time there have been strides to integrate learners with VI in regular schools but little has been accomplished so far.

Most of the recent studies carried out on inclusion, have looked at including all learners with disabilities into the mainstream setting. It is important to analyze the needs of each category of learners with special needs when in an inclusive education class. This is because the visually impaired learners have unique needs compared with the other learners with special needs. A number of researchers have written on inclusive education for the learners with visual impairments, but there is no research which has been done on the same in Kisii County (Kabue, 1984; Odero, 2004). It is, therefore, essential to explore in-depth information and identify the factors or barriers that hinder school administrators, regular class

teachers, parents and learners from effective implementation of inclusive education for learners with visual impairments in Kisii County.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

This chapter discusses the methodology that was followed in data collection. It covers the research design, variables, location of the study, target population, sampling techniques and sample size. Also covered are the research instruments, questionnaires and an interview schedule, pilot study, validity, reliability, data collection procedures, data analysis, logistical and ethical considerations.

#### **3.1 Research Design**

This study adapted a descriptive research method utilizing both qualitative and quantitative techniques in gathering data. The design was relevant because it is used to assess attitudes and opinions about events, individuals or procedures (Gay, 1992). As stated above, the design combined both qualitative and quantitative approaches. This was appropriate because no single method is adequate in investigating a problem with rival causal factors (Patton, 1990). The researcher used questionnaires which catered for quantitative aspects, while the interviews formed the main thrust of the qualitative aspects. The qualitative strategy is the best way of getting in-depth information including sensitive and personalized experiences which are unlikely to be obtained with other methods (Kane, 1995).

On the other hand, the quantitative method was applied to get information from school administrators, teachers and sighted pupils. As a result, the descriptive design was most appropriate for this study, that is, to obtain exhaustive and accurate accounts of various barriers to inclusive education for learners with visual impairments in the four primary schools in Kisii County.

### **3.1.1 Study Variables**

- **Independent variables**

In this study independent variables were; lack of peer acceptance, lack of teaching/learning resources, lack of trained teachers in SNE, negative attitudes from teachers and sighted learners and the unmodified environment.

- **Dependent variable**

In this study, the dependent variable was full inclusive education for learners with visual impairments.

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

The study was conducted in four selected primary schools in Kisii County, Nyanza Province, Kenya. Kisii County was preferable for this study because it has over 600 primary schools and only four primary schools in the County were including learners with visual impairments. Singleton (1993) argues that an ideal sight for any study should be easily accessible to the researcher. Kisii County was selected because of its accessibility to the researcher. The first two schools which were Kiomiti and St. Agnes Nyakoe primary schools had enrolled learners with VI who were low vision and those who were total blind. The other two schools,

Isamwera and Kerina primary schools had learners who were low vision because the learners who were total blind had dropped out of school. The schools were also chosen because the teachers were able to state the reasons why those learners drop out of these schools or prefer transferring to special schools.

### **3.3 Target Population**

Kiomiti primary school had a population of 300 sighted learners, 15 learners with VI, 11 teachers and 1 school administrator. Isamwera primary had a population of 320 sighted learners, 9 learners with VI, 12 teachers and 1 school Administrator. Kerina primary school had a population of 300 sighted learners, 12 learners with VI, 10 teachers and 1 school administrator. St. Agnes Nyokoe primary had 200 sighted learners, 9 learners with VI, 8 teachers and 1 school administrator. The total target population was 1210.

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

#### **3.4.1 Sampling Technique**

Purposive sampling technique was used to select the four primary schools in Kisii County. The schools were selected because they included learners with visual impairments or they had tried to enrol these learners but they ended up transferring to special schools. From the selected schools, purposive sampling was still used to sample out teachers for the study. The criterion used to select teachers was based on the teachers who teach learners with visual impairments, and so have more contact with them, those who had more responsibilities in those

schools, and those who were most experienced in the field of special needs education. The logic and power for purposive sampling lie in selecting information rich sample for in-depth study (Patton, 1990). The researcher used simple random sampling to select both learners with and without visual impairments. Upper primary pupils were preferred because they could easily respond to the interview. In selecting the sample, gender parity was considered. The four school administrators were the key informants for the study.

### **3.4.2 Sample Size**

The study sample size comprised of four school administrators, twenty regular teachers, twenty learners with VI and twenty sighted learners. A total of sixty participants were selected for this study. This number represents at least more than 20% of the teachers, and learners in the four schools, which is adequate to contribute a sample in a study of this nature (Gay, 1992). The study sample frame is shown in table 3.1.

**Table 3.1: Sampling Frame**

| Subjects         | Isamwera pri. school |        | Kiomiti pri. school |        | Kerina pri. school |        | St. Agnes pri. school |        | Total sample population |
|------------------|----------------------|--------|---------------------|--------|--------------------|--------|-----------------------|--------|-------------------------|
|                  | Target               | Sample | Target              | Sample | Target             | Sample | Target                | Sample |                         |
| S/Adms           | 1                    | 1      | 1                   | 1      | 1                  | 1      | 1                     | 1      | 4                       |
| Regular teachers | 12                   | 5      | 11                  | 4      | 10                 | 4      | 11                    | 3      | 16                      |
| Learners with VI | 9                    | 4      | 16                  | 8      | 12                 | 5      | 8                     | 3      | 20                      |
| Sighted learners | 320                  | 5      | 300                 | 5      | 300                | 5      | 200                   | 5      | 20                      |
| Total            | 342                  | 15     | 327                 | 18     | 323                | 15     | 221                   | 12     | 60                      |

### 3.5 Research Instruments

To achieve the objectives of the study, the researcher used questionnaires which consisted of both open and closed-ended questions and an interview guide.

#### 3.5.1 Questionnaires

Three questionnaires had been developed for school administrators, classroom teachers and sighted learners to find out their opinions towards inclusion of learners with visual impairments. A questionnaire can be appropriate for a number of reasons. For instance, (Kerlinger, 1973), observes that a questionnaire is widely used in research because it is possible to give similar or standardized questions to the subjects. This makes it possible to compare responses from different subjects on the same questions. Use of questionnaires enables the researcher to collect a

relatively wide range of information from a relatively wide large sample in a short period of time, and at reasonably low cost. Furthermore, it is also possible to reach distant subjects by either posting the questionnaires or delivering them to the respondents personally.

The questionnaires for the teachers and school administrators were divided into three sections. The first section comprised the personal information of the respondents. The second section comprised close-ended questions inform of a Likert scale. The last section had both open and closed-ended questions. The open-ended questions gave the teachers room to give their opinions to the inclusive education for learners with VI. The questionnaire for the sighted learners had both closed and open-ended questions.

### **3.5.2 Interview Schedule**

An interview guide was designed to elicit information on the opinions of the learners with visual impairments towards inclusive education in these schools. This was deemed appropriate as the interview method of data collection is flexible and can be adapted to a variety of situations. The interview guide and the questionnaires were used to solicit information on the barriers to inclusive education for learners with visual impairments.



### **3.6 Pilot Study**

The researcher conducted a pilot study in Endiba Primary School in Nyamira County. The school was selected because it provides an environment and population similar to the intended population for the proposed study. The purpose of piloting was to discover any weaknesses in the instruments, and elicit comments from respondents that would assist in improvement and modification of the instruments. The population of the pilot study consisted of one school administrator, two teachers, three sighted learners and three learners with visual impairments.

#### **3.6.1 Validity**

For the purpose of validating the instruments in this study, the researcher sought opinions from experts who included the supervisors from the departments of special needs education and educational foundations, competent in the area being investigated. They assessed the instruments to determine the relevance of the questionnaires and the interview guide by establishing whether the set of items included accurately represented the variables under study. Also, the pre-tested instruments during the pilot study were also analyzed to check for the appropriateness of the language used. The questionnaire for learners with VI was changed into an interview guide.

#### **3.6.2 Reliability**

The reliability of the study was measured by use of Pearson's product moment formula. Split-half method was used to determine the reliability of the research

instruments. According to Cohen, Mahion and Marrison (2000), the method involved splitting the test items into two by assigning all the even numbered items to one group and all the odd numbered items to another. This would move towards the two halves being matched in terms of content and cumulative degree of difficulty. Each half was marked separately and the marks obtained on each half was correlated with the other. The marks on the one half were matched with the marks of the other half of the respondents. This was calculated using Spearman-brown formula. The correlation coefficient using Pearson moment correlation was established. A correlation of 0.8 was obtained which implies that the instruments were reliable.

According to (Creswell, 2003), qualitative data can be made reliable and valid by triangulating different data sources of information by examining evidence from the sources and using it to build justification for themes. If time spent in the field is prolonged, the researcher develops an in-depth understanding of the phenomenon under study and can convey details about the site and the people.

### **3.7 Data Collection Procedures**

Before data collection, the researcher carried out a familiarization tour to the schools under study. The school administrators introduced the researcher to their teachers and learners. The researcher explained the purpose of the study and how it could help the learners and the educators. The researcher planned with each headteacher on the convenient day for data collection. The researcher was

assisted by a research assistant to administer the questionnaires to the legible respondents in order to collect data. The research assistant was given prior training on how to administer the instruments in order to overcome the possibility of respondents discussing among themselves when writing. The respondents were given a duration of one week to fill the questionnaires. The researcher conducted exhaustive formal and informal interviews with the learners with visual impairments. The research assistant was taking notes while the researcher was interviewing the learners.

### **3.8 Data Analysis**

Once data was collected, it was first edited. Editing of data was a process of examining the collected raw data to detect errors and omissions so as to correct them. It involved a careful scrutiny of the completed questionnaires and interview guides to ensure that data was accurate, consistent with other facts gathered, uniformly entered and well arranged to facilitate coding and tabulation (Kothari, 2005).

Data was analyzed qualitatively and quantitatively, using descriptive statistics method. Responses from closed-ended questions were assigned numbers, for instance one for 'yes' and two for 'no'. On the other hand, the open-ended questions were numbered according to themes. Each theme was assigned a code. Frequency tally was then used to assign each expected response the theme to which it closely responded. Numerical values were then assigned to the themes

and tallied accordingly. These numerical values were then fed into the computer and analyzed using the Statistical Package for Social Sciences (SPSS). To obtain case processing summary, data were converted into percentages and presented in tabular form and charts. The findings were presented using tables, pie-charts and graphs for the purpose of making interpretations clearer.

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

The researcher got authorization to carry out the research from the Ministry of High Education, Science and Technology through the National Council for Science and Technology through Graduate School, Kenyatta University. After the permit was obtained, the researcher then informed the County Education officer of Kisii County, as well as the schools of the intention to carry out the study. According to Kothari (2005) subjects of a study must be informed of the nature of the research in a clear and understandable language. Informed consent must also be documented and the researcher's need to guarantee anonymity and confidentiality. In the study, the researcher put all the above into consideration, in addition to respecting the teacher's and learners' wishes to participate in the study. The researcher as much as possible encouraged the research participants to participate in the study. This was achieved through establishing rapport with the respondents through interaction and prior preparation.

## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS AND DISCUSSION OF THE FINDINGS**

#### **4.0 Introduction**

This chapter presents the findings of the study, analysis of data and discussion of major findings. The chapter is organized in seven sections. Specifically the chapter covered demographic information about the respondents, opinions of teachers, school administrators and learners towards inclusive education for learners with VI, the training backgrounds of the teachers and the school administrators. The chapter also examined the availability of teaching/learning resources for learners with VI the use of the special curriculum, the status of the physical environment in the four schools and lastly barriers to inclusive education as reported by the teachers and the learners.

#### **4.1 Demographic Characteristics of the Sample**

The data collected first sought to establish the demographic and social characteristics of the respondents. The main demographic features of the respondents featuring in the report included professional qualifications, age and gender, among others.

##### **4.1.1 Distribution of Sighted and Learners with VI by Age**

The researcher sought information about the age of both the sighted and learners with visual impairments. The age of the learners was deemed important to the

study as it showed the duration of time the learners had been in the schools. Data on the age of the learners in the study were collected and analyzed and the findings are as shown in table 4.1 below.

**Table 4.1: Age distribution of the sample of the learners with and without visual impairments**

| Ages (Years) | Learners with VI |             | Sighted Learners |             |
|--------------|------------------|-------------|------------------|-------------|
|              | Frequency        | Percentage  | Frequency        | Percentage  |
| 8            | -                | -           | -                | -           |
| 9            | -                | -           | 2                | 10          |
| 11           | 4                | 20          | 2                | 10          |
| 12           | 4                | 20          | 7                | 35          |
| 13           | 7                | 35          | 5                | 25          |
| 14           | 2                | 10          | 4                | 20          |
| 15           | 2                | 10          | -                | -           |
| 16           | 1                | 5           | -                | -           |
| <b>Total</b> | <b>20</b>        | <b>100%</b> | <b>20</b>        | <b>100%</b> |

Table 4.1 indicates that the age of learners with VI ranged from 11 to 16 years. The majority 7(35%) of those learners were aged 13 years, 4(20%) had 12 years, and 1(5%) had 16 years. On the other hand, the sighted learners who participated in the study were in their ages of between 9–14 years. 7 (35%) of the sighted learners were 12 years. Those with 13 years comprised 5(25%), 4(20%) of the sighted learners were below 12 years.

The findings of the age of learners with and without visual impairments revealed that learners with VI were slightly older than their peers, they ranged between 11-16 years. The youngest sighted learners were 9 years while the oldest were 14 years. Nevertheless, both the sighted and the learners with visual impairments

according to the study, were of the right age recommended by the MoE. From the results, the study concluded that the learners with VI were affected by time of admission due to lack of early identification assessment and placement in the right schools. The findings were in line with Jha (2002) who states that there was need for early identification, assessment and placement for learners with special needs to reduce the school dropout rates and repeating of classes. It was important that the learners with VI complete the primary education at the right time with the appropriate age. This was supported by Butod (2009) who observed that for successful inclusion for learners with disabilities, the classroom and the school environment should be age appropriate.

#### **4.1.2 Gender of Teachers and School Administrators**

Data were collected from 15 teachers and 4 school administrators. From the total sample of 15 class teachers, the majority were female teachers 10(66.7%) while 5(33.3%) were male teachers. Among the four school administrators, 3(75%) were male teachers and 1(25%) was a female teacher. The results on gender distribution are displayed in table 4.2 below.

**Table 4.2: Gender distribution of teachers and school administrators**

| <b>Gender</b> | <b>Teachers</b>  |                   | <b>School Administrators</b> |                   |
|---------------|------------------|-------------------|------------------------------|-------------------|
|               | <b>Frequency</b> | <b>Percentage</b> | <b>Frequency</b>             | <b>Percentage</b> |
| Male          | 5                | 33.3              | 2                            | 75                |
| Female        | 10               | 66.7              | 1                            | 25                |
| <b>Total</b>  | <b>15</b>        | <b>100%</b>       | <b>4</b>                     | <b>100%</b>       |

The information on gender distribution of teachers and school administrators in table 4.2 above shows that majority of the teachers in the four schools were females. That meant those female teachers enjoyed teaching learners with VI. The results also revealed that majority of those female teachers were classroom teachers and not school administrators.

#### 4.1.3 Age Distribution of Teachers and School Administrators

According to the collected and analyzed data on the age distribution of the teachers, majority 8(53.3%) were in the age bracket of 40-50 years. Further, 6(40%) of the teachers were in the age bracket of 30-39 years. Only 1(6.7%) was above 50 years. Age distribution for school administrators shows that 3(75%) of the administrators were over 50 years, while 1(25%) was in the age bracket of 30-39. The information on the age distribution is summarized in table 4.3 below.

**Table 4.3: Age distribution of teachers and school administrators**

| Ages (Years) | Teachers  |             | School administrators |             |
|--------------|-----------|-------------|-----------------------|-------------|
|              | Frequency | Percentage  | Frequency             | Percentage  |
| 39 - 40      | 6         | 40          | 0                     | 0           |
| 40 – 50      | 8         | 53.3        | 1                     | 25          |
| Above 50     | 1         | 6.7         | 3                     | 75          |
| <b>Total</b> | <b>15</b> | <b>100%</b> | <b>4</b>              | <b>100%</b> |

From the above information, it can be deduced that majority of the teachers and school administrators teaching in the four schools including learners with VI, were in their prime age and possibly in a better position to address matters



pertaining to inclusive education for learners with VI. Their long experience in teaching also assisted in the teaching of those learners in an inclusive setting.

## **4.2 Opinions of Teachers, School Administrators and Learners Towards Inclusive Education**

The first research question was to establish the opinions of teachers, school administrators, sighted learners and learners with VI towards inclusive education for learners with VI. This was done by getting the opinions of the respondents through the questionnaires and the interview guide. The results are presented in the chapter.

### **4.2.1 Teachers' and School Administrators Opinions Towards IE for Learners with VI**

To get the teachers' opinions on the inclusive education of learners with VI, a five-point Likert Scale was used to rate the teachers' opinions. The range was from Strongly Agree to Strongly Disagree. Data were collected, analyzed and the results are summarized in table 4.4.

**Table 4.4: Teachers' opinions towards IE for learners with VI**

| Statement  | Strongly agree | Agree     | Undecided | Disagree  | Strongly disagree |
|--|----------------|-----------|-----------|-----------|-------------------|
| Inclusion promotes confidence in learners with visual impairments  | 10 (66.7%)     | 5 (33.4%) | -         | -         | -                 |
| A visually impaired child requires more attention in class than sighted  | 6 (40.0%)      | 8 (53.3%) | -         | 1 (6.7%)  | -                 |
| Learners with visual impairment should remain in special schools   | 1 (6.7%)       | -         | -         | 5 (33.3%) | 9 (60.0%)         |
| All children have a right to education in any school   | 13 (86.6%)     | 2 (13.3%) | -         | -         | -                 |
| Inclusion increases a visually impaired child's number of friends  | 10 (66.7%)     | 5 (33.4%) | -         | -         | -                 |
| The attention given to learners with VI is at the expense of the sighted learners  | -              | -         | 1 (6.7%)  | 5 (33.3%) | 9 (60.0%)         |
| Regular teachers in primary schools need in-service training to handle learners with VI  | 10 (66.7%)     | 5 (33.3%) | -         | -         | -                 |
| Inclusion for learners with VI calls for changes in curriculum for Kenyan schools  | 10 (66.7%)     | 3 (20.0%) | -         | 2 (13.3%) | -                 |
| Teachers trained in SNE find it easier to teach learners with VI in an inclusive setting   | 10 (66.7%)     | 4 (26.7%) | 1 (6.7%)  | -         | -                 |
| Including learners with VI in a regular classroom has negative effect on the social and academic development of the sighted learners | 1(6.7%)        | -         | -         | 5 (33.3%) | 9 (60.0%)         |

The findings in table 4.4 show that 1(6.7%) of the teachers strongly agreed that learners with VI should remain in special schools, while 5(33.3%) disagreed. Over 90% of the teachers disagreed that the attention given to the learners with VI is at the expense of the sighted learners. The 1(6.7%) still agreed to this statement. All the teachers agreed that all children have a right to education in any school. Learners with visual impairments have a right to education in any primary school.

It was important for this study to capture the opinions of the school administrators because they play a vital role in the co-ordination and planning of all activities which take place in those four schools which included learners with VI. To get the opinions of the school administrators, still the Likert scale was used to rate their opinions. The results are presented below in table 4.5.

**Table 4.5: School administrators' opinions towards IE of learners with VI**

| Statement  | Strongly agree | Agree     | Undecided | Disagree  | Strongly disagree |
|--|----------------|-----------|-----------|-----------|-------------------|
| Inclusion promotes confidence in learners with visual impairments  | 4(100%)        | -         | -         | -         | -                 |
| A visually impaired child requires more attention in class than sighted  | 2 (50.0%)      | 2 (50.0%) | -         | -         | -                 |
| Learners with visual impairment should remain in special schools   | -              | -         | -         | 1 (25.0%) | 3 (75.0%)         |
| All children have a right to education in any school   | 3 (75.0%)      | -         | 1 (25.0%) | -         | -                 |
| Inclusion increases a visually impaired child's number of friends  | 3 (75.0%)      | -         | 1 (25.0%) | -         | -                 |
| The attention given to learners with VI is at the expense of the sighted learners  | -              | -         | 1 (25.0%) | -         | 3 (75.0%)         |
| Regular teachers in primary schools need in-service training to handle learners with VI  | 2 (66.7%)      | -         | 1 (33.3%) | -         | -                 |
| Teachers trained in SNE find it easier to teach learners with VI in an inclusive setting   | 3 (75.0%)      | -         | 1 (25.0%) | -         | -                 |
| Including learners with VI in a regular classroom has negative effect on the social and academic development of the sighted learners | -              | -         | 1 (25.0%) | -         | 3 (75.0%)         |

From the information in table 4.5, we learn that 3(75%) of the school administrators strongly disagreed that learners with VI should remain in special schools, and the same percentage also strongly disagreed that the attention given to the VI learners in class was at the expense of the sighted learners, 3(75%) of

the school administrators also strongly disagreed that including learners with VI has a negative effect on the development of the sighted learners.

The results of the teachers and the school administrators' opinion towards inclusive education clearly indicated that most of them had a positive attitude towards including those learners in the mainstream. One of the statements in the Likert scale which portrayed that the teachers had a positive attitude towards including learners with VI said; including learners with VI in a regular classroom had negative effects on the social and academic development of the sighted learners. 5 (33.3%) of the teachers disagreed and 9(60.0%) strongly disagreed with the statement.

Nevertheless, 1(6.7%) strongly agreed to this statement. The opinion of this teacher should not be ignored because Burugu (2005) states that lack of previous experience can lead children and adults without disabilities to feel uncomfortable in the presence of a person with disability, and in turn cause them to avoid contact if possible. Surely, sometimes this may affect the social and academic development of the learners. Another statement was the one which stated that all children have a right to education in any school. All the teachers agreed to this statement. Learners with VI have a right to education in any primary school. The above findings have been confirmed by UNESCO (1994) report which argues that regular schools with an inclusive orientation are the most effective means of combating discriminatory attitudes, creating a welcoming community, building an

inclusive society and achieving education for all. The teachers and the school administrators felt that learners with VI could compete with the sighted learners in a regular setting. Attitudes towards learners with VI form a major component of effective education for those learners in a regular setting.

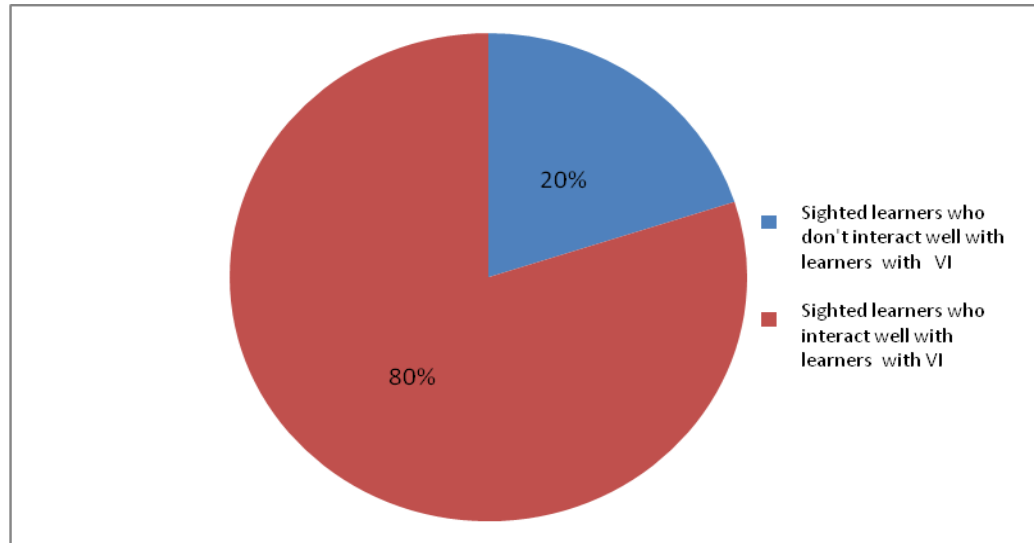
Emod et al., (2003) states that, one of the important predictors of successful implementation of inclusive education for learners with disabilities in a regular classroom is the attitude of the regular teachers. Attitudes held by both regular and special educators towards learners with special needs, determine the success or failure of the inclusive programme. The authors assert that if the educators hold a positive attitude towards these learners, it allows and encourages establishment of policies that generates the learners' rights to be educated in regular classrooms. Negative attitudes towards these learners in all aspects limit their opportunities to be included in the regular classroom, leading to their exclusion in the society.

Although the teachers in the four schools had shown a sign of having positive attitudes, we still have a long way to go. This is because still over six hundred primary schools in Kisii County have not started including learners with VI in the mainstream. If those teachers are not sensitized and even witness practically those learners in class they, will remain having the negative attitudes towards the learners with VI, which will remain to be a barrier to implementation of the inclusive programme.

#### 4.2.2 Opinions of Learners With and Without Visual Impairments Towards Inclusive Education

Positive attitudes towards the learners with VI lead to the development of sense of security, confidence and the ability to cope with others in and outside the school (Jha, 2002). The study sought the opinions of the sighted learners towards inclusion of learners with VI because they are the ones who interact with them most of the time in the classrooms and outside. The sighted learners were asked on how they socialized and interacted with learners with VI. The findings are shown in figure 4.1.

**Figure 4.1: Interaction between sighted and learners with VI**



The information in figure 4.1 shows that 16 (80%) of the sighted learners interacted and socialized well with learners with VI. Only 4 (20%) had a problem

with interacting with the learners with VI. To support this, one of the learners with VI had the following to say:

I am in Std seven. I interact well with my friends. They usually read for me what I cannot see on the blackboard. My desk mates are always ready to assist me. Male learner with VI No. 3, 2012.

The sighted learners were also asked on how they assisted the learners with VI.

Their responses are indicated in table 4.6.

**Table 4.6: How sighted learners assist learners with VI**

| <b>Type of assistance</b>   | <b>Frequency</b> | <b>Percentage</b> |
|---|------------------|-------------------|
| Reading for pupils who are blind or low vision                      | 20               | 100               |
| Walking and guiding the pupil who is blind or low vision            | 20               | 100               |
| Working with pupils who are blind in group work                     | 20               | 100               |
| Playing games with pupils who are blind or low vision               | 18               | 90                |
| Helping pupils who are blind or low vision with difficult classwork | 19               | 95                |

In table 4.6, the sighted learners were required to state how they assisted the learners with VI in the classes and outside the classes. The information obtained revealed that all the 20(100%) of the sighted learners reported that they read for the blind or learners with low vision, they guided and walked with them, they worked with them in groups when in class, 18(90%) reported that they played games with them. All the sighted learners except one 19(95%) helped learners with VI with difficult work in class.

The study also sought to establish whether the sighted learners had been sensitized on how to interact and help learners with VI. It was noted that all the sighted learners reported to have been sensitized. Another question was passed to them where they were to say who sensitized them, about learners with VI and how they could be assisted. 17(85%) of the learners said that they got the knowledge from the teachers, while the remaining percentage said they got the knowledge from either books or friends. It is quite clear that the knowledge those sighted learners had, helped them to socialize, share classes and even interact well with the learners with VI. The learners with VI were asked to state whether they enjoyed being included in the mainstream together with the sighted learners. The responses are shown in figure 4.2.

**Figure 4.2: Responses of learners with VI on being included in the mainstream**

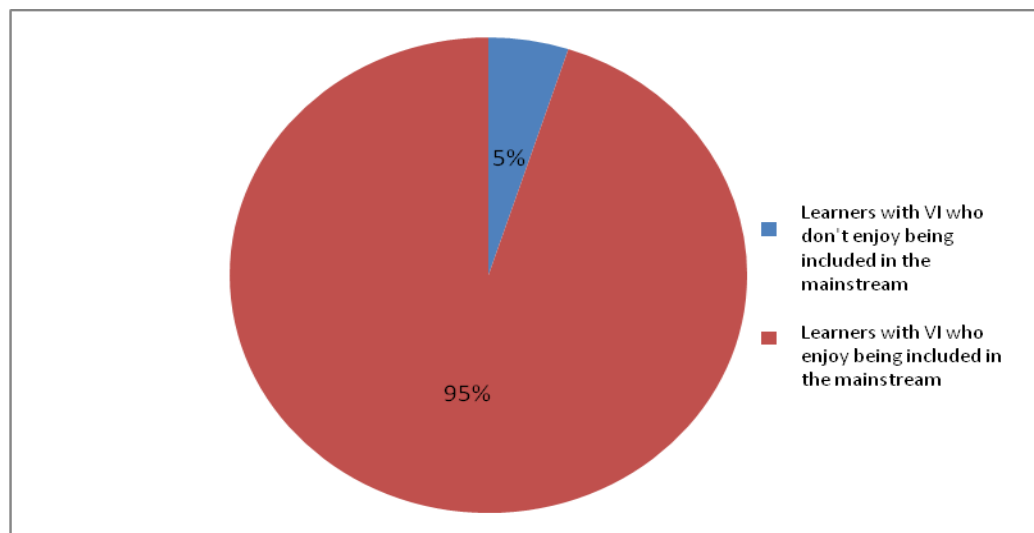




Figure 4.2 shows that, 19(95%) of the learners with VI enjoyed being included in the mainstream. Only 1(5%) does not enjoy learning with the sighted learners. The learner with VI who said that he does not enjoy learning with sighted learners was a boy and had this to say:

Sometimes the sighted learners call me names, some even don't want to play with me. My father says he will transfer me to a boarding school. Male learner with VI No. 6, 2012.

One of the learners who enjoyed learning with sighted learners said:

My classmates are good, I play with them football. They also read for me and guide me around the school compound and even when we are going home. Male learner with VI No. 1, 2012.

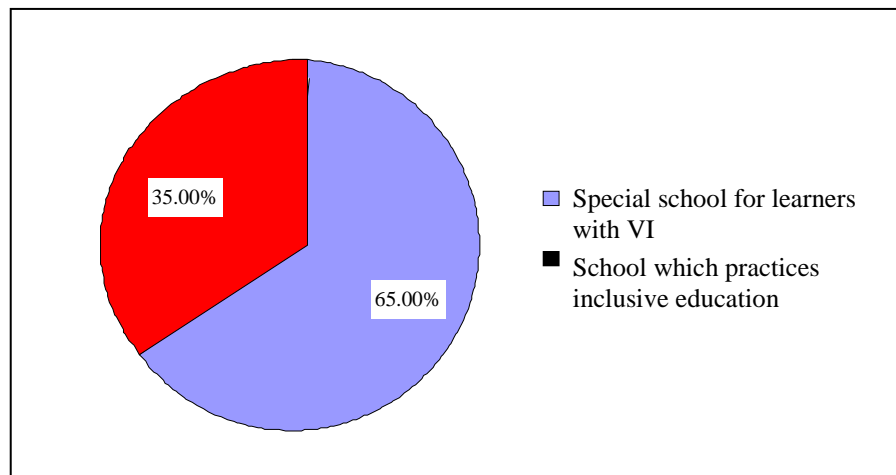
According to (ICEVI, 2010), the results of integration and inclusion do not support the belief that merely placing a child with a disability in the mainstream spontaneously improves the social status of that child. There is actually a danger that the child will be marginalized, ignored or even openly rejected. Over 90% of those VI learners said that they interacted well with sighted learners.

The learners with visual impairments through an interview were asked to state how they relate with their sighted peers and how they assisted them. These findings concur with Njoroge (1991) who says that the main idea of integration or inclusion of learners with special needs is that they should become normal members of the class and the school, so that they are not isolated from the society. This will depend on the relationship they form with other learners and other members in the school, and later the entire community. According to Heward

(2006), those individuals were threatened with social exclusion. Now that the learners with VI were included, they would acquire social skills right from the schools that would help them be included in the society.

The study further sought to establish the type of secondary schools the learners with VI would like to join after their Kenya Certificate of Primary Education (KCPE). The findings are shown in figure 4.3.

**Figure 4.3: Type of secondary school learners with VI would prefer to join**



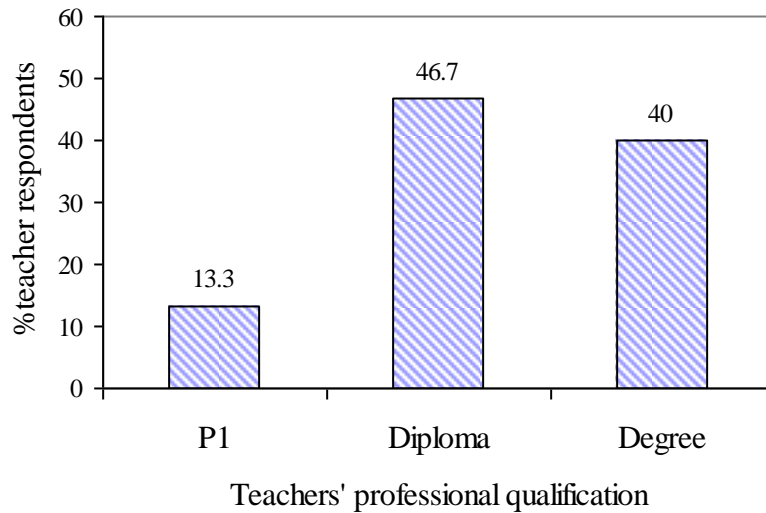
The information in figure 4.3 shows that the majority 13(65.0%) of the learners with VI would prefer regular schools which practice inclusive education. Seven (35%) of the learners reported that they would prefer special secondary schools for learners with VI.

The opinions of the 7(35%) of the learners should not be ignored. During the study, the researcher noted that some of those learners walked long distances from

home to school, a few also had a problem with moving around the compounds to interact with others. Before an inclusive programme for the learners with VI starts in a regular school, the teachers and other special educators have to sensitize all the learners with and without VI, parents and other stakeholders on the same. It is good that the sighted learners, teachers and parents of the four schools had accepted to interact, learn and socialize with the learners with VI. What about the situation in the remaining over six hundred primary schools in Kisii County? It might take some time for inclusive education for the learners with VI to take off in the whole county.

#### **4.3 Teachers Training Backgrounds**

The researcher sought information about the professional qualification of teachers. The results will show the teachers training as regular teachers and those teachers training in SNE for comparison purposes. First the study sought the highest professional qualification of teachers, and the results are summarized in figure 4.4.

**Figure 4.4: Professional qualification of the teachers**

The information on figure 4.4 shows that the majority 7(46.7%) of the teachers were diploma holders. 6(40%) of the teachers were degree holders. Only 2(13.3%) of the teachers were P1 holders.

**Table 4.7: Professional qualification of the school administrators**

| Professional qualification | School administrators |            |
|----------------------------|-----------------------|------------|
|                            | Percentage            | Percentage |
| P1                         | 1                     | 25         |
| Diploma                    | 1                     | 25         |
| Degree                     | 2                     | 50         |
| <b>Total</b>               | <b>4</b>              | <b>100</b> |

The data in table 4.7 revealed that 2(50%) of the school administrators were degree holders. 1(25%) was a diploma holder and 1(25%) was a P1. The teaching

staff comprised of different levels of professional qualifications. However, one encouraging observation was that the majority of those teachers had adequate qualifications relative to the level at which they were providing their services. Although Primary Teacher's Education did not have much of special needs education components, the qualifications most of these teachers had made them better placed to work with learners with VI.

#### 4.3.1 Experience in Teaching Learners with VI

The experience of teaching learners with VI was important to the study for it was one criterion used to sample the teachers and the school administrators. It also assisted in answering some of the questions in the questionnaires. Data were collected and recorded as presented in table 4.8 below.

**Table 4.8: Experience in Teaching Learners with VI**

| Year         | Teachers  |            | School administrators |            |
|--------------|-----------|------------|-----------------------|------------|
|              | Frequency | Percentage | Frequency             | Percentage |
| 1 – 6        | 10        | 66.7       | 1                     | 25         |
| 6 – 10       | 2         | 13.3       | 2                     | 50         |
| 10 – 20      | 2         | 13.3       | 0                     | -          |
| Over 20      | 1         | 6.7        | 1                     | 25         |
| <b>Total</b> | <b>15</b> | <b>100</b> | <b>4</b>              | <b>100</b> |

The information in table 4.8 shows that 10(66.7%) of the teachers had taught the learners with VI for less than 6 years. Only 1(6.7%) had a teaching experience of

over 20 years. 2(50%) of the school administrators had taught for a period of over 10 years and 1(25%) of the school administrators had taught for over 20 years.

#### 4.3.2 Training in SNE

The study sought information from the teachers and the school administrators whether they were trained in SNE. It was deemed important to establish the percentage of teachers who had undergone the training on how to teach learners with special needs so that we could get the real picture of what was happening in the schools. Data were collected, analyzed and findings are as tabulated in table 4.9.

**Table 4.9: Teachers and school administrators' training in SNE**

| <b>Training</b>                     | <b>Teachers</b> |            | <b>School administrators</b> |            |
|-------------------------------------|-----------------|------------|------------------------------|------------|
|                                     | Frequency       | Percentage | Frequency                    | Percentage |
| Regular teachers trained in SNE     | 3               | 20         | 1                            | 25         |
| Regular teachers not trained in SNE | 12              | 80         | 3                            | 75         |
| <b>Total</b>                        | <b>15</b>       | <b>100</b> | <b>4</b>                     | <b>100</b> |

The information in table 4.9 clearly shows that majority of the teachers and the school administrators were not trained in SNE. 12 (80%) of the teachers were not trained while on the other side, 3(75%) of the school administrators, were not

trained. Only 3(20%) of the teachers and 1(25%) of the school administrators were trained in SNE.

Learners with VI have unique needs when in an inclusive setting compared to the other learners. As a result, they require attention from their teachers who are in turn expected to pay close attention to those learners. It is important that in a school which practises inclusive education for learners with VI, there are at least teachers trained in SNE to work with the other regular teachers. From the result, it is possible to assert that the implementation of IE for learners with VI was hampered by the lack of trained personnel. The study also revealed that only 3(20%) of the teachers could read and write braille. Also, none of the sampled four schools had a braille transcriber, a brailler repairer and a computer technician. These findings are consistent with Butod (2009), as the writer stresses on the training of the regular teachers and instructors who teach learners with special needs as they are the people who implement and take charge of everything in the programmes. This was supported by powers (1983) who said that if regular classroom teachers are to occupy roles associated with successful education with learners with VI, they must be provided with opportunities for developing the knowledge, skills and attitudes prerequisites to the effective teaching and learning for the learners with disabilities.

In a study by Pivik and McComus (2002) on barriers to inclusive education, most respondents reported unintentional attitudinal barriers related to lack of

knowledge, education and lack of understanding on the side of the teachers. For the teachers teaching the learners with VI to acquire knowledge skills and values, they have to undergo proper training in SNE. This is when the teachers will learn how to read and write braille, use of the special equipment like brailers and computers with voice outputs. The teachers will also be able to teach the specialist curriculum for the learners to acquire the braille skills, typing skills, Activities for Daily Living skills and Orientation and Mobility skills. If the teachers are well-trained, by the end of the eight years, their graduates will be well-equipped with knowledge skills and values that will help them become useful members in the society. This goes in line with Gargiulo (2006) who emphasizes that education provided to learners with disability must be functional and preparing them with skills to live and work in their immediate communities. The study concludes that lack of trained personnel is still a barrier to inclusive education for learners with VI.

#### **4.4 Availability of Teaching/ Learning Resources for Learners with VI**

Teaching learning materials are important in teaching and learning. They motivate the learners and also increase the retention capacity (ICEVI, 2010). In this section, the researcher wanted to establish the prevailing status of special educational resources available in the four selected primary schools.



#### 4.4.1 Enrolment of Learners with VI

The study sought to establish the enrolment of learners with VI in the four primary schools before looking at the available resources so that we could have a clear picture of the number and type of the resources needed for those learners.

The enrolment of learners with VI in the four schools is shown in table 4.10.

**Table 4.10: Enrolment of learners with VI in four schools**

| School       | Low vision | Total blind | Total     | Percentage |
|--------------|------------|-------------|-----------|------------|
| 1            | 7          | 5           | 12        | 26.7       |
| 2            | 5          | 3           | 8         | 17.8       |
| 3            | 14         | 2           | 16        | 35.5       |
| 4            | 5          | 4           | 9         | 20         |
| <b>Total</b> | <b>31</b>  | <b>14</b>   | <b>45</b> | <b>100</b> |

From what is seen in table 4.10, there were 31 low vision learners and 14 total blind learners. This gave us a total of 45 learners.

**Table 4.11: Reasons for the low enrolment of learners with VI**

|   | Frequency | Percentage |
|---|-----------|------------|
| Lack of teaching/learning materials and special equipment         | 19        | 100        |
| Long distances from home to school                                | 08        | 53.3       |
| School environment not modified to meet the needs of the learners | 10        | 66.7       |
| Lack of funds   | 09        | 50         |
| Parents/guardian's ignorance                                      | 13        | 86.7       |
| Lack of trained personnel   | 10        | 66.7       |
| Negative attitudes  | 18        | 99.3       |

Table 4.11 shows that 19(100%) of the teachers and the school administrators said lack of teaching/learning materials in schools contributed to the low enrolment of the learners with VI. 18(93.3%) reported that parent's ignorance was another strong factor that lowered the enrolment. 10(66%) of those teachers said that if there were no funds to modify the environment to suit the needs of the learners, the enrolment would be low. Only 8(53.3%) thought that walking long distances from home to school affected the enrolment. One of the respondents confirmed this when he said:

My home is very far from the school. I pass four schools before I reach here. I always walk a very long distance to and from school. Male learner with VI No. 2, 2012.

#### 4.4.2 School Administrators' Responses on the School Dropout

As part of the study, the school administrators were asked to state the number of learners with VI who had dropped out of the four selected primary schools within a period of one year. The reports are shown in table 4.12.

**Table 4.12: Number of learners with VI who had dropped out**

| School       | Learners with VI |             |           |
|--------------|------------------|-------------|-----------|
|              | Low vision       | Total blind | Total     |
| 1            | -                | 2           | 2         |
| 2            | 2                | 5           | 7         |
| 3            | 2                | 3           | 5         |
| 4            | 1                | 3           | 4         |
| <b>Total</b> | <b>5</b>         | <b>13</b>   | <b>18</b> |

Table 4.12 shows that within a period of 1 year from September 2011 to September 2012, a total of 5 learners with low vision learners and 13 learners who were total blind had dropped out of the four primary schools. During this period, we had a total of 18 learners who had dropped out of those schools, yet the total number of the VI learners enrolled in the four schools was 45 learners. This meant that the dropout rate was quite high. The only reason the school administrators gave for low enrolment was that, the learners transferred to join special schools for the learners with VI. From the results, we found that most of the learners who dropped out of these schools were learners who were totally blind.

According to the statistics available in Kisii County Resource Centre by September 2011, 577 learners had been identified and assessed as having VI. Out of these, only 50 learners with visual impairments had been enrolled and were learning in the four selected primary schools. The remaining 527 learners were not enrolled in any of the primary schools in Kisii County. Efforts to improve access to provision for basic primary education to learners with VI can only be achieved by educating them in regular inclusive classroom as the right to every individual to equal educational opportunities (UN, 1992). Efforts should be made to ensure that all the learners with VI who are identified and assessed are placed in schools or else the low enrolment of these learners will hamper the smooth running of the inclusive programme for the learners with VI in the County.

### 4.3.3 Teachers' and School Administrators Views on Special Resource in the Schools

The views of the teachers on the resources were obtained from the Likert scale and the results are summarized in table 4.13 below.

**Table 4.13: Views of teachers on resource/materials for the learners with VI**

| Statement  | Strongly agree | Agree     | Undecided | Disagree  | Strongly disagree |
|--|----------------|-----------|-----------|-----------|-------------------|
| Resources for teaching learners with VI are not available in the schools   | 10 (66.7%)     | 3 (20.0%) | -         | 2 (13.3%) | -                 |
| Resources available in the schools cater for both learners with and without VI   | -              | 3 (20.0%) | 3 (20.0%) | 6 (40.0%) | 3 (20.0%)         |
| Facilities in primary schools allow learners with VI easy adaptation   | 1 (6.7%)       | 1 (6.7%)  | 1 (6.7%)  | 4 (26.7%) | 8 (53.3%)         |
| School have modified the buildings and other structures to cater for needs of learners with VI   | -              | 1 (6.7%)  | -         | 8 (53.3%) | 6 (40.0%)         |
| Low enrolment of learners with VI in primary schools is caused by lack or inadequate physical and learning materials such as brailers, braille books and white canes | 13 (86.7%)     | 2 (13.3%) | -         | -         | -                 |
| Most resources for learners with VI are not locally available and are quite expensive  | 10 (66.7%)     | 3 (20.0%) | -         | 2 (13.3%) | -                 |

The information in table 4.13 shows that more than 80% of the teachers agreed that the resources for teaching learners with VI were not available in schools. Also, 15(100%) of these teachers agreed that lack of the teaching and learning resources/materials caused the low enrolment of the learners with VI in the schools. 13 (86%) of the teachers agreed that most of the resources and equipment for learners with VI were not locally available and were quite expensive. 6 (40%) of the teachers disagreed that the resources available in the schools catered for

both learners with VI and the sighted. This was true because the learners with VI need specialized equipment and resources different from what the sighted learners use due to their unique needs. The school administrators also gave their views by ticking the Likert scale. Their results are shown in table 4.14.

**Table 4.14: Views of the school administrators on resources in the schools**

| Statement  | Strongly agree | Agree     | Undecided | Disagree  | Strongly disagree |
|--|----------------|-----------|-----------|-----------|-------------------|
| Resources for teaching learners with VI are not available in the schools   | 3 (75.0%)      | -         | 1 (25.0%) | -         | -                 |
| Resources available in the school cater for both learners with and without VI  | -              | 1 (25.0%) | 2 (50.0%) | 1 (25.0%) | -                 |
| Facilities in primary schools allow learners with VI easy adaptation   | -              | -         | 2 (50.0%) | -         | 2 (50.0%)         |
| School have modified the buildings and other structures to cater for needs of learners with VI   | -              | -         | 1 (25.0%) | 2 (50.0%) | 1 (25.0%)         |
| Low enrolment of learners with VI in primary schools is caused by lack or inadequate physical and learning materials such as brailers, braille books and white canes | 3 (75.0%)      | -         | 1 (25.0%) | -         | -                 |
| Most resources for learners with VI are not locally available and are quite expensive  | 3 (75.0%)      | -         | 1 (25.0%) | -         | -                 |

The above information in table 4.14 revealed that all through 3(75%) of the school administrators agreed that resources for the learners with VI were not available in schools, the lack of those resources affected the enrolment of those learners and most of the resources were expensive and were not locally available. 3 (75%) also stated that their schools were not modified to cater for the needs of the learners with VI.

The study deemed it important to find out other resources/equipment available and used at school level. The information was sought through what was observed and written in the field notes and the results are summarized in table 4.15.

**Table 4.15: Special resources available in the four schools**

| <b>Special Resources</b>    | <b>School 1</b> | <b>School 2</b> | <b>School 3</b> | <b>School 4</b> |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|
| Computer with voice out put | 0               | 1               | 0               | 0               |
| Braile machines             | 1               | 2               | 3               | 1               |
| Victor reader               | 0               | 0               | 2               | 0               |
| Abacus                      | 1               | 2               | 5               | 2               |
| Slate and stylus            | 2               | 2               | 2               | 1               |
| Typewriter                  | 0               | 1               | 0               | 0               |

Table 4.15 shows that the only equipment available in the four schools were 7 braille machines, 10 abacus, 7 slates and stylus, 2 victor readers.. One school had one typewriter and another one had one computer. Those were the ones which were functional although there were 2 brailers and 2 typewriters which were not in good order.

#### **4.3.4 Sighted and Learners with VI Views on the Resources**

The study sought information from the sighted learners to see whether they could identify some of the resources/equipment used by their peers with visual impairments. The sighted learners' ticked brailers, slates and stylus, white canes and low vision devices like the magnifiers. The learners did not tick the computers, typewriters and talking calculators, which meant that the equipment

were not oftenly used in the schools. At the same time, the learners with VI were interviewed on the mode of reading and writing. The results are shown in table 4.16.

**Table 4.16: Special resources used by the learners with VI**

| <b>Resources/materials</b> | <b>Frequency</b> | <b>Percentage</b> |
|----------------------------|------------------|-------------------|
| Braille                    | 7                | 35                |
| Slate and stylus           | 7                | 35                |
| Optical devices            | 6                | 30                |
| <b>Total</b>               | <b>20</b>        | <b>100</b>        |

The data on table 4.16 above revealed that 7(35%) of the learners used braille, another 7(35%) reported to use slates and stylus and 6(30%) used optical devices like magnifiers. According to the researcher's observations and what was written in the field notes, most of the braille, typewriters, computers and slates were old and they needed not only repair but replacement. This meant that the resources were both inadequate and unsuitable.

From the observation report, none of the schools had a closed circuit television, a braille, embosser and a thermoforming machine. However, Florian (1988) reminds us that a multitude of resources/equipment is available to help in the teaching and learning of learners with VI. But, the writer points out that those resources are expensive and may be difficult to locate. When sighted learners were asked to tick the resources/equipment used by learners with VI in their schools, none of them ticked computers, typewriters, talking calculators,

thermoforming machines, embossers and victor readers. Maybe this was because the machines were not available in the schools.

According to Willoughby (1980) media resources/materials play an important role in the education of learners with VI. Such specialized materials and equipment include, mobility canes, braille writers, braille book and paper, tape recorders. Specialized computers and low vision devices, among others. According to this analysis of the availability of the resources/equipment and other materials in the four schools, to some extent the resources/materials were available except the schools also need to purchase at least some modern equipment like embossers, computers and calculators with voice outputs, which will assist both the teachers and the learners. The schools also need to have braille transcribers and brailier and computer technicians. None of the four schools had the above technicians yet they were vital in an inclusive setting for the learners with VI.

#### **4.5 Use of Specialist Curriculum in the Four Primary Schools**

Learners with VI studying in an inclusive school need a specialist curriculum, where the teachers teach them the special skills to enhance the regular curriculum. In this study, the special skills included braille skills, Orientation and Mobility skills, key boarding and Activities for Daily Living. The study sought to get information from the school administrators if the special curriculum was used together with the regular curriculum. The learners with VI were also interviewed



to confirm whether they were taught those skills. The results of all the school administrators are presented in table 4.17.

**Table 4.17: Use of the specialist curriculum in the four selected schools**

| Skills taught               | Schools |   |   |   |
|-----------------------------|---------|---|---|---|
|                             | 1       | 2 | 3 | 4 |
| Orientation and mobility    | √       | x | √ | √ |
| Braille skills              | √       | √ | x | x |
| Typing skills               | √       | x | x | x |
| Activities for Daily Living | √       | √ | √ | √ |

According to the school administrators, activities for Daily Living skills were taught in all the four schools, Orientation and Mobility in three schools, braille skills were taught in two schools, while typing skills were only taught in one school. The findings on the special curriculum also revealed that out of the 15 teachers and 4 school administrators, only 4 (21.1%) were teaching the specialist curriculum while 15 (78.1%) just used the regular curriculum. The study also sought to establish whether the learners with VI were taught the specialist skills. The learners were required to tick the skills they were taught. The information is shown in table 4.18 below.

**Table 4.18: Specialist skills learnt in the schools**

| <b>Special skills learnt</b> | <b>Frequency</b> | <b>Percentage</b> |
|------------------------------|------------------|-------------------|
| Orientation and mobility     | 18               | 90%               |
| Braille skills               | 11               | 55%               |
| Typing skills                | 5                | 25%               |
| Activities for Daily Living  | 12               | 60%               |

Table 4.18 shows that 18(90%) of the learners with VI reported that they learnt Orientation and Mobility skills, 11(55%) said they learnt braille skills, 12 (60%) of the learners learnt the Activities for Daily Living skills. Those who reported to learn typing skills constituted 5(25%). To confirm the findings, this is what one of the learners with VI said:

Our teacher teaches us how to write braille on Tuesdays at 7.30 before assembly. On Wednesdays and Fridays at games time, we are taught orientation and mobility. On Fridays, we are taught activities for Daily Living. Male learner with VI No.16, 2012.

The results revealed that, only three teachers and one school administrator were teaching the specialist curriculum. Most probably, those were the teachers who were trained in SNE. We can't blame the other 15 teachers for not teaching those skills, because they know nothing about them. Unless those teachers were trained in SNE for them to learn those skills, there was no way they could be able to teach learners with VI those skills. The skills are very important because they will later help the learners with VI to be integrated in the community (Horton, 1998). As a result, this remains a big barrier to the implementation of inclusive education.

The study sought to establish whether those skills were really being taught in the schools, because they were not time-tabled. This meant that the teachers had to create their own time outside the normal time to teach those skills. Such time could not be adequate enough for the pupils to grasp the skills and be competent.

Through interviews, the learners with VI said that they were being taught the skills by their teachers either during games time or in the morning before assembly. This proved that the specialist skills were being taught to the learners, despite the fact that only four teachers were trained in SNE. The findings were constant with WHO (1992) who reported that learners with VI require a specialist curriculum to support the implementation of the regular curriculum. Jha (2002) observed that the curriculum in any education system is one of the major barriers or tools that facilitate the implementation or development of the inclusive system. Thus, it is important that those skills were allocated time on the school timetable, so that the teachers can get enough time to teach the skills.

#### **4.6 The Status of the Physical Environment in the Four Schools**

Issues of accessibility of the physical environment and safety to the learners with VI are paramount in an inclusive environment. The Salamanca Statement (UNESCO, 1994) expresses that when confronting the challenges of building an inclusive school, current consideration must be taken into account. The physical environment in this study included the surrounding terrain, school buildings like classrooms and other facilities.

#### 4.6.1 Actual Status of the School Environment in the Four Schools

The study sought to establish the actual status of the physical environment in the four schools. Data collected are shown in table 4.19.

**Table 4.19: Status of the physical environment in the schools**

| Physical environment in the schools                           | Number of schools<br>(N= 4) | Percentage |
|---|-----------------------------|------------|
| There are cemented pavements in the compound                  | 1                           | 25%        |
| Classes are spacious for easy movement                        | 4                           | 100%       |
| Storage facilities for brailers and Braille books are enough  | 3                           | 75%        |
| Buildings arranged in order for easy movement in the compound | 4                           | 100%       |

Table 4.19 above shows that 4(100%) of the schools had spacious classes. 3(75%) had enough storage facilities. All the four schools also had their buildings arranged in order for easy movement in the compounds. Only 1(25%) had cemented pavements.

To gauge the condition of the physical environment of the four primary schools, the teachers were required to tick the actual conditions of their schools from the questionnaires. Table 4.20 presents the findings.

**Table 4.20: Opinions of teachers on the physical environment**

| <b>Physical environment in the schools</b>                      | <b>Number of teachers<br/>(N= 15)</b> | <b>Percentage</b> |
|---|---------------------------------------|-------------------|
| There are cemented pavements in the compound                    | 1                                     | 6.7%              |
| Classes are spacious for easy movement                          | 12                                    | 80%               |
| Storage facilities for Brailers and Braille books are enough    | 6                                     | 40%               |
| Buildings were well arranged in the compounds for easy movement | 10                                    | 66.7%             |

The information revealed that 12(80%) of the teachers reported that their classrooms were spacious. They were followed by 10(66%) who said that the buildings were well arranged in the compounds for easy movement. Those who said that they had enough storage facilities constituted 6(40%), 1(6.7%) said there were cemented pavements in the school. To assess the physical environment, learners with VI were asked to state whether they found it hard or easy when walking around the school compounds. 12(80%) said they found it easy, while 3(20%) said they found it hard walking alone around the school compounds. Also, 18(90%) of the learners reported that they had spacious classrooms. 19(95%) reported that the buildings were well-arranged for easy movement. From the results given, one of the respondents had this to say:

Our school compound is very steep and sandy. This makes it hard for us to walk around the compound. There are no cemented pavements. Female learner with VI No. 8, 2012.

Schools including learners with VI should have a physical environment which is modified to suit the needs of those learners. The analyzed data from the teachers showed that all the four schools had not modified the environment to meet the needs of the learners. From the results, some of learners with VI said that they found it had to walk in some of the school compounds.

From the field notes prepared by the researcher on the physical environment, two of the schools had very steep compounds which made it hard for the learners to move around the school compounds. There was also another school which did not have enough classrooms. The Salamanca statement (UNESCO, 1994) states that inclusion requires investment in ensuring that buildings are fully accessible to all learners. The statement continues to point out that most schools do not have the basic facilities such as classrooms, hence experiencing serious difficulties in the process of teaching and learning in an inclusive setting.

According to Pijil and Dyson (1998), the growing feeling that learners with special needs could and should be educated alongside their peers in mainstream schools, raised the question of how to make the necessary additional resources/facilities available in those schools. The authors assert that the major barriers of inclusive education is serious shortage of resources, inadequate facilities, lack of teachers or qualified staff, lack of learning materials and absence of support.

The four schools can only modify the environment and get all the above listed resources/facilities if they are well-funded. According to (ICEVI, 2010), the government through the MoE should post teacher aides, computer instructors and braille transcribers in the schools including learners with VI. Although the government gives Ksh. 2000 per child with VI per year to be used to buy specialized materials, the amount is inadequate owing to the prices of those resources. From the findings of the study, the government has not sent trained support staff in the four schools which seems to be a barrier to the running of the inclusive programme.

#### **4.7 Barriers to Inclusive Education for Learners with VI**

Teachers and school administrators are the people who implement inclusive education in our schools, so they are in a better position of identifying the barriers to the programme as they practically teach those learners.

##### **4.7.1 Barriers to Inclusive Education As Stated by the Teachers and the School Administrators**

The study sought to establish the barriers from the teachers, the school administrators and learners by asking them to list the barriers. The findings from the teachers are shown in table 4.21.

**Table 4.21: Barriers to inclusive education for learners with VI**

| <b>Barriers</b>  | <b>Frequency</b> | <b>Percentage</b> |
|--|------------------|-------------------|
| Lack of resources and facilities   | 19               | 100               |
| Environment which is not modified to meet the needs                                      | 10               | 66.7              |
| Time not enough to cater for the needs of all learners                                   | 9                | 50                |
| Resources materials and other equipment are very expensive and not locally available     | 13               | 86                |
| No strong government policy on inclusion   | 10               | 66.7              |
| Lack of trained teachers in SNE  | 13               | 86                |
| Curriculum not modified  | 8                | 53                |
| High enrolment of sighted learners   | 6                | 40                |
| Negative attitude of both parents and the community                                      | 13               | 86                |
| Lack of qualified personnel  | 13               | 86.7              |
| Lack of cooperation between the school management and the community                      | 10               | 66                |
| Lack of support and enough funds   | 18               | 93.3              |
| Parents with special children are not knowledgeable about SNE and the community at large | 13               | 86                |
| Stigma associated with persons with disabilities   | 13               | 86                |
| Lack of advocacy for persons with disabilities   | 8                | 53                |
| Community not enlightened on potentials of VI persons and opportunities available        | 8                | 53.3              |
| Poor management skills in school   | 10               | 66.7              |

The data in table 4.21 revealed that lack of resources and other facilities was written by all the 19(100%) teachers. They were followed by those who wrote about lack of support and funds in SNE 18(93.3). 13(86%) of the teachers also talked about lack of trained personnel in SNE, stigma associated with persons with disabilities and lack of qualified personnel. The only point which scored



below 50% was high enrolment of sighted learners, with 40%. The teachers and the school administrators were supposed to give solutions to these barriers for inclusive education. The most common responses from the teachers included; the government to provide funds to the schools including learners with VI, community sensitization for positive attitudes, provisions of resources/materials and other facilities to the schools, train and in-service teachers in SNE and lastly, curriculum and environment modification to suit the needs of the learners with VI.

#### **4.7.2 Barriers to Inclusive Education from Learners with VI**

Learners with VI were also asked to list problems that they face in their schools.

Data were collected and analyzed, the findings are summarized in table 4.22.

**Table 4.22: Barriers to inclusive education**

| <b>Barriers</b>   | <b>Frequency</b> | <b>Percentage</b> |
|---|------------------|-------------------|
| Lack of resource/facilities and other materials                             | 18               | 90                |
| Long distances from home to school  | 16               | 80                |
| School environment not modified to meet the needs                           | 19               | 95                |
| Lack of knowledge on the side of teachers on how to handle learners with VI | 15               | 75                |
| Negative attitudes  | 10               | 50                |
| Lack of funds   | 11               | 55                |

The table shows that 19(95%) of the learners with VI reported that the school environment was not modified as the biggest barrier. Lack of resources constituted 18(90%). Those who talked about long distance were 16(80%).

Despite many of the pupils, teachers and school administrators being positive about the inclusion of learners with VI, the teachers identified a number of shortcomings or challenges that they face while teaching both the learners with and without VI in the same class. The barriers faced by the teachers and learners were noted and included as significant findings requiring consideration. The results show that over (50%) of the teachers and the school administrators reported lack of resources, lack of support and enough funds, negative attitudes towards learners with VI, parents and community not enlightened, and lack of qualified personnel as barriers among others. Learners with VI are the immediate beneficiaries of the inclusive programme; they are the ones who feel where the shoe pinches. When asked about barriers, the majority talked about the modification of the environment in their schools, a point that teachers and the school administrators thought had no much weight. These learners spend most of their time in these school compounds, and so they are forced to learn the maps of the compounds, the hard way. These learners also talked about lack of resources, lack of funds and lack of knowledge on the side of the teachers on how to handle learners with VI. Around 10(50%) of the learners talked about negative attitudes towards learners with VI. It is good the percentage was not high, with time, the attitudes will be positive especially from the teachers. This is supported by Emod

et al., (2003). These authors argue that if teachers gain more knowledge about including learners with VI and how their learning needs can be addressed, they may have less negative attitudes towards inclusion and even towards the learners. Negative attitudes should not lead to the exclusion of the learners with VI in the society. This was confirmed by Mugo and Sore (2008) when they highlighted that negative attitudes towards learners with SNE contributes to them not being integrated in the society and can be translated as a social barrier.

#### **4.8 Summary**

This chapter has presented data analysis, interpretation and discussion of the results. The study sought to obtain information on barriers to inclusive education for learners with VI in primary schools. Results revealed that very few teachers were trained in SNE, despite the fact that there were learners with VI enrolled in the four schools. Also, the teaching/learning resources and materials were not adequate for teaching the learners with VI. At the same time the physical environment in the four schools was not modified to meet the needs of the learners with VI. Further, the various aspects of the study have been summarized in chapter five.

## **CHAPTER FIVE**

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

#### **5.0 Introduction**

The chapter presents the key study findings, conclusion, recommendations and suggested areas for further study. The purpose of this study was to identify barriers to inclusive education for learners with V.I, in four primary schools in Kisii County. In particular, the study was to investigate the opinions of teachers, school administrators and learners towards inclusive education for the learners with VI. The study also looked at other factors which included teachers' qualifications the status of the teaching/learning materials and other facilities that assist in the teaching of learners with VI, use of the special curriculum in the four schools and the condition of the physical environment for the provision of the needs for learners with VI in the four primary schools. The data for the study was collected through questionnaires which were administered by the researcher to teachers, school administrators and sighted learners. The learners with VI were interviewed for further in-depth information.

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

Findings summarized were based on research questions that guided the study. The major findings are discussed in the following themes.

### **5.1.1 Demographic Characteristics of the Sample**

The demographic features of the respondents featuring in the study included, age, gender and professional qualifications, among others. The findings of the age of the learners revealed that learners with VI were slightly older than their sighted peers, they ranged between 11-16 years. The sighted learners ranged between 9-14 years. Learners with VI who were over 15 years were in class seven, while the sighted learners who were between the ages of 13-15 years were in class seven. The results on the gender of the teachers and the school administrators revealed that the majority of the teachers were females. Also, only one female teacher was a school administrator. At the same time, data on age of the teachers and school administrators showed that the majority of the teachers were in the age bracket of 40-50 years, while the majority of the school administrators were over 50 years.

### **5.1.2 The Opinions of Teachers, School Administrators and Learners**

#### **Towards Inclusive Education**

The rating of the opinions of the teachers and the school administrators revealed that both the teachers and the school administrators had positive attitudes towards inclusive education. All the 15(100%) of the teachers either strongly agreed or agreed to the following statements; inclusion promotes confidence in learners with VI, all children have a right to education in any school, inclusion increases the number of friends for learners with VI when in an inclusive setting. On the other hand, 14(93.3%) of the teachers disagreed that; learners with VI should remain in special schools. The same percentage also disagreed with the fact that

including a learner with VI in a regular classroom had negative effects on the social and academic development of the sighted learners. They also disagreed that the attention given to the learners with VI, in an inclusive setting was at the expense of the sighted learners. 4(100%) of the school administrators agreed that inclusion promotes confidence in learners with VI. 3(75%) strongly agreed that all children have a right to education in any school, and inclusion increases the number of friends for learners with VI. The administrators also disagreed with the fact that learners with VI should remain in special schools, and 3(75%) did not agree to the statement that attention given to the learners with VI was at the expense of the sighted learners.

The opinions of the sighted learners towards inclusion and learners with VI were positive. This was because, when the sighted learners were asked whether they interacted and socialized well with the learners with VI, 16(80%) of those learners accepted that they interacted and socialized well with the learners with VI. Over 90% of the sighted learners reported different ways in which they assisted the learners with VI. They said, they read for them, guided and walked with them, worked with them in classes and played games with them. Quite a good number said they enjoyed sharing classes with the learners with VI because they were also created by God. On the side of the learners with VI, their positive attitudes towards being included in the mainstream was attributed to their responses when asked whether they enjoyed learning with the sighted learners. 19(95%) of those learners reported that they enjoyed being included in the four schools. At the same

time, 7(65%) preferred joining secondary schools which practised inclusive education after sitting for their KCPE. Those VI learners also reported how they were assisted by the sighted learners both in class and outside the classrooms. In general, the study indicated a relatively high level of acceptance and interaction among the teachers, sighted learners and learners with VI in the four primary schools.

### **5.1.3 Teachers Training Backgrounds**

Qualification of teachers is paramount if learners have to achieve. Teachers need to have skills necessary to meet the instructional and special needs of all the learners. In this study, the findings indicated that the majority of the teachers were diploma holders, others were P1 holders and degree holders. These teachers were generally trained to teach learners without disabilities. In regard to training of teachers in Special Needs Education, a few 3(20%) of the teachers were trained and 1(25%) of the school administrators was trained. Since the majority of the teachers were not trained in SNE, to some extent, this would hamper the inclusive education due to lack of trained teachers. Training of teachers is important to the success of the learners with VI (Burugu, 2005).

### **5.1.4 Status of the Teaching/Learning Resources for the Learners with VI**

Before finding out the available resources in the four schools, the study sought information on the enrolment of the learners with VI for comparison purposes. The findings on the enrolment showed that there was low enrolment of learners

with VI in the four primary schools. The figures provided by the school administrators showed that there were 31 learners with low vision and 14 learners who were total blind in the schools. At the same time, the administrators also reported 18 cases of learners who had dropped out of the schools. School administrators were asked to give reasons for the low enrollment. The reasons included: lack of trained teachers and funds; negative attitudes towards inclusion, the unmodified curriculum and environment; lack of resources and other materials and lastly parents/guardians' ignorance.

The study sought to find out the resources used by the learners with VI. The study established that the schools had seven brailers, seven slates and stylus, six optical devices like magnifiers, one computer and one typewriter. There were a few braille books and braille paper. When asked to comment on the availability of those resources and facilities majority of the teachers and the school administrators reported that the resources were quite expensive and were not locally available. The school administrators also said that the resources were inadequate. The study also observed that most of the brailers, the computer and the typewriter were old and needed replacement.

#### **5.1.5 The Use of the Special Curriculum**

The specialist skills taught in the four schools were orientation and mobility, braille skills, typing skills and activities for daily living. The few teachers trained in SNE were effectively implementing the special curriculum, although the



challenge here was that there was no time allocated on the school timetable for those skills to be taught. The teachers had to look for their own extra time to teach those skills. Nevertheless, it is reasonable to say that inclusion for the learners with VI was being implemented in the four schools.

#### **5.1.6 The Status of the Physical Environment**

The findings on the physical environment in the four schools revealed that only one school had cemented pavements. All the four schools had spacious classrooms for easy movement and buildings well-arranged in the compounds for easy movement. The study also observed that two of the schools had very steep grounds which made it hard for the learners to move around the compounds. There was also another school which did not have enough classes for both sighted and learners with VI. Despite that, there were many other positive observations in the schools. There was enough light in the classrooms and the desks were large enough to accommodate the brailers and braille books.

#### **5.1.7 Barriers to Inclusive Education**

When asked to list the barriers to inclusive education for learners with VI the teachers reported the following: lack of resource/materials and other special facilities, lack of trained personnel and this included the teachers, braille transcribers, computer technicians and others. They also talked about the unmodified curriculum and the environment and lack of funds among others. To eradicate all those barriers, teachers should be trained in SNE, the government to

increase the funds to the schools including learners with VI and lastly, there was need to sensitize teachers, parents and the community at large on the importance of inclusive education for learners with VI.

## **5.2 Conclusions**

In line with the above findings, the researcher had the following conclusions:

- i. Teachers, school administrators and sighted learners had positive attitudes towards inclusion for learners with VI. This necessitated the inclusive education practices to take place in the four schools without much problems. There was free interaction between the teachers, the sighted learner and the learners with VI.
- ii. Majority of the teachers and the school administrators were not trained in Special Needs Education. This had negative effects on the quality of education offered to the learners with VI in the four schools. Most of them didn't know how to write and read Braille, which laid a heavy load to the few teachers who were trained in SNE.
- iii. The special teaching /learning resources and other materials for the learners with VI were not adequate in the four schools. Braille machines, braille books, low vision devices were missing. This interfered with the teaching and learning of the learners with VI for learning can't take place without those resources.
- iv. The special curriculum had no provision in the main schools' time tables. This laid a heavy burden on the teachers trained in SNE, who had to create

their own free time to teach the special skills. Sometimes the learners were taught the skills at games time, and yet that time is specifically for games. Learners with VI need to go for games for recreation.

- v. The four schools had not modified the physical environment to suit the needs of learners with VI. The unmodified physical environment in the schools hindered the learners with VI to master the compounds, and thus most of them could not walk in the compounds independently.
- vi. The long distances from home to school contributed to the school dropout and the low enrolment of the learners with VI.

### **5.3 Recommendations**

#### **5.3.1 Recommendation to the Government**

Based on the findings of the study, the researcher recommends that:

- i. The government through the Kenya Institute of Education to ensure that the specialist skills such as Orientation and Mobility and Braille are included in the schools main timetables, in the school including learners with VI.
- ii. The government through the Kenya Integrated Education Programme to ensure that special resources and services are made adequate to learners with VI in Kisii County.
- iii. The government through the Ministry of Education should post teacher aids and resource room teachers to ease the work load of the personnel already posted in the four primary schools.

- iv. The government to assist the Kenya society for the blind to organize seminars and workshops for teachers school administrators, learners and parents for them to know the importance of inclusive education, for this might help to change the negative attitudes towards learners with VI.

### **5.3.2 Recommendations to the four Primary Schools in Kisii County**

- i. The schools should involve the community to assist in the provision of special resources and services for learners with VI.
- ii. The schools to provide boarding facilities to learners with VI to enable them to concentrate in class.
- iii. Teachers trained in special needs education should make sure that all educational materials for learners with VI are provided to them in the appropriate media, for instance in large print or in Braille.

### **5.3.3 Recommendations to the Policy-Makers**

- i. To make a follow-up to ensure that the inclusive policy is being implemented in the regular primary schools.

### **5.4 Recommendations for Further Research**

Having looked at barriers to inclusive education for learners with VI in primary schools, the researcher felt it was important that studies be done in the following areas:

- i. A study to be carried out on barriers to inclusive education for learners with VI in secondary schools.
- ii. A study to be carried out on one of the programmes for the VI which is under the Kenya Integrated Education Programme in Nyanza province for comparison purposes.

## REFERENCES

- Booth, T. and Ainscow, M. (2002). Understanding inclusion and exclusion in the English competitive education system. *International Journal of Inclusive Education*, **1**(4), 337-355.
- Burugu, P. K. (2005). *Factors affecting implementation of inclusive education for children with special needs in primary schools in Muthioya Division, Murang'a District. M.Ed Thesis Unpublished*. Kenyatta University.
- Butod, M. (2009). "Teachers' training and attitudes towards inclusion of CWSEN in Russian schools in education issues, management simples, special education" <http://www.ivythesis.typead.com/term>. Retrieved on 24/03/2010.
- Cohen, L. Mabion, L. and Marrison, K. (2000). *Research methods in education* (5th Ed.). London: Routledge Falmer.
- Council for Exceptional Children, (2003). *Building culture in the classroom: Role of Romany assistant in the Romany classroom in the Slovak Republic*: <http://encec.org/>. Retrieved 20th May 2010.
- Creswell. J. W. (2003). *Research design: Qualitative, quantitative and mixed methods approaches*, (2<sup>nd</sup> Ed). London: Sage Publishers.
- Eleweke, C. J. and Rhodda, M. (2002). "The Challenges of Enhancing Inclusive Education in Developing countries". *International Journal of Inclusive Education*. April, 2002. **6** (2) 113-126.
- Emod, M., Algazo; Hamza P., Ibrahim, A. and Agaryouti, (2003). "Attitudes of pre-service teachers towards persons with disabilities". *Predictions for the Success of Inclusion College Student Journal*. **37**.

- Engelbretch, P. and Booyesen, M. I. (1998). *Perspectives on learning difficulties, international concerns and S. Africa Realities* (eds). European Agency for Development in Special Needs Education.
- Florian, L. (1998). *An examination of the practical problems with the implementation of inclusive education policies* (Electronic Version) **13**. (3) 1998.
- Friend, M. (2008). *Special education: Contemporary perspectives for schools professionals*, (2nd Ed). U.S.A: Pearson Education. Inc.
- Gargiulo R. M. (2006). *Special education in contemporary Society: An Introduction to Exceptionality*. New York: Thomson Wadsworth.
- Gay. L. R (1992). *Educational research competencies for analysis and application* (3<sup>rd</sup> Ed). Paris: Meril Publishing Company.
- GoK, (2010). *The 2009 Kenyan census population and household distribution by socio- economic characteristics*. Nairobi: Kenya Bureau of Statistics.
- GoK, (1988). *Education and manpower development in the next decade and beyond (Kamunge Report)*. Nairobi: Government Printer.
- Hatlenm H. P. (1980). *Important concerns in education for VI. Children's Mavis Sourcebook*. Boulder Co. Social Science Education Consortium Inc.
- Hergarty, S. (2002). *Education and children with special needs from segregated to inclusion*. New Delhi: Sage Publication.
- Heward, W. L. (2006). *Exceptional children: An introduction to special education* (8th Ed.). New Jersey: Prentice Hall.

- Horton, J. K. (1988). *Education of pupils with visual impairments in ordinary schools* UNESCO. Hellen Keller International.  
<http://www.jstar.org/stable/3099831>. Accessed 27/03/2010.
- ICEVI, (2010). The educator. *Inclusive education*. **22**. Issue. 2.
- Jha, M. M. (2002). *School without walls: Inclusive Education For All*. Oxford: Heinemann 18.
- Kabue. S. (1984). *A study of education integration of the visually impaired learners in primary school level*.
- Kane. R. (1995). *Seeing yourself: Research handbook for girls' education in Africa*: Washington D.C. World book. E D I. Learning Resources Series.
- Kerlinger, F. (1973). *Foundations of behavioural research*. (2<sup>nd</sup> Ed), New York: Holt and Winton Inc.
- Kiyimba, A. (1997). *The case for special needs education in institutions of higher learning. The experience of visually impaired students on mass communication at Makerere University*. African Journal of special needs education. **2**(2).
- Kisanji, J. (1998). "The March towards inclusive education in Western Countries: Retracing the Steps". *International Journal of Inclusive Education*.
- Knight, B.A. (1995). Towards inclusion of students with special educational needs in the regular classroom. *Support for learning* 14, 13-17.
- Kothari, C. R. (2005). *Research methodology methods and techniques*. New Delhi: New Age International (P) Ltd.



- Lipsky, D. K. and Gardtner, A. (1996). *Inclusion and school reform: Transforming America's classrooms*. Baltimore Paul H. Brooker.
- Meijer, C. (1996). *Integration in Europe: Provision for pupils with special educational needs trends in 14 European Countries*. Middlefart, Denmark.
- Ministry of Education (2001). *Poverty reduction strategy paper. 2001 – 2004*. Nairobi: Government of Republic of Kenya.
- MoEST, (2004). *National action plan on Education For All 2003-2015*. Nairobi: Government Printer.
- Mugo, J. K. and Sore, I. L., (2008). *Participation of young persons with disabilities in community processes in proceedings of the international conference on social and human development outcomes of education and poverty*. Nairobi: Kenyatta University 12th - 14th November, 2008.
- Mushoriwa, T.D. (1998). A study of attitudes of African parents in Masvingo District towards educational changes introduced in Zimbabwean secondary schools since independence. *Zimbabwe Journal of educational Research*, **10** (3) 210-221.
- Ngugi. W. M. (2007). *Introduction to inclusive education*. (2nd Ed). Nairobi, KISE.
- Njoroge, M. N. (1991). *Factors influencing initiation of successful mainstreaming of visually handicapped students in Kenya*. Austin: University of Texas.

- Odero, E.S. (2004). Identification of curriculum barriers to successful inclusion of students with visual impairments in Kenya polytechnic. M.Ed Thesis Kenyatta University.
- Ogollah, M.M (2008). *Attitudes of primary school educators towards inclusive education in Kisumu County Kenya*. Med Thesis Kenyatta University.
- Omurwa, B. J. (2007). *Factors hindering integration of students with special needs in primary schools and secondary schools*. M. Ed Thesis KU.
- Patton, W. (1990). *Qualitative evaluation and research methods*. New York: Sage Publishers.
- Pijl and Dyson, A. (1998). Funding special education: A three country study of demand-oriented models. *Comparative Education*. **34** (3).
- Pivik, J. and McComus, J. (2002). *Barriers and facilitators to inclusive education. Exceptional children*. Ottawa: Marclaflamme University of Ottawa.
- Powers, D. A. (1983). "Mainstreaming and the in-service education of teachers". *Exceptional children* **49**(5) 432-440.
- Republic of Kenya (1988). *The presidential working party on education and manpower training for the next decade and beyond*. Nairobi: Government of Republic of Kenya.
- Singleton, P.A. (1993). *Approaches to social research*. New York: Oxford University Press.
- Smith, E. C. Polloway, E.A Patton, J. R. and Dowdy, C. A. (2001). *Teaching students with special needs in inclusive settings* (3<sup>rd</sup> Ed). Boston: Allyn and Bacon.
- Spandagou Iliketra, Evans, David, and Little Cathy. 2008). *Primary education pre-service. Teachers attitudes on inclusion and perception on preparedness to classroom diversity*. Conference Paper. AARE: Australia.

- Task Force, (2003). *A report of the task force on special needs education appraisal exercise*. Nairobi: Ministry of Education. Kenya.
- UN (1992). *World programme of action concerning disabled persons*. New York: UN.
- UNCHR, (1948). *United Nations commission for human rights*. New York: Department of public information.
- UNESCO (2004). *Getting all children in school and learning*. Bangkok: UNESCO.
- UNESCO (1994). *World conference on special needs education: Access and equality, Salamanca Statement (Final Report)*. Paris: UNESCO.
- Vygotsky, L. S. (1978). *Vygotsky and socio-cultural theory*.  
<http://www.kidsdevelopment.co.uk/vygotskysocioculturaltheory.html>.  
 Retrieved 6/7/2010.
- Wang, H. L. (2009). *Should all students with special education needs be excluded in the mainstream education provision- A critical analysis international education studies*. 2(4).[http://www.ccnsenet. Org/journal.html](http://www.ccnsenet.Org/journal.html). Retrieved 3/3/2010.
- WCEFA, (1990). *World Conference on Education For All Basic Learning Needs*. Final Report from Jomtien Thailand.
- Willoughby, D. M. (1980). *A reason guide for parents and educators of blind children*. Baltimore: National Federation of the Blind.
- World Health Organization (1992). *Management of low vision children report of a WHO consultation*. Bangkok: WHO.
- Zestrow, C. (2003). *Practice of social work. Application of generalist and advanced content*. (7th Ed.). Toronto: Wadsworth. Brooks/Cale.

**APPENDIX I**  
**INTRODUCTION LETTER**

Dear Sir/Madam,

My name is Namwaki Wakube Janet. I am a postgraduate student of Kenyatta University conducting a master degree research on “Barriers to inclusive education for learners with visual impairment in four primary schools in Kisii County”.

You have been identified and selected as one of the respondents/participant to provide I information for this study. This is because of the important role you play in providing a noble service for learners with visual impairments in Kisii County. The purpose of this communication is to request that you to provide information. In case you may be interested in the study results, you get access without any hindrance.

Thank you in advance.

Janet Nawmaki Wakube.

Reg. No. E55/12592/2009

## APPENDIX II

### QUESTIONNAIRE FOR HEADTEACHERS

The purpose of this questionnaire is to gather information concerning inclusion of learners with visual impairments in primary schools. The more honest your responses are, the more it will help us achieve the purpose. Your identity will not be revealed, and all the responses will be treated with strict confidence. In filling the questionnaires, work independently following the instructions given for each section.

#### SECTION A: Personal Information

Please tick  as appropriate

1. Name of school \_\_\_\_\_
2. State your gender:            M             F
3. State your age bracket  
     25-29 years       30-39 years       40-50 years   
     Over 50years
4. Teaching experience  
     Under 6 yrs       6-10 yrs       10-20yrs       Over 20yrs
5. Highest academic qualifications  
     University       'A' levels (KACE)       'O' levels KCSE/KCE   
     Others specify \_\_\_\_\_
6. Your highest professional qualifications  
     P1       Diploma       Degree
7. Present position  
     a) A regular teacher trained in Special needs education   
     b) A regular teacher not trained in Special needs education

#### SECTION B

8. (i) Please read the statements carefully and place a tick  against the answer that suits you most.

Key: Strongly Agree (SA), Agree (A), Uncertain (U), Disagree (D), Strongly Disagree (SD).

|   | SA | A | U | D | SD |
|---|----|---|---|---|----|
| a. Inclusion promotes confidence in learners with visual impairments.   |    |   |   |   |    |
| b. A visually impaired child requires more attention in class than a sighted learner.   |    |   |   |   |    |
| c. Learners with visual impairments should remain in special schools.   |    |   |   |   |    |
| d. All children have a right to education in any school   |    |   |   |   |    |
| e. Inclusion increases a visually impaired child's number of friends.   |    |   |   |   |    |
| f. The attention given to learners with VI is at the expense of the sighted learners.   |    |   |   |   |    |
| g. Inclusion for learners with VI calls for changes in curriculum for Kenyan schools.   |    |   |   |   |    |
| h. Including a learner with VI in a regular classroom has negative effect on the social and academic development of the sighted learners. |    |   |   |   |    |

ii. Do the learners with VI perform well academically when in class

Yes  No

### SECTION C

9. (i) Do regular teachers in primary schools require in-service training to teach learners with VI

Yes  No

ii. Support your answer \_\_\_\_\_  
\_\_\_\_\_

iii. State your training level in SNE

Certificate  Diploma   
Bachelor's degree  Master's degree

- iv. Kindly indicate the highest level of training your teachers have attained in regard to regular and special needs education.

| Qualification    | Regular (number) | Special needs education (number) |
|------------------|------------------|----------------------------------|
| Masters degree   |                  |                                  |
| Bachelors degree |                  |                                  |
| Diploma          |                  |                                  |
| Certificate      |                  |                                  |
| Total            |                  |                                  |

Answer the following questions as precisely as possible.

10. (i) How many learners with VI are enrolled in your school?

Low vision  Total blind

- ii. Are their learners with VI who have dropped out of this school?

Yes  No

(a) If Yes, give the number \_\_\_\_\_

(b) Give reasons for dropping out of these learners \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- (c) How can you rate the enrolment of learners with V.I in your school.

Very low  Low  High  Very High

- iii. Please read the statements carefully and place a tick  against the answer that suits you most.

Key: Strongly Agree (SA), Agree (A), Uncertain (U), Disagree (D), Strongly Disagree (SD).

|   | SA | A | U | D | SD |
|---|----|---|---|---|----|
| a. Our school has modified the buildings and other structures to cater for needs of learners with VI. |    |   |   |   |    |
| b. Most resources for learners with VI are not locally available and are quite expensive.             |    |   |   |   |    |
| c. The resources available in the school cater for both learners with and without visual impairments. |    |   |   |   |    |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| d. Facilities in primary schools allow learners with VI easy adaptation.   |  |  |  |  |  |
| e. The low enrolment of learners with VI in primary schools is caused by lack or inadequate physical and learning materials such as brailers, Braille books and white canes. |  |  |  |  |  |
| f. Resources for teaching learners with VI are not available in our schools.   |  |  |  |  |  |

iv. What special facilities does the institution have? Please  tick appropriately

- |                         |                          |                  |                          |
|-------------------------|--------------------------|------------------|--------------------------|
| Brailers                | <input type="checkbox"/> | Abacus           | <input type="checkbox"/> |
| Braille books and paper | <input type="checkbox"/> | Typewriters      | <input type="checkbox"/> |
| White canes             | <input type="checkbox"/> | Computers        | <input type="checkbox"/> |
| Low vision devices      | <input type="checkbox"/> | Slate and stylus | <input type="checkbox"/> |

(b) How can you rate the resources in your school?

Adequate                       Inadequate

11. (i) Which curriculum is used in your school?

Regular                       Special                       Both

ii. Tick the special skills taught to the learners with VI

Braille skills                       Typing skills

Orientation and mobility skills                       Activities of Daily Living skills

iii. When are the skills taught? \_\_\_\_\_

12. (i) Do you have enough spacious classrooms to meet the needs of the learners with and without VI?

Yes                       No

ii. Comment on the status of the physical environment in your school on provision of the needs for leanness with VI \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



13. What barriers in your own opinion hinder inclusion for learners with VI in your school\_\_\_\_\_

---

---

---

---

Thank you for finding time to fill in the questionnaire.

**APPENDIX III**  
**QUESTIONNAIRE FOR TEACHERS**

**Instruction**

The purpose of this questionnaire is to gather information concerning inclusion of learners with visual impairments in primary schools. The more honest your responses are, the more it will help us achieve the purpose. Your identity will not be revealed, and all the responses will be treated with strict confidence. In filling the questionnaires, work independently following the instructions given in each section.

**SECTION A: Personal Information**

Please tick  as appropriate

1. Name of school \_\_\_\_\_
2. State your gender:           M            F
3. State your age bracket  
     25-29 years       30-39 years       40-50 years   
     Over 50years
4. Teaching experience  
     Under 6 yrs       6-10 yrs       10-20yrs       over 20yrs
5. Highest academic qualifications  
     University       'A' levels (KACE)       'O' levels KCSE/KCE   
     Others specify.....
6. Your highest professional qualifications  
     P1       Diploma       Degree
7. Present position  
     c) A regular teacher trained in Special needs education   
     d) A regular teacher not trained in Special needs education

**SECTION B**

8. (i) Please read the statements carefully and place a tick  against the answer that suits you most.

Key: Strongly Agree (SA), Agree (A), Uncertain (U), Disagree (D),  
Strongly Disagree (SD).

|   | SA | A | U | D | SD |
|---|----|---|---|---|----|
| 1. Inclusion promotes confidence in learners with visual impairments.   |    |   |   |   |    |
| 2. A visually impaired child requires more attention in class than a sighted learner.   |    |   |   |   |    |
| 3. Learners with visual impairments should remain in special schools.   |    |   |   |   |    |
| 4. All children have a right to education in any school   |    |   |   |   |    |
| 5. Inclusion increases a visually impaired child's number of friends.   |    |   |   |   |    |
| 6. The attention given to learners with VI is at the expense of the sighted learners.   |    |   |   |   |    |
| 7. Inclusion for learners with VI calls for changes in curriculum for Kenyan schools.   |    |   |   |   |    |
| 8. Including a learner with VI in a regular classroom has negative effect on the social and academic development of the sighted learners. |    |   |   |   |    |

### SECTION C

9. (i) Do regular teachers in primary schools require in-service training to teach learners with VI

Yes  No

ii. Support your answer \_\_\_\_\_

iii. State your training level in SNE

Certificate  Diploma

Bachelor's degree  Master's degree

Answer the following questions as precisely as possible.

10. (i) Please read the statements carefully and place a tick  against the answer that suits you most.

Key: Strongly Agree (SA), Agree (A), Uncertain (U), Disagree (D), Strongly Disagree (SD).

|  | SA | A | U | D | SD |
|--|----|---|---|---|----|
| 1. Our school has modified the buildings and other structures to cater for needs of learners with VI.  |    |   |   |   |    |
| 2. Most resources for learners with VI are not locally available and are quite expensive.  |    |   |   |   |    |
| 3. The resources available in the school cater for both learners with and without visual impairments.  |    |   |   |   |    |
| 4. Facilities in primary schools allow learners with VI easy adaptation.   |    |   |   |   |    |
| 5. The low enrolment of learners with VI in primary schools is caused by lack or inadequate physical and learning materials such as brailers, Braille books and white canes. |    |   |   |   |    |
| 6. Resources for teaching learners with VI are not available in our schools.   |    |   |   |   |    |

- ii. Which special resources/equipment are available in your school for inclusion for learners with VI. Tick appropriate.

|                         |                          |                  |                          |
|-------------------------|--------------------------|------------------|--------------------------|
| Brailers                | <input type="checkbox"/> | Slate and stylus | <input type="checkbox"/> |
| Braille books and paper | <input type="checkbox"/> | Typewriters      | <input type="checkbox"/> |
| White canes             | <input type="checkbox"/> | Computers        | <input type="checkbox"/> |
| Low vision devices      | <input type="checkbox"/> | Abacus           | <input type="checkbox"/> |

- iii. How do you get the resources in the school?

Buying  Through KIEP

- iv. How can you rate the status of the resources in the school?

Adequate  Inadequate

11. (i) Which curriculum do you use?

Regular  Special  Both

- ii. Tick the special skills that you teach in your school

Braille skills  Typing skills

Orientation and mobility skills  Activities of Daily Living skills

iii. Specifically when do you teach the skills? \_\_\_\_\_

12. (i) Is the physical environment in your school suitable to meet the needs for learners with and without VI?

Yes  No

ii. Please tick what is available in your school

Cemented pavements for movement

Spacious classrooms for easy movement

Storage facilities for brailers and braille books

Buildings well arranged in the compound for easy movement

iii. What can you comment on the physical environment in your school? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. What barriers in your own opinion hinder inclusion for learners with VI in your school? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**APPENDIX IV**  
**QUESTIONNAIRE FOR SIGHTED PUPILS**

The purpose of this questionnaire is to gather information concerning inclusion of learners with visual impairments in primary schools. The more honest your responses are, the more it will help us achieve the purpose. Your identity will not be revealed, and all the responses will be treated with strict confidence. In filling the questionnaires, work independently following the instructions given in each section.

1. Name of school \_\_\_\_\_
2. How old are you \_\_\_\_\_
3. Class \_\_\_\_\_
4. What is your opinion towards sharing classes with leanness with VI \_\_\_\_\_  
\_\_\_\_\_
5. Below are ways in which sighted pupils can help pupils who are blind or low vision at school. Show by ticking the ones you have used to help pupils who are blind or low vision.
  - a) Reading for the pupil who is blind or low vision a printed book
  - b) Walking and guiding the pupil who is blind or low vision during break, lunch or games times
  - c) Working with a pupil who is blind or low vision in group work
  - d) Playing games with pupils who are blind or low vision
  - e) Helping pupils who are blind or low vision with difficult class work
  - f) Any other specify \_\_\_\_\_
6. From the list below, tick the facilities which are available for learners with VI in your school?
 

|  |   |
|--|---|
| (a) Brailers <input type="checkbox"/>    | (b) Slate and stylus <input type="checkbox"/>   |
| (c) White canes <input type="checkbox"/> | (d) Low vision devices <input type="checkbox"/> |
7. Which of the above equipment is commonly used by learners with VI in your school? \_\_\_\_\_  
\_\_\_\_\_

8. When are the learners with VI taught braille and orientation and mobility? \_\_\_\_\_  
\_\_\_\_\_

9. Have you been taught on how to guide and assist a learner with VI?

Yes  No

10. Who taught you on how to guide them? \_\_\_\_\_

11. Do learners with VI move independently in the school compound without year

Yes  No

Thanks

## APPENDIX V

### INTERVIEW GUIDE FOR LEARNERS WITH VISUAL IMPAIRMENTS

The purpose of this interview guide is to gather information concerning inclusion of learners with visual impairments in primary schools. The more honest your responses are, the more it will help us achieve the purpose. Your identity will not be revealed, and all the responses will be treated with strict confidence. In filling the questionnaires, work independently following the instructions given in each section.

1. Name of school \_\_\_\_\_
2. Name of pupil \_\_\_\_\_
3. How old are you? \_\_\_\_\_
4. How do you come to school? \_\_\_\_\_
5. How far is your home from this school?    Yes     No
6. How do you interact with sighted learners in the school?
7. Do you enjoy learning with sighted learners?
8. After your KCPE which secondary school would you prefer to join?
  - a) Special secondary school for learners with visual impairments
  - b) A secondary school which practices inclusive education
9. Below are ways in which sighted learners assist learners with visual impairments in schools. Show by ticking how they assist.
  - a) Reading for the pupil who is blind or low vision a printed book
  - b) Walking and guiding the pupil who is blind or low vision during break, lunch or games times
  - c) Working with a pupil who is blind or low vision in group work
  - d) Playing games with pupils who are blind or low vision
  - e) Helping pupils who are blind or low vision with difficult class work
  - f) Any other specify \_\_\_\_\_
10. How many teachers know how to
  - Write Braille
  - Teach orientation and mobility



11. Which mode of reading and writing do you use? Braille  Print?
- a) If braille, please tick the resources or equipment available for use?  
 Braille  Braille paper   
 Slate and stylus  Braille books
- b) If print, please tick the resources available for use?  
 Optical devices  Non-optical devices
12. Are the following trained personnel (in the school? Tick the ones who are there.
- Braille transcriber   
 Brailer technician   
 Computer technician   
 Teacher Aid
13. Which specialist skills do you learn in your school?  
 (a) Braille skills  (b) Typing skills   
 (c) Orientation and mobility skills
14. Exactly at what time are you taught the special skills?
15. How is the physical environment in your school? Tick appropriately.
- a) There are cemented pavements in the compound   
 b) Classes are spacious for easy movement   
 c) Storage facilities for braille and Braille books are enough   
 d) Buildings arranged in order for easy movement in the compound

Thanks

**APPENDIX VI**  
**AUTHORIZATION LETTER**

REPUBLIC OF KENYA



**NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY**

Telegrams: "SCIENCETECH", Nairobi  
Telephone: 254-020-241349, 2213102  
254-020-310571, 2213123.  
Fax: 254-020-2213215, 318245, 318249  
When replying please quote

P.O. Box 30623-00100  
NAIROBI-KENYA  
Website: www.ncst.go.ke

Date:

Our Ref:

NCST/RRI/12/1/SS-011/1315/4

20<sup>th</sup> September, 2011

Janet Namwaki Wakube  
Kenyatta University  
P. O. Box 43844  
NAIROBI

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "*Barriers to inclusive education for learners with visual impairments in four selected primary schools in Kisii County, Kenya*" I am pleased to inform you that you have been authorized to undertake research in selected districts in Kisii County for a period ending 31<sup>st</sup> December 2011.

You are advised to report to the **District Commissioners & the District Education Officers in the selected Districts in Kisii County** before embarking on the research project.

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

**P.N. NYAKUNDI**  
**FOR: SECRETARY/CEO**

Copy to:  
The District Commissioner  
Selected Districts in Kisii County

The District Education Officer  
Selected Districts in Kisii County

