DETERMINANTS OF ACADEMIC ACHIEVEMENT AMONG LEARNERS WITH VISUAL IMPAIRMENT IN INTEGRATED PRIMARY SCHOOLS WITHIN KAKAMEGA COUNTY, KENYA

BY

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NOVEMBER 2018
DECLARATION

I declare that this research report is my original work and has not been presented in any other university/institution for consideration. This report has been complemented by referenced sources duly acknowledged. Where text, data (including spoken words), graphics, pictures or tables have been borrowed from other sources, including the internet, these are specifically accredited and references cited in accordance in line with anti-plagiarism regulations.

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DEDICATION

This thesis is dedicated to my dear husband, John Ihugo who under his support I began the postgraduate course, for during all the period he supported and encouraged me through the journey. To my sons John Bradley, Brighton Elvis my daughter Tracy Wanjiru and loving mum Jane Wangare Thank you all for your encouragement and continuous support throughout the study period. Without your support I would not have had the time, drive and motivation to manifest resilience.
ACKNOWLEDGMENT

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<td>Analysis of Variance</td>
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<td>Closed-Circuit Television</td>
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<td>CDs</td>
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<td>EFA</td>
<td>Education for All</td>
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<td>IQ</td>
<td>Intelligence Quotient</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>RNIB</td>
<td>Royal National Institute of Blind People</td>
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<td>SNE</td>
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<td>SPSS</td>
<td>Statistical Packages for Social Sciences</td>
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<td>UK</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<td>VI</td>
<td>Visually Impaired/Visual Impairment</td>
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ABSTRACT

The purpose of this study was to assess the determinants of academic achievement among learners with visual impairment within integrated primary schools in Kakamega County Kenya. The concept of integrated education for learners with special needs which include visual impairment has been one of the major priorities for the government and teachers in Kenya today. However, the performance of learners with visual impairment in integrated primary schools in Kakamega County has been low for decades. They are continuously outperformed in end term and national examinations by their counterparts without any impairment. The determinants of the poor academic achievement in integrated primary schools in Kakamega County had not been studied. This created the need for the researcher to assess the determinants of academic achievement among learners with visual impairment in integrated primary schools in Kakamega County. Study objectives included to assess the influence of teaching methodologies on academic achievement of learners with visual impairment in integrated schools, to establish the influence of types of teaching and learning materials on academic achievement of learners with visual impairment in integrated schools, to find out the influence of teachers and learners attitude towards integration of learners with visual impairment on academic achievement of learners with visual impairment in integrated schools and to identify how parental involvement influences academic achievement of learners with visual impairment in integrated schools within Kakamega County. The study was guided by the classical liberal theory of equal opportunities as advanced by Sherman and Wood. This was done through the use of a descriptive survey study design. The main target population for the study was the class teachers and visually impaired upper class pupils in Kakamega County. Simple random sampling technique was used to select the needed respondents. Primary data was collected by use of structured questionnaires. Data was grouped, coded, cleaned and analyzed descriptively using SPSS to generate frequencies and percentages. The collected data was presented in tables generated using SPSS and figures generated using Microsoft excel 2010. The results of this study revealed that in Kakamega County, academic performance of learners with VI was greatly influenced by teaching methodologies employed, teaching and learning materials used, teachers attitude towards integrated education and parental involvement. The researcher therefore concludes that to enhance academic performance of learners with VI in Kakamega County, appropriate teaching and learning materials for VI learners need to be provided, teachers attitude towards integrated education must improve, parental involvement must be increased and better teaching methodologies must be employed while educating learners with VI. All the ethical issues pertaining to research were adhered to during the entire process of this study.
CHAPTER ONE
INTRODUCTION

1.0 Introduction

This chapter presents information on the background of the study, statement of the problem, purpose of the study, study objectives, research questions, and significance of the study, delimitations and limitations of the study, assumptions of the study, theoretical and conceptual framework as well as definition of terms.

1.1 Background to the Study

Childhood and adolescent vision problems are diverse in nature and severity, ranging from mild refractive errors to permanent vision impairment and blindness. Many vision problems entail a variety of symptoms that greatly affect skills and systems related to learning. Low-income learners appear to suffer from a disproportionately high prevalence of educationally relevant vision problems (Harvey, Dobson, Miller & Clifford-Donaldson, 2008). It has been estimated that more than 1 in 5 school-aged learners in the United States of America have some kind of vision problem (Ferebee, 2004; Kemper, Gurney, Eibschtiz-Tsimhoni & Del Monte, 2007). Integrated education has been advocated for around the world for learners with disability. An integrated school must put flexibility and variety at its core (UNESCO, 2005; Lindsay, 2007).

In United Kingdom, identification of special education needs, associated with learning disabilities (LDs) in the age range 7-15 was 2.56% for girls and 4.19% for boys in 2010 (Emerson & Robertson, 2011). Narrow band definitions based on conservative cutoffs place the prevalence rates between 4% and 8%, but, broad
based surveys show prevalence rates of up to 18% with high incidence rates in early school years, peaking around the end of primary school (age 8-10 years), and new “cases” continuing to be identified through middle and high school, and even higher education and beyond (Emerson & Robertson, 2011).

In the United States of America (USA) Brown and Perrin, (2007) established that the estimated prevalence of impaired vision (blindness and partial sight) in developed countries, is approximately 0.2 per cent of the school population. This was far lower than what can be expected in a country like. Some students with poor attending behaviour in school can have a specific ‘attention deficit disorder’, with or without hyperactivity (ADD and ADHD). Attention deficit hyperactivity disorder (ADHD) is early in onset and is a highly prevalent neurobehavioral disorder persisting into adolescence and adulthood. The generally accepted rate of ADHD is about 4 per cent of school age students with ¾ of them being boys though estimates range from approximately 7% to 10% (Brown & Perrin, 2007).

Review of Indian studies on prevalence of learning disability shows that, prevalence of various types of deficits of scholastic skills to be 3-10 per cent among students population, with estimates falling below 2 per cent in some studies (Arun et al, 2013). The prevalence study on Learning Disability in Mumbai reveals that near 25 per cent of those referred due to their poor school performance from the lower, middle and upper middle socioeconomic strata of society were diagnosed as having a Specific Learning Disability (Arun et al, 2013).

The concept of integrated education is based on the fact that all learners, despite different cultural, social and learning backgrounds, should have equal learning
opportunities in all kinds of schools (UNESCO, 2008). UNESCO emphasizes that education systems, schools and teachers should focus on generating integrated settings that uphold the values of respect and understanding of cultural, social and individual diversity. Essentially, integrated education is an approach that looks into how to transform education systems and other learning environments in order to respond to the diversity of learners. Removing barriers to participation in learning for all learners is at the core of integrated education systems (UNESCO, 2005). The achievement of learners with special needs in an integrated system of education around the world is however in question.

Low-vision and blindness stakeholders (like parents, teachers) have long been concerned about the apparent achievement gap between learners who are visually impaired (for instance, those who have low-vision or are blind) and their sighted peers. Also, specialized teachers of learners with visual impairments (VI) have consistently expressed concerns about their ability to provide learners with quality instruction and education (Rosenblum & Amato, 2004). In the United States of America, Blackorby and Cameto (2004) found that learners with a visually impairment [VI] but no secondary disabilities performed below their sighted peers on a state-wide assessment. In North Carolina, in the 2007–2008 school years, 56% of learners with a primary disability of VI or blindness in third through eighth grade scored at or above grade level, compared to 74% of learners without disabilities. One factor that is thought to have a positive impact on school achievement, including Mathematics achievement, for the general population is parental role (Pomerantz, Moorman & Litwack, 2007).
In Scottish schools, about one in five visually impaired learners leave school with only basic levels of literacy (Literacy Commission, 2009). Despite the best efforts of all involved (teachers, psychologists, special education specialists), these learners fail to develop literacy levels to the expected levels. The Royal National Institute of Blind People (RNIB) estimates that as many as one in five learners in UK schools may have an undiagnosed vision problem (Scottish Government, 2011). Klinkosz, Andrzej and Brambring (2007), observed that in Poland, learners who are visually impaired (that is, are blind or have low vision) receive an education that is comparable to their sighted peers. Although the majority of the learners are taught in special schools, a growing proportion including those who are blind are being integrated into regular schools with the support of itinerant teachers of learners with visual impairments. Furthermore, approximately 20% of all Polish learners who are visually impaired manage to gain entrance to universities.

The study by Klinkosz et al. (2007) further revealed that the Academic achievement did not prove to be higher in the group of learners who were visually impaired in Poland. The achievement of elementary and middle school learners paints a portrait of diversity in school engagement and academic performance both within and across disability categories Disabilities (Blackorby & Cameto, 2004). Most learners with disabilities are reported to enjoy school, be motivated for schooling, and engage in classroom activities. However, their performance on standardized tests suggests that most of them have significant deficits in important academic skills when compared to their peers without learning disabilities.

Most African governments’ commitments to special needs education (SNE) began in the 1970s. In South Africa, there are 12 million learners in school and approximately
28,000 schools including 390 schools for learners with special needs. The introduction of SNE in South Africa was a direct response to Act 108 of 1996 and a national commitment to the EFA movement as stated in the UNESCO Salamanca statement of 1996. In Uganda, the government is constantly adopting its education structure and content to promote quality learning for all learners independent of special learning needs. To ensure that all learners with special needs were given relevant and quality education in integrated schools, all schools in Uganda were grouped in clusters of 15-20 schools and each cluster had a special needs education coordinator (UNESCO, 2008; Miles, 2003; Mmbaga, 2002).

The Kenya government has made efforts to expand and improve the education of learners with special needs as stipulated in the Learners’ Act (2001) and the Disability Act (2003), provision is skewed towards four traditional areas Hearing Impairment, Visual Impairment, Mental Handicap and Physical handicap (Republic of Kenya, 2005a, 2005b). SNE has continued to expand although these learners have been a major challenge to the education sector. To this end, majority of learners with special needs in education in Kenya do not access educational services. For instance, in 1999, there were only 22,000 learners with special needs enrolled in special schools, special units and integrated programmes (KENPRO, 2010). Out of a total of 750,000 only 14,614 are enrolled in educational programmes for learners with special needs while an equivalent number are either at home or in regular schools with little or no specialized assistance (KENPRO, 2010).

The government of Kenya recognizes the importance of SNE as an important sector for attaining the EFA and the MDGs (KENPRO, 2010). The Sessional Paper No: 1 of 2005 outlines the vision of the education sector and it will only be achieved
through the provision of an integrated quality education accessible and relevant to all learners including those with special needs in education. Even though integrated education is being practiced in Kenya, a recent study by Omete (2010) in Starehe division primary schools showed that learning disabilities including visual impairment greatly affected pupils’ academic achievement among standard three pupils.

According to Omete (2010), compared to learners who are not VI, the VI learners often perform below average in any exams with less than 5% of them proceeding to secondary schools by passing the national exams in standard 8. Very limited studies in Kenya address the determinants of academic achievement among learners with special needs in integrated schools in Kenya. Kakamega County has a lot of learners who are visually impaired in integrated classrooms. However, there had never been an evaluation of what influences the achievement of these learners despite their continued underperformance as opposed to their counterparts who are not visually impaired. This prompted the need for this study by the researcher in order to assess the determinants of academic achievement of learners with visual impairment in integrated primary schools in Kakamega County Kenya.

1.2 Statement of the Problem

In Kenya, the special needs and inclusive education policies recognizes integrated education system and advocates that schools accommodate learners with VI in integrated classes and provide them with quality education. Though studies (Omete 2010; KENPRO, 2010; UNESCO, 2008) document the importance and status of integrated education in Kenya, they however fail to address the academic
achievement of learners with VI in integrated classrooms. Some studies (Omete 2010; KENPRO, 2010) indicated that learners with disabilities showed poor performance. They continually underperform in all subjects being taught compared to their counterparts. However, the study did not clearly show barriers that hinder academic achievement of learners with visual impairment within integrated education/classrooms. This study assessed learners’ with visual impairments’ performance in relation to various challenges they encountered in integrated schools in Kakamega County, Kenya.

1.2.1 Purpose of the Study

The purpose of this study was to assess the determinants of academic achievement among learners with visual impairment in integrated schools, Kakamega County, Kenya.

1.2.2 Objectives of the Study

The study objectives were;

1. To assess the influence of teaching methodologies on academic achievement of learners with visual impairment in integrated schools within Kakamega County

2. To establish the influence of types of teaching and learning materials on academic achievement of learners with visual impairment in integrated schools within Kakamega County

3. To find out the influence of teachers attitude towards integration of learners with visual impairment on their academic achievement in integrated schools within Kakamega County
4. To identify how parental involvement influences academic achievement of learners with visual impairment in integrated schools within Kakamega County

1.2.3 Research Questions

The research questions for the study were;

1. How does teaching methodologies influence academic achievement of learners with visual impairment in integrated schools within Kakamega County?

2. In what way does the type of teaching and learning materials influence academic achievement of learners with visual impairment in integrated schools within Kakamega County?

3. What is the influence of teachers attitude towards integration of learners with visual impairment on academic achievement of learners with visual impairment in integrated schools within Kakamega County?

4. How does the parental involvement influence academic achievement of learners with visual impairment in integrated schools within Kakamega County?

1.3 Significance of the Study

The findings of this study are important to various individuals. The first are the education policy makers in the study area, the findings of this study may help them find ways of making integrated education a success and help learners with visual impairment receive quality education through appropriate amendments of their integrated education policy to include means of eliminating predictors of negative
academic achievement of learners with visual impairment. This may be based on the results of the current study. The school administration and teachers may also benefit as they may get documented study on the determinants of academic achievement of learners with visual impairment and find ways of dealing with the negative determinants. With the government and school administration putting their efforts towards eliminating the determinants that negatively affect learners with visual impairment academic achievement, the learners themselves may benefit by receiving better instruction and attitude from their teachers and fellow pupils which may positively impact on their academic achievement. The positive impact may also have a good impact on overall class and school achievement in notational examinations. This study may also act as a baseline for other studies.

1.4 Limitations and Delimitations of the Study

1.4.1 Limitations of the Study

Several limitations were envisaged for this study, first accessibility of respondents was a challenge as some head teachers at first did not allow this study to be conducted in their schools. Therefore, the researcher made several visits to such principals in order to gain their authorization, written permission from the ministry of education, department of science and technology was also shown to the principals in an effort to make them understand that the study had been approved by the ministry. Secondly, the self reporting nature of this study could have affected the accuracy of the findings as some respondents provided information they felt was favourable to them and their schools. The researcher therefore assured the respondents of anonymity and that no one would know that they took part in the
study. Also, the teaching staffs were assured that this study in no way endangers their jobs. This therefore encouraged them to be as truthful as possible when answering the study instruments. Some of the research instruments were not filled while in others, respondents lost the instruments all together. More instruments were therefore issued well above the actual study sample size to cater for this.

1.4.2 Delimitations of the Study

The current study was delimited to assessing the determinants of academic achievement among learners with visual impairment in integrated schools within Kakamenga County Kenya only. This was done in selected schools. Integrated schools in neighbouring counties were not included in the study. The stated objectives and research questions were also used to guide this research. All primary schools that had not integrated VI teaching were also excluded from the study. Therefore, the results were only generalized to integrated public primary schools of Kakamega County Kenya only.

1.5 Assumptions of the Study

This study was guided by the following assumptions;

1. That all the participants were willing participants in this research

2. That information provided by respondents was accurate
1.6 Theoretical and Conceptual Framework

1.6.1 Theoretical Framework

This study was guided by the classical liberal theory of equal opportunities as advanced by Sherman and Wood (1982) who expressed the view that there should be equal opportunities in education for all. This theory asserts that each individual is born with a given amount of capacity. According to this theory, educational systems should be designed with a view to removing barriers of any nature for example, barriers based on socio-economic factors, socio-cultural factors, geographical factors, school-based factors which prevent learners who have a learning disability to take advantage of their inborn talents. The education offered to such groups of learners will accelerate them to social promotion since education is a great equalizer which enhances life chances of the learners with special needs (Orodho, 2009).

The theory demands that opportunities be made available for individuals to go through all levels of education (primary, secondary and tertiary) to which access will not be determined by the disability of the learners but on the basis of individuals’ capability (Orodho, 2009). This theory therefore recognizes that learners with special needs have the right to be educated in a way that enhances their chances of attaining better grades just like their counterparts who are not disabled. This can only be achieved by understanding the determinants of academic achievement among these learners and eliminating the negative aspects of these determinants that negatively affect academic achievement of Learners with VI as well as improve or enhance the predictors that improve academic achievement of these learners. This
was in line with the proposed theory as it suggests the elimination of barriers to successful education of all learners.
1.6.2 Conceptual Framework

![Diagram of Conceptual Framework]

Figure 1: Diagrammatic representation of the researcher’s study problem
Source (Researcher)

Figure 1.1: Conceptual Framework

The researcher conceptualizes that the academic achievement of learners with visual impairment is dependent on various determinants in integrated schools. The researcher believed that the independent variables under investigation which include
teaching methodologies (problem based or traditional teaching methods), availability and type of instructional materials, parental involvement and teacher attitude towards integrated education were possible predictors of the dependent variable which was academic achievement of learners with visual impairment. The mentioned independent variables can have a positive influence on the dependent variable if they are positive however if they are negative, they can also negatively affect the dependent variable. The conceptual relationship between the mentioned determinants and academic achievement is as shown in the figure 1 in page 13.

1.7 Operational Definition of Terms

In this study, the following terms were defined as follows;-

**Academic achievement:** This is the grades that learners get in their exams after completing course work.

**Attitude:**  This is the way a person chooses to see or react to a phenomenon or a situation.

**Collaborative Learning:** This is the type of learning where learners are encouraged to form study groups.

**Collaborative Teaching:** This is where a teacher engages learners to participate in the lessons being taught by asking them questions and allowing them to discuss it.

**Determinants:** A thing that controls or influences what happens or outcome of something.
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<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Influence:</strong></td>
<td>Is the act by which one variable affects the other either positively or negatively.</td>
</tr>
<tr>
<td><strong>Integrated Education:</strong></td>
<td>This is the process whereby both learners with disabilities and learners without disabilities are taught together in the same school and in the same classroom.</td>
</tr>
<tr>
<td><strong>Low Vision:</strong></td>
<td>Is a condition where a learner has not lost his/her sight completely as they can still see but through effort.</td>
</tr>
<tr>
<td><strong>Measures:</strong></td>
<td>These are corrective steps taken to eliminate negative predictors of academic achievement of learners with visual impairment.</td>
</tr>
<tr>
<td><strong>Predictor:</strong></td>
<td>Something such as an event or fact that enables you to say what will happen in future.</td>
</tr>
<tr>
<td><strong>Teachers/Pupils attitudes:</strong></td>
<td>Refer to the way they feel and think about integrated education. It affects the way teachers behave towards learners with visual impairment.</td>
</tr>
<tr>
<td><strong>Visual Impairment:</strong></td>
<td>Is a condition where an individual completely or partially lose their sight.</td>
</tr>
</tbody>
</table>
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter presents a review of literature on influence of teaching methodologies on academic achievement, influence of types of teaching materials and academic achievement, influence of teachers’ attitude on academic achievement of learners with VI, influence of parental involvement on academic achievement of learners with VI and ends with summary of literature review.

2.1 Influence of Teaching Methodologies on Academic Achievement

Teaching in integrated classrooms is not easy, since teaching needs to be more individualized as compared to normal classrooms, where there are little diversities among learners (Peters, 2003). Furthermore, it has been pointed out that, the degree of visual abilities varies among the learners leading to variation in learning needs and learning strategies for learners (Salisbury, 2008). As a result, learners with visual impairments require unique ways of addressing their academic problems. Therefore, it is important that teachers understand this desire to be able to predetermine teaching approaches to be used for effective learning (Salisbury, 2008). Research shows that, quality teachers are the ones, who are the best at including learners with diverse learning needs (Mastropieri & Scruggs, 2010). This study used these findings to corroborate and support those of the current study in Kakamega County Kenya.

In a learning process learners differ in capabilities. Learners with low ability will learn from their fellow capable peers. Cooperative learning among learners of
different learning capabilities and learning needs, in an integrated classroom, has proved to be effective in promoting academic achievement in America (Mastropieri & Scruggs, 2010). Cooperative group learning involves learners working together in small learning groups. This helps learners to help each other to carry out different tasks. It is a good strategy of teaching learners with visual impairment, particularly in the mixed ability groups (Mitchell, 2008). These studies failed to show a clear correlation between collaborative teaching and learning and academic achievement of learners with visual impairment which was the main interest for this study.

However, it is widely believed that teaching methodology employed in classrooms with learners with visual impairment have the potential to influence their academic achievement. Few studies have tried to show relationship between teaching methodologies and learners with visual impairment academic achievement. According to Mitchell (2008) in a study among American learners, collaborative teaching was shown to be effective in facilitating the academic development of learners both with and without disabilities. A study by Kravetz (2006), showed that since the introduction of collaborative instruction there was a thirty-three percent increase in the number of learners with learning disabilities who have passed state exams and the exam pass rate for learners with disabilities improved by twenty percent in math, twenty seven percent in science and thirty-seven percent in social studies in the United States of America. The current study established that collaborative teaching methods were being employed in integrated education and it was found to affect academic achievement of learners with visual impairment in Kakamega County.
To help learners with visual impairment, teaching materials need to be adapted. For example printed text can be adapted through increasing the font size, bolding the text, increasing contrast, adding colour, and adjusting spaces between characters (Mastropieri & Scruggs, 2010). Meanwhile, learners with low vision should be provided with a copy of notes which are written on the board or presented on a projector. A specialized teacher for learners with visual impairment, should help to clarify the lesson to them, and if possible, should teach them before the main teaching session starts (Spungin, 2002). If a teacher writes on the blackboard or uses visual aids, it is important that he or she uses large writing text on the blackboard or visual aids. In addition a teacher may use colored chalks (UNESCO, 2001). These studies also failed to link adapting written text while teaching and academic achievement an area this study covered.

2.2 Influence of Types of Teaching Materials and Academic Achievement

Lack of proper vision among some learners, show that, the normal traditional materials for teaching and learning cannot be used to meet their learning and academic needs in integrated settings. Simon, Echeita, Sandoval and Lopez (2010), conducted a study in Spain with the aim of analyzing the process of integration to learners with visual impairments. The study found out that schools do not have appropriate teaching and learning resources to help learners with visual impairments learn better in integrated classrooms. Several resources are required by learners with visual impairment Braille being among them. These studies do not show how the use of Braille improves academic achievement.
Print adapted materials are also said to be essential for learners with visual impairment. Determining the appropriate method of adaptations to magnify text for learners with low vision is an important issue, to ensure that difficulties in reading do not impede progress in educational activities. Such adaptation may include, use of magnifiers (angular magnification), higher contrast material, large print and use of electronic devices. Angular magnification involves the use of a low vision device (such as a hand held magnifier or telescope). Electronic magnification involves the use of video magnification devices; such as a closed-circuit television (CCTV) a device that enlarges written or printed text; head-mounted video-magnification device and computer software that enlarges and enhances the quality of images on a computer. Large print provides relative size magnification by enlarging the print size (Strobel, Fossa, Arthanat & Brace, 2006). The authors however simply explained adaptation of print media but failed to show how these materials affected academic achievement of learners with visual impairment.

It is further argued that the technological developments during the last few decades have significantly increased access to information in all formats for learners with visual impairments. As Kapperman and Sticken (2000) observed, the ability to access information is essential for success in education employment and life. Therefore, much of the development of assistive technology has focused on providing access to information. In particular, devices to read and write Braille and print have significantly improved with the application of new technology. Such devices include audio technology (tapes and tape recorder, auditory text, recorded texts and synthetic speech) as well as computer based technology such as Braille embossers (specialized tactile printer) advanced CCTV, scanners and optical
character recognition software (technology that scans printed text and provide the user with speech output), computer screen readers, Compact Discs (CDs) and multiple hardware and software innovations (Gerber, 2003; Michaels & McDermott, 2003; Strobel, et al., 2006).

Most of the above studies failed to correlate teaching materials and academic achievement of learners with visual impairment. However in Kenya, a study in Nyeri district by Orodho and Mwangi (2014), showed that school-based factors such as unavailability of instructional materials, lack of SNE learner-centered integrated curriculum and inadequate teaching strategies affected the education of learners with special needs. Though this study showed that learning materials affect the success of integrated education, it however focused on special needs education in general. The current study however focused on teaching and learning materials and how they are affecting learners with visual impairment academic achievement in integrated school settings in Kakamega County Kenya.

2.3 Influence of Teachers Attitude on Academic Achievement of Learners with VI

Attitudes of individuals and teachers towards integrated education have been found to influence how learners with SNE integrate into integrated education. In Malaysia, Ali, Mustapha and Jelas (2006), examined the attitude and perceived knowledge of integrated and special education teachers of primary and secondary schools towards integrated education and found out that, in general, teachers had positive attitudes towards integrated education. They had however not linked the positive attitude of teachers and academic achievement of learners with visual impairment in integrated
education in the country. In Bangladesh, Rahaman and Sutherland (2012), observed that teachers attitudes towards integrated education was generally positive, however participants were unsure how to implement integrated education. However, this study did not show any link between teacher attitude and academic achievement of SNE learners which included Learners with VI.

Baron-Cohen’s (2003) findings revealed that female teachers working in regular schools showed a positive attitude towards integrated education for learners with hearing impairment, when compared to male teachers. Several studies support the view that there is no correlation between a teacher’s gender and the attitude towards integrated education (Kuester, 2000; Van, ShoHo & Barker, 2001). Bevan-Brown (2002) reported negative attitude of teachers to learners with special needs. Rahaman and Sutherland (2012), discovered that most regular teachers preferred having learners with special needs removed from their classes. His study further revealed that the reactions of 60% of the teachers were negative towards having learners with special needs. Rahaman and Sutherland (2012), also found that there existed a considerable residue of fear, hostility and aversion toward the learners with special needs, thus making teacher’s attitude to be an obstacle to achieving full academic potential of the learners. These findings correspond to Odongo’s (2012), study in Tanzania where female teachers had negative attitudes and even not willing to further their education in special needs education.

Further studies have shown that attitude of teachers toward working with learners with special needs in regular schools are mixed. Hungwe (2005), found that 62% of teaching staff had positive attitudes towards learners with special needs; 19% had negative attitudes, while 19% were neutral. Hungwe (2005), also found that some
teachers had more positive attitude toward SNE learners than their normal counterparts. Findings in Nigeria and Zimbabwe reported positive attitude of teachers to learners with special needs in integrated schools (Maunganidze & Kasayira 2002; Hungwe, 2005).

A study by Odongo (2012), in Kenya showed that teachers have a positive attitude towards integration of learners with disabilities in regular classrooms. The reviewed literatures are quite contradictory with some indicating positive attitude while others show negative attitude towards integrated education. However, none of the reviewed data focused on the relationship between these attitudes and academic achievement of Learners with VI. It was as a result of this that the researchers sought to assess the attitude of teachers towards Learners with VI and how it was affecting these learners academic achievement in Kakamega County Kenya.

2.4 Influence of Parental Involvement on Academic Achievement of Learners with VI

A recent systematic review of parents’ role (PR) in the United States of America concluded that parental role has a positive and significant effect on learner’s overall academic achievement (Nye, Turner & Schwartz, 2006). The association between parental role and student achievement has also been investigated by measuring the amount of naturally occurring parental role (according to the parent, the child or a teacher) and evaluating its relationship to achievement. Some of the research has supported the positive effects of PR on student achievement, particularly for activities that are not directly related to school but rather to general academics (Pomerantz, et al., 2007). Findings on the positive benefits of involvement at school
have been more consistent. In the USA, both cross-sectional and longitudinal research has documented an association between naturally occurring parental role in school and higher achievement (Pomerantz, et al., 2007). This involvement in early grades has been shown to predict later achievement even achievement in secondary school (Barnard, 2004).

In general, the idea is that parental role can have a direct effect on achievement by improving learner’s skills (like helping them to do homework) or an indirect effect by increasing motivation for school or improving student behaviour (Pomerantz, et al., 2007). Some studies involving post primary and secondary school learners has documented little or no relationship between parental role and achievement for these learners (Fan, 2001; Bronstein, Ginsberg & Herrara, 2005), whereas other studies have found a positive relationship between parental role and learners achievement (Grolnick, Kurowski, Dunlap & Hevey, 2000; Hill, Castellino, Lansford, Nowlin, Dodge, Bates & Pettit, 2004). These studies are general in nature and do not focus on specific groups of learners that is either learners with special needs such as learners with visual impairment or normal learners. The studies also did not show how parental involvement affected academic achievement of these learners.

Research concerning parental role of learners with disabilities are surprisingly limited, particularly given the fact that parental roles are obviously considered important for this population. According to Rogers, Wiener, Marton and Tannock (2009), and Gerstein (2006), much of the research that has been conducted in this area has been descriptive in nature, measuring levels of parental role for various subgroups of learners with disabilities, or has involved a comparison of the levels of parental role of learners in the general population and special education learners.
Other studies have documented similar levels of involvement for parents of learners with disabilities and parents of learners without disabilities (Gerstein, 2006; Strobel, et al., 2006). Rogers, et al. (2009) found general education learners to have higher levels of parental role in assistance with homework as well as attendance of parent teacher meetings.

Although no published research relating parental role to achievement for learners with disabilities could be found, two unpublished dissertations that addressed this topic were located in US. One of these studies investigated the relationship between parental role and achievement for learners with learning disabilities and serious emotional disturbances (Rogers, et al., 2009). Parental role was measured by school-initiated home school contact, parent-initiated home school contact, and other involvement such as parent teacher organizations and volunteer activities. Results indicated that the three parent-involvement factors combined were a significant predictor of achievement but that both types of home school contact tended to be associated with lower achievement whereas other involvement tended to be associated with higher achievement.

Another study also evaluated the benefits of parental role for a group of learners with learning disabilities, including its relationship with grades (Gerstein, 2006). Results indicated that higher grades were correlated with both parents’ involvement, particularly school-related involvement for mothers and fathers’ involvement in personal activities. In another study carried out in the United States of America, Kelly (2009), observed that high levels of continued parental involvement may help learners with VI get the appropriate accommodations and supports they need to function better and therefore perform better academically. In the same country,
negative relationship between parental involvement and achievement has also been found by some studies, particularly those focusing on homework help (Patall, Cooper & Robinson, 2008; Pomerantz, et al., 2007).

In Africa studies measuring the association of parental involvement and academic achievement of learners with disabilities are either nonexistent or limited at best. According to Ukeli and Akem (2013) in a study conducted in Nigeria, a positive relationship was established between parental involvement and Mathematics achievement among primary school pupils. This relationship was significant over time, meaning that parental involvement had a positive effect on the growth of Mathematics achievement over time for learners who started the study in primary school. These findings indicate that parental involvement is important for learners with visual impairment [VI] while in late primary and junior school but not in secondary school. However such studies to the best of the researchers’ knowledge were nonexistent in Kenya and Kakamega County to be particular. The studies in disabilities were also not specific as they were generalized to all disabilities without focusing on a particular disability which was an area of interest for the current study. This study sought to address this gap by identifying how parental involvement was affecting learners with visual impairments performance in integrated schools.

2.5 Summary of Literature Review

The reviewed literature was based on the various who concluded that teaching methodologies affected learners’ academic achievement, others who observed that teaching materials also had some impact on academic achievement of learners with visual impairment, some who established that teachers attitude affected integrated
education and others who showed that parental involvement was a strong predictor of academic achievement.

However, majority of the reviewed literature focused on predictors of academic achievement among learners without disability, while others generalized their findings for all learners with disability. The focus of the current study however was on the determinants of academic achievement among learners with visual impairment especially those who attended integrated primary schools in Kakamega County Kenya.
CHAPTER THREE
RESEARCH METHODOLOGY

3.0 Introduction

This chapter described the procedure followed in conducting the study. It began with research design, study population, sampling techniques and sample size, research instruments, pilot study, validity and reliability of the instruments, data collection procedures, data analysis procedures and ended with ethical considerations.

3.1 Study Design

The research design adopted in this study was descriptive survey. Descriptive survey studies are concerned primarily with determining “what is” (Mutai, 2000). Surveys are excellent vehicles for collecting original data for studying a phenomenon in a large population. Using this design, a large population was studied with only a portion of the population being used to provide the required data. The research design was therefore most appropriate for this study as it involved an assessment of the determinants of academic achievement of learners with visual impairment in integrated schools in Kakamega County Kenya without manipulating any of the variables. It also enabled the researcher to gather quantitative data through the use of questionnaires.

3.2 Study Variables

This study assessed the relationship between two variables, the independent variable and the dependent variable. The two variables were as stated below;

Independent Variables: These included-
- Teaching methods or strategies
- Types of teaching and learning materials
- Teachers attitude towards integrated education
- Parental involvement

**Dependent variable:** This was the academic achievement of learners with VI which was measured by teachers and gathering learners on how the pupils perform academically, that it very good, good, average, poor or very poor.

### 3.3 Study Location

The study was carried out in Kakamega County found in western province in Kenya. The county is largely inhabited by the Luhya speaking community and has Kakamega town as its largest town. Food crop farming is the main economic activity of the residents of Kakamega. However, Kakamega town is fast becoming a metropolitan town where Kenyans from each community can be found. The county is also home to 64 public primary schools and five VI integrated primary schools. Therefore, the study was conducted within the four selected VI integrated primary schools of Kakamega County. These schools included Shikoti, Nambacha, Shinoyi and Ewamakhumbi. The selection of these schools was based on the fact that they had been providing integrated education for pupils with VI for the longest time in this County and also the fact that these pupils often underperform compared to their counterparts without VI.
3.4 Target Population

The target population for this research was 58 individuals from the available 4 integrated schools with VI learners, which comprised 8 class 6 and 7 teachers and 50 visually impaired standard six and seven pupils from the selected integrated schools in Kakamega County Kenya. These groups had been selected because they were more experienced with the subject matter under study. They are also more accessible as compared to parents and head teachers. The learners were selected as they are the ones whose performance was in question whereas teachers were selected because they are the ones who teach and assess these learners. Class 6 and 7 was selected as they had been in school for long and have taken numerous exams hence were capable of accurately responding to set questions.

3.5 Sampling Technique and Sample Size

In this section, the researcher presents the sampling techniques used to select study participants and also the selected sample size as follows.

3.5.1 Sampling Technique

The numbers of integrated schools with VI learners were only four in the study area. Therefore, purposive sampling was used to select the studied schools and the required 8 teachers whereby the researcher selected 2 teachers from each of the 4 schools until the needed 8 participants were selected. Further, purposive sampling technique was used to select 50 class six and seven VI learners in these schools as they were mature enough to undertake the study. The researcher purposively picked 6 pupils in class six and 6 pupils in class seven from three schools and in the remaining 1 school, 7 pupils from class six and 7 pupils from class seven were
selected to participate in the study. This gave a total sample of 50 pupils who took part in the study. The choice of this sampling technique was informed with the fact that it allowed the researcher the autonomy of selecting participants she felt could adequately answer the study questions.

### 3.5.2 Sample Size

Mugenda and Mugenda (2003) 10 to 30% sample size determination technique was used in this study to calculate the appropriate sample size among the teachers. The technique was used as the study population was small. The total sample size was $8 + 50 = 58$ participants which forms 10.7% of the study population as presented in table 1 that follows.

<table>
<thead>
<tr>
<th>Target</th>
<th>Population</th>
<th>% Sample Proportion</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class six pupils</td>
<td>500</td>
<td>10.0</td>
<td>50</td>
</tr>
<tr>
<td>Teachers</td>
<td>40</td>
<td>20.0</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>540</strong></td>
<td><strong>10.7</strong></td>
<td><strong>58</strong></td>
</tr>
</tbody>
</table>

### 3.6 Research Instruments

The following research instrument was used to collect information from respondents.

**Questionnaires:** This instrument was useful in collecting both qualitative and quantitative data as it had both open-ended and close ended questions. With open-ended questions, no pre-coded answers, that is response categories were provided to respondents. In close-ended questions, response categories were provided and
respondents only need to select a particular answer. The instrument was used to gather data from teachers and pupils. The questions in the instrument addressed each and every objective of the study in separate sections (See Appendix I).

3.7 Pilot Study

Before the actual data collection, the questionnaires were piloted on a selected sample from Mukuli Salvation Amy primary in Vihiga County similar to the actual sample that took part in the actual study. This school was chosen because the demographic characteristics of individuals in it are similar to those of the target population. This enabled the researcher to make meaningful modifications to the research instruments. Piloting was helpful for it enhanced reliability and validity of the research instrument as a consistent measure of the concepts measured.

3.7.1 Reliability of the Instruments

Reliability of an instrument is a measure of the degree to which it yields consistent results or data after repeated trial (Kothari, 2005). With the assistance of the university supervisors, the researcher assessed the consistency of the responses on the pilot instruments to make a judgement on their reliability. Research instruments were evaluated for appropriateness of items so as to identify any errors. These errors were amended to ensure that the respondents clearly understood the questions. From the piloting results, reliability coefficient was determined using Pearson’s Product Moment Correlation Method. A reliability coefficient value of $r>0.89$ was obtained which indicated a high internal reliability.
3.7.2 Validity of the Instruments

Validity is the extent in which a concept, conclusion or measurement is well founded and corresponds to the real world (Brains, Willnat, Manheim & Rich 2011). Content validity of the instruments was determined by expert judgments. The instruments were scrutinized by the peer reviews and project supervisors provided by the university to judge the items on their appropriateness of content, and need of modification so as to achieve the objectives of the study. The supervisors determined whether the items in the research instruments adequately represented all the areas that needed to be investigated. In addition, the researcher also ensured validity of the data to be collected by administering the instruments personally as well as with the assistance of well-trained assistants.

3.8 Data Collection Technique

This process was undertaken in a week using two data collectors with experience in data collection prior to this study. One field supervisor and the researcher were part of the field work. Three days training was provided to the data collectors and supervisors in Kakamega town where sampling of respondents and issuing of questionnaires by field assistants was practiced in actual field situation on 6 respondents by each data collector during the training. This was followed by discussions on the experiences gained from the practice. After the training, sampling began and questionnaires were issued by the researcher and field assistants’ to class 6 and 7 teachers first, this was followed by issuing of questionnaires to visually impaired class six and seven pupils. The issued instruments were then collected in a period of one week and prepared for data analysis.
3.9 Data Analysis

The data collected from the respondents was grouped, cleaned, coded, transformed and analyzed using statistical packages for social sciences (SPSS) software version 17. The analyzed data were presented using frequencies and percentages while figures and tables were used to present the results. Close-ended questions were presented using linkert scale indicating whether a respondent either strongly agree, agree, neither agreed nor disagreed, disagreed or strongly disagreed. Interpretation and presentation of data was based on the research questions in chapter one. Conclusions and recommendations were drawn from the research findings.

3.10 Logistical and Ethical Considerations

Permission for conducting this study was sought from National Commission of Science, Technology and innovation by using a letter of introduction received from Kenyatta University (NACOSTI). After acquiring the research permit, local administrators in Kakamega County as well as the head teachers of the selected schools were also asked to give authorization for this study to be done in their locale and schools. Granted permission was shown to every respondent in order to gain their confidence and trust in the research as well as their authorization to carry out this study. Then the study subjects were informed of their rights to participate or refuse to participate in the study and their right to remain anonymous as their names were not to be mentioned anywhere in this research. Research assistants were at the same time trained on how to respect the rights of the study subjects and therefore did not force anyone’s participation. In the process of doing so, they observed the
ethical regulations during the study. Lastly, respondents’ answers were not directed in anyway by the field staffs during this study.
CHAPTER FOUR:
DATA ANALYSIS AND PRESENTATION OF RESULTS

4.0 Introduction

This chapter presents findings based on the study objectives. The study findings are presented as follows, distribution of respondents by demographic information, impact of teaching methodologies on academic achievement of learners with visual impairment, influence of types of teaching and learning materials on academic achievement of learners with visual impairment, effects of teachers and learners attitude towards integration of learners with visual impairment on academic achievement of learners with visual impairment and ends with the effects of parental involvement on academic achievement of learners with visual impairment in integrated schools within Kakamega County.

4.1 General Information

In this section, the return rates of the questionnaire and participants demographic information are presented.

4.1.1 Questionnaire Return Rate

This research sampled 58 participants who were drawn from selected integrated primary schools in Kakamega County. The sample consisted of class teachers and visually impaired learners. Out of the sampled participants, 58 responded to the investigation. The summary of the return rate is shown in table 2.
Table 4.1: Questionnaire Response Rate

<table>
<thead>
<tr>
<th>Sample size</th>
<th>Participants</th>
<th>Non participants</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>58</td>
<td>100</td>
<td>58</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: The researcher, 2018

According to table 2, the total response rate was 58 participants (100.0 %) which recorded 100.0% return rate. This was an excellent rate for the analysis of data collected. This questionnaire response rate decision was based on a study by Babbie (2007) who suggested that a fifty percent return rate was good enough for any data analysis but 70% and above was termed as very good. Therefore, the researcher concludes that this was an excellent return rate. The rate was excellent to carry out the analysis of this data.

4.1.2 Participants by Demographic Information

The researcher first sought to document the demographic characteristics of the studied participants and based on the collected and analyzed data, 50%, n=4 of teachers and head teachers were male while the remaining 50%, n=4 were female. Findings from visually impaired learners also showed that 50%, n=25 were male, while the other 50%, n=25 were female learners. The study therefore ensured that voices of all gender were equally represented in the study.
With respect to age, 25%, n=2 of the teachers were found to be aged between 21 to 30 years, a majority of 50%, n=4 were aged between 31 to 40 years, while 25%, n=2 were aged over 40 years as findings in figure 3 show.

Table 4.2: Distribution of Learners with VI by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentages</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 years</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>12 years</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>13 years</td>
<td>20</td>
<td>40.0</td>
</tr>
<tr>
<td>14 years and above</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

However, data obtained from Learners with VI and presented in table 3 indicate that 20%, n= 10 were aged 11 years, another 20%, n=10 were aged 12, however a majority of 40%, n=20 were aged 13 years and the remaining 20% were aged 14 years and above. The researcher further sought to place teachers who participated in
this research in different categories and based on the results, 50%, n=4 were teachers, while another 50%, n=4 were head teachers.

**Figure 4.2: Distribution of teachers by level of education**

In figure 3, the results reveal that majority of the teachers 50%, n=4 have had a postgraduate level of education, 37%, n=3 had undergraduate level of education and the remaining 13%, n=1 had college level of education. This reveals that all the teachers in the studied school had desirable level of education necessary to manage Learners with VI in integrated classrooms.
The Learners with VI who took part in the study came from various upper classes with 20%, n=10 being class five learners, 20%, n=10 class six, a majority of 40%, n=20 class seven learners and 20%, n=10 being class eight learners as findings in figure 4 show.

**Figure 4.3: Distribution of Learners with VI by class**

**Figure 4.4: Distribution of teachers by marital status**
Information gathered by the researcher showed that half of the teachers 50%, n=4 were married, 37%, n=3 were single, while 13%, n=1 was separated as findings in figure 5 indicate.

**Figure 4.5: Distribution of teachers by experience working in an integrated school**

Based on the analyzed data presented in figure 6, majority of the teachers who participated in this study 50%, n=4 had worked in integrated schools for 2 to 5 years, 13%, n=1 had spent 6 to 10 years in such academic setting as educator, while 37%, n=3 had spent over 10 years teaching in such schools. This shows most teachers in the studied schools had considerable experience working with VI children in their career. All the teachers 100%, n=8 agreed that they had learners with VI in their classes and schools.
Information gathered from the Learners with VI indicated that a majority of 80%, n=40 were partially blind while only 20%, n=10 were totally blind as presented in table 4.

### Table 4.3: Status of Visual Impairment among Learners

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partially blind</td>
<td>40</td>
<td>80.0</td>
</tr>
<tr>
<td>Fully blind</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2 Impact of Teaching Methodologies on Academic Achievement of Learners with Visual Impairment

In this section, the first study objective which was to assess the influence of teaching methodologies on academic achievement of learners with visual impairment in integrated schools within Kakamega County has been addressed.

Teachers employ various teaching methods in classrooms in order to impart knowledge to learners.
Figure 4.6: Teachers’ responses on the main teaching methodology used in an integrated classroom

Findings in figure 7 indicate that the main teaching methodology employed by teachers in the studied schools with Learners with VI in Kakamega County was chalk and board method as 22%, n=2 of the respondents mentioned, 13%, n=1 of the teachers provided audiovisual pre-recorded lessons, 13%, n=1 used differentiated teaching methods, 13%, n=1 used lecture methods, 13%, n=1 talked loud while teaching, 13%, n=1 taught using large print texts, while the remaining 13%, n=1 used collaborative/cooperative group teaching methods while teaching these learners. A study by Mitchell (2008) in America, revealed that collaborative teaching and lecture methods were widely used for instructing learners.
Similarly, as results presented in figure 8 show, 20%, n=10 of the learners noted that chalk and board was the main method of instruction, 20%, n=10 of learners with VI mentioned collaborative teaching, 20%, n=10 mentioned teaching using large print text, 20% mentioned teaching using lecture method, 12%, n=6 mentioned that teachers talked loud while teaching, 10%, n=5 mentioned that teachers used differentiated teaching methods, while 8%, n=4 observed that teachers provided audiovisual pre-recorded lessons.

In support Mitchell, (2008) noted that American educators employed collaborative and differentiated methodologies while instructing learners. The researcher also sought to assess whether the mentioned teaching methodologies have any impact on academic achievement of learners with visual impairment and findings from the teachers 100%, n=8 indicated that they did a similar outcome derived from the Learners with VI themselves (100%, n=50). A study by Mitchell, (2008) in America,
revealed that collaborative teaching facilitated academic development of learners both with and without disabilities which supports the current findings.
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking loud while teaching enhances learners with visual impairment understanding of the subject content</td>
<td>6  75.0</td>
<td>2     25.0</td>
<td>0       0.0</td>
<td>0       0.0</td>
<td>0     0.0</td>
</tr>
<tr>
<td>The use of lecture method of teaching improves Learners with VI participation</td>
<td>2  25.0</td>
<td>2     25.0</td>
<td>0       0.0</td>
<td>0       0.0</td>
<td>4     50.0</td>
</tr>
<tr>
<td>Repeating the lessons contents being taught enhances Learners with VI understanding</td>
<td>6  75.0</td>
<td>2     25.0</td>
<td>0       0.0</td>
<td>0       0.0</td>
<td>0     0.0</td>
</tr>
<tr>
<td>Talking slowly enables Learners with VI to be able to take down notes</td>
<td>8  100.0</td>
<td>0     0.0</td>
<td>0       0.0</td>
<td>0       0.0</td>
<td>0     0.0</td>
</tr>
<tr>
<td>Provision of audiovisual pre-recorded lessons enhance</td>
<td>6  75.0</td>
<td>2     25.0</td>
<td>0       0.0</td>
<td>0       0.0</td>
<td>0     0.0</td>
</tr>
<tr>
<td>Learners with VI academic achievement</td>
<td>6  75.0</td>
<td>2     25.0</td>
<td>0       0.0</td>
<td>0       0.0</td>
<td>0     0.0</td>
</tr>
<tr>
<td>Using big letters while writing on the board enables partially blind learners to participate in class</td>
<td>8  100.0</td>
<td>0     0.0</td>
<td>0       0.0</td>
<td>0       0.0</td>
<td>0     0.0</td>
</tr>
<tr>
<td>The use of group discussions among all learners improves academic achievement of Learners with VI</td>
<td>4  50.0</td>
<td>2     25.0</td>
<td>2     25.0</td>
<td>0       0.0</td>
<td>0     0.0</td>
</tr>
</tbody>
</table>
Table 5 indicate that a majority of teachers, 75%, n=6 strongly agreed that talking loud while teaching enhanced learners with visual impairment understanding of the subject content, 50%, n=4 strongly disagreed that the use of lecture method of teaching improved Learners with VI participation in the discussions during lessons enhances their academic achievement, 75%, n=6 strongly agreed that repeating the lessons contents being taught enhanced Learners with VI understanding, 100%, n=8 strongly agreed that talking slowly enabled Learners with VI to take down notes, 75%, n=6 strongly agreed that provision of audiovisual pre-recorded lessons enhanced Learners with VI academic achievement, 100%, n=8 strongly agreed that using big letters while writing on the board enabled partially blind learners to participate in class, while 50%, n=4 strongly agreed that the use of group discussions among all learners improved academic achievement of Learners with VI.

This therefore clearly shows that teaching methodology used by teachers while educating learners with VI have a significant influence on their performance academically and in exams. Similarly, Kravetz, (2006) also revealed that collaborative instruction have improved academic achievement of learners with VI in the United States of America. It is believed that in a learning process learners differ in capabilities. Learners with low ability will learn from their fellow capable peers. Cooperative learning among learners of different learning capabilities and learning needs, in an integrated classroom, has proved to be effective in promoting academic achievement in America (Mastropieri & Scruggs, 2010).
<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th></th>
<th>Agree</th>
<th></th>
<th>Neutral</th>
<th></th>
<th>Disagree</th>
<th></th>
<th>Strongly Disagree</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking loud while teaching enhances my understanding of the</td>
<td>30</td>
<td>60.0</td>
<td>20</td>
<td>40.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>subject content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of lecture method of teaching improves my participation</td>
<td>10</td>
<td>20.0</td>
<td>10</td>
<td>20.0</td>
<td>5</td>
<td>10.0</td>
<td>25</td>
<td>50.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Repeating the lessons contents being taught enhances my</td>
<td>40</td>
<td>80.0</td>
<td>10</td>
<td>20.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>understanding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talking slowly enables me to be able to take down notes</td>
<td>50</td>
<td>100.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Provision of audiovisual pre-recorded lessons enhance my</td>
<td>10</td>
<td>20.0</td>
<td>5</td>
<td>10.0</td>
<td>25</td>
<td>50.0</td>
<td>10</td>
<td>20.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>academic achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using big letters while writing on the board enables me to</td>
<td>50</td>
<td>100.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>participate in class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of group discussions among all learners improves my</td>
<td>45</td>
<td>90.0</td>
<td>5</td>
<td>10.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>academic achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Findings from the Learners with VI yielded similar results as those of their teachers. Findings in table 6 show that a majority of the learners 60%, n=30 strongly agreed that talking loud while teaching enhanced their understanding of the subject content, 50%, n=25 disagreed with the statement that the use of lecture method of teaching improved their participation during lessons and enhances their academic achievement, 100%, n=50 strongly agreed that using big letters while writing on the board enabled them to participate in class hence improved their academic achievement, 50%, n=25 neither agreed nor disagreed with the statement that provision of audiovisual pre-recorded lessons enhance my academic achievement, 90%, n=45 strongly agreed that the use of group discussions among all learners improved their academic achievement, 80% strongly agreed that repeating lesson taught contents enhanced their understanding, while 100%, n=50 strongly agreed that talking slowly enabled them to take down notes. The findings also lend credence to those of teachers that teaching methodologies play a big role on the performance of learners with VI in the study area. A study by Mitchell (2008), in America revealed that collaborative teaching facilitated academic development of learners both with and without disabilities. Therefore, using big letters and talking slow while teaching had the highest influence on academic performance of learners with VI in the study area as the findings indicate.

4.3 Influence of Types of Teaching and Learning Materials on Academic Achievement of Learners with Visual Impairment

The study addresses the second objective of the study which was to establish the influence of types of teaching and learning materials on academic achievement of learners with visual impairment in integrated schools within Kakamega County in this section.
The study sought to find out if teaching and learning materials needed by learners with VI was available in schools and the results presented in table 7.

Table 4.6: Teachers’ and learners’ responses on availability of teaching and learning materials for learners with VI

| Study findings from the teachers and the learners as presented in table 7 showed that 50%, n=4 of the teachers and 40%, n=20 of the learners mentioned that the resources were available while 50%, n=4 teachers, and 60%, n=30 Learners with VI mentioned that the materials were not available. On their part, Simon, et al. (2010) conducted a study in Spain with the aim of analyzing the process of integration to learners with visual impairments. The study found that schools lacked appropriate teaching and learning resources to help learners with visual impairments learn better in integrated classrooms. |
Results from the teachers presented in figure 10 show that a majority of 50%, n=2 of the teachers who mentioned that the materials were available indicated that large print teaching and learning materials were available, 25%, n=2 mentioned audiovisual materials, whereas the remaining 25%, n=1 mentioned Braille as the available teaching and learning materials for learners with VI in school. These results are supported by Strobel, et al. (2006) who noted that print media adapted materials are said to be essential for learners with visual impairment. Also, determining the appropriate method of adaptations to magnify text for learners with low vision is an important issue, to ensure that difficulties in reading do not impede progress in educational activities. Such adaptation may include, use of magnifiers (angular magnification), higher contrast material, large print and use of electronic devices. Angular magnification involves the use of a low vision device (such as a hand held magnifier or telescope).
Similar outcomes were derived from information gathered from the Learners with VI as 60%, n=18 mentioned that large print teaching and learning materials were available, followed by audiovisual materials as mentioned by 30%, n=9 mentioned and Braille as 10%, n=3 mentioned. The findings from the learners are as presented in figure 10. In Spain, a study by Simon, et al. (2010) established that Braille’s are necessary for the education of learners with VI at all levels of education.
Table 4.7: Teachers’ ratings of the influence of teaching and learning materials on academic achievement of learners with visual impairment

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>The use of sound recorders improves academic</td>
<td>8</td>
<td>100.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>achievement of Learners with VI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of large text on the board and academic</td>
<td>6</td>
<td>75.0</td>
<td>2</td>
<td>25.0</td>
<td>0</td>
</tr>
<tr>
<td>print media improves Learners with VI academic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of Braille by Learners with VI improves</td>
<td>2</td>
<td>25.0</td>
<td>1</td>
<td>13.0</td>
<td>5</td>
</tr>
<tr>
<td>their academic achievement as it allows them to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>take notes that they can easily read</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of computer screen reader improves Learners</td>
<td>2</td>
<td>25.0</td>
<td>2</td>
<td>25.0</td>
<td>4</td>
</tr>
<tr>
<td>with VI ability to read texts hence improving their</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>academic achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of large print which provide relative size</td>
<td>7</td>
<td>87.0</td>
<td>1</td>
<td>13.0</td>
<td>0</td>
</tr>
<tr>
<td>magnification by enlarging the print size enables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>readability of texts by Learners with VI making it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>possible for them to keep up with the rest and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>perform well academically</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Based on the obtained information, all teachers 100%, n=8 and learners with VI 100%, n=50 agreed that teaching and learning materials available for Learners with VI education in schools influenced these learners academic performance. As shown in table 8, all the teachers 100%, n=8 strongly agreed that the use of sound recorders improved academic achievement of Learners with VI, 75%, n=6 strongly agreed that the use of large text on the board and academic print media improves Learners with VI academic achievement, 62%, n=5 neither agreed nor disagreed that the use of Braille by Learners with VI improved their academic achievement as it allowed them to take notes that they could easily read, similarly, 50%, n=4 were neutral on whether the use of computer screen reader improved Learners with VI ability to read texts hence improving their academic achievement, while 87%, n=7 strongly agreed that the use of large print which provide relative size magnification by enlarging the print size enabled readability of texts by Learners with VI making it possible for them to keep up with the rest and perform well academically.

However, from the results, it is clear that availability of teaching and learning materials in schools for Learners with VI have both positive and negative influence on their achievement. This is because the results reveal that where certain materials are available, academic achievement of learners improves and where they are lacking, the performance of learners with VI diminishes. In Kenya, a study in Nyeri district by Orodho and Mwangi (2014) showed that school-based factors such as unavailability of instructional materials, lack of an SNE learner-centered integrated curriculum affected the education of learners with special needs.
Table 4.8: Learners’ with VI ratings of the influence of teaching and learning materials on their academic achievement

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>The use of sound recorders improves my academic achievement</td>
<td>15</td>
<td>30.0</td>
<td>20</td>
<td>40.0</td>
<td>0</td>
</tr>
<tr>
<td>The use of large text on the board and academic print media improves my academic achievement</td>
<td>30</td>
<td>60.0</td>
<td>20</td>
<td>40.0</td>
<td>0</td>
</tr>
<tr>
<td>The use of Braille by us improves our academic achievement as it allows us to take notes that we can easily read</td>
<td>15</td>
<td>30.0</td>
<td>0</td>
<td>0.0</td>
<td>35</td>
</tr>
<tr>
<td>Use of computer screen reader improves my ability to read texts hence improving my academic achievement</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>The use of large print which provide relative size magnification by enlarging the print size enables readability of texts by us making it possible for us to keep up with the rest and perform well academically</td>
<td>50</td>
<td>100.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
</tbody>
</table>
With respect to information obtained from learners with VI, a majority of 40%, n=20 strongly agreed that the use of sound recorders improved their academic achievement, 60%, n=30 strongly agreed that the use of large text on the board and academic print media improved their academic achievement, 70%, n=35 neither agreed nor disagreed with the statement that the use of Braille improves their academic achievement as it allows us to take notes that we can easily read, 100%, n=50 strongly disagreed with the statement that the use of computer screen reader improves my ability to read texts hence improving my academic achievement, while 100%, n=50 strongly agreed that the use of large print which provide relative size magnification by enlarging the print size enabled readability of texts by learners making it possible for them to keep up with the rest and perform well academically. These results are presented in table 9. Just like their teachers and head teachers, results from learners with VI indicate that availability of needed teaching and learning materials for this group of learners in school and classes can positively influence their academic outcomes while lack of these have negative outcome on their academic achievement.

Simon, et al. (2010) in Spain found that schools do not have appropriate teaching and learning resources to help learners with visual impairments learn also, print adapted materials are said to be essential for learners with visual impairment. The use of video magnification devices; such as a closed-circuit television (CCTV) a device that enlarges written or printed text; head-mounted video-magnification device and computer software that enlarges and enhances the quality of images on a computer are also recommended (Strobel, et al., 2006). Devices such as audio technology (tapes and tape recorder, auditory text, recorded texts and synthetic
speech) as well as computer based technology such as Braille embossers (specialized tactile printer) advanced CCTV, scanners and optical character recognition software, Compact Discs (CDs) and multiple hardware and software innovations (Gerber, 2003; Strobel, et al., 2006).

### 4.4 Influence of Teachers’ Attitude towards Integration of Learners with Visual Impairment on Academic Achievement of Learners with Visual Impairment

Here, the researcher addressed the third study objective which was to find out the influence of teachers attitude towards integration of learners with visual impairment on their academic achievement in integrated schools within Kakamega County.

The researcher was also interested in assessing teachers’ attitude towards integration of learners with VI.

<table>
<thead>
<tr>
<th>Teachers</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive attitude</td>
<td>4</td>
<td>50.0</td>
</tr>
<tr>
<td>Negative attitude</td>
<td>4</td>
<td>50.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Results from the teachers as presented in table 10 showed that 50%, n=4 mentioned that teachers had positive attitude towards integration of Learners with VI into integrated education while 50%, n=4 had negative attitude. However, Rahaman and Sutherland (2012), observed that teachers attitudes towards integrated education was generally positive, however participants were unsure how to implement integrated education.
Table 4.10: Learners’ responses on teachers attitudes towards integration of learners with VI

<table>
<thead>
<tr>
<th>Teachers</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive attitude</td>
<td>15</td>
<td>30.0</td>
</tr>
<tr>
<td>Negative attitude</td>
<td>35</td>
<td>70.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

However, only 30%, n=15 learners with VI agreed that their teachers had positive attitude towards their integration while a majority of 70%, n=35 mentioned that the teachers attitude was negative as findings in table 11 revealed. This contradicts Rahaman and Sutherland (2012), who revealed that teachers’ attitude towards integrated education was generally positive.

Table 4.11: Teachers’ and students’ responses on whether teachers attitudes influence learners with VI’s academic achievement

<table>
<thead>
<tr>
<th>Teachers</th>
<th>F</th>
<th>%</th>
<th>Learners with VI</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>8</td>
<td>100.0</td>
<td>50</td>
<td>50</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
<td><strong>100.0</strong></td>
<td><strong>50</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

As shown in table 12, all the teachers, 100%, n=8 and learners with VI 100%, n=50 agreed that the mentioned attitudes influence learners with visual impairments academic achievement in their schools. Rahaman and Sutherland (2012), further noted that teachers’ attitudes towards inclusive education influenced learners’ performance even though they failed to show what kind of influence the said attitudes had on the academic achievements.
On ways in which teachers' attitude affect academic achievement of Learners with VI, results obtained from the information provided by teachers indicate that teachers' indifference towards Learners with VI negatively affect the pupils' academic achievement as mentioned by 47%, n=3, teachers positive attitude towards Learners with VI improved their engagement in class and eventual academic achievement as mentioned by 25%, n=2, 25%, n=2 of teachers mentioned that teachers intolerance towards learners with VI was negatively affecting the learners academic achievement, whereas the remaining 13%, n=1 mentioned that teachers attitudes did not in any way influence academic achievement of learners with VI. These findings are as presented in figure 11. Therefore, the results indicate that depending on the attitude held by teachers on the integration of learners with visual impairment into general classrooms and integrated education, the academic
achievement of these learners can either improve or be affected negatively. A study by Odongo (2012) in Kenya showed that teachers have a positive attitude towards integration of learners with disabilities in regular classrooms. However, they also established that such attitudes improved learners’ achievements.

![Figure 4.10: Learners with VI response on ways in which teachers’ attitude influence their academic achievement](chart)

Results from the learners with visual impairment indicate that half of them 50%, n=25 agreed that teachers’ indifference towards Learners with VI negatively affected the pupils’ academic achievement, 30%, n=15 mentioned that teachers’ positive attitude towards Learners with VI improved their engagement in class and eventual academic achievement, while 20%, n=10 observed that teachers’ intolerance towards Learners with VI negatively affected these learners academic achievement. These findings are presented by the researcher in figure 12. They therefore confirm the teachers’ responses which showed that teachers attitude towards integration of learners with VI in integrated classrooms could have either
positive or negative outcomes with respect to learners with VI’s academic achievement.

In concurrence with the current research findings in Kakamega County, in Bangladesh, et al. (2012), found that there existed a considerable residue of fear, hostility and aversion toward the learners with special needs, thus making teachers attitude to be an obstacle to achieving full academic potential of the learners. Odongo (2012), in Tanzania, revealed that female teachers had negative attitudes and were not willing to further their education in special needs education. In Zimbabwe, Hungwe (2005) showed that blind learners were not accepted in integrated settings. Teachers felt that learners with VI would be a bother in terms of seeking assistance from the others while walking. But unlike these studies that delved only on teachers attitude towards integrated education, the current study has gone further to show how attitudes held by teachers specifically influence academic achievement of learners with visual impairment in Kakamega County.

4.5 Parental Involvement and Academic Achievement of Learners with Visual Impairment

Lastly, the researcher addressed the forth study objective which was to identify how parental involvement influences academic achievement of learners with visual impairment in integrated schools within Kakamega County in this section.
On parental involvement in learners with VI’s education, study results presented in table 13 showed that 50%, n=4 of the teachers and 30%, n=15 of the learners with VI agreed that these learners parents were involved in their education, while the remaining 50%, n=4 of the teachers and a majority of 70%, n=35 of learners with VI mentioned that parents do not get involved in these learners education. In the USA, both cross-sectional and longitudinal research has documented an association between naturally occurring parental role in school and higher achievement (Pomerantz, et al., 2007).

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Learners with VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
</tr>
</tbody>
</table>

Figure 4.11: Teachers’ response on ways in which Learners with VI parents get involved in their education in this school
Further findings from the teachers reveal that a majority 50%, n=2 mentioned that parents got involved by purchasing of the learning materials the Learners with VI require, 25%, n=1 mentioned that they attend every parent teacher meetings organized while the remaining 25%, n=1 observed that parents assist their children with VI with homework as findings in figure 13 indicate. Other studies have documented similar trends in involvement for parents of learners with disabilities and parents of learners without disabilities (Strobel, et al., 2006). Rogers, et al. (2009) found general education learners to have higher levels of parental role in assistance with homework as well as attendance of parent teacher meetings.

![Learners with VI response on ways in which their parents get involved in their education](image)

**Figure 4.11: Learners with VI response on ways in which their parents get involved in their education**

Results from learners with VI indicate that a majority of their parents 53%, n=8 got involved in their education by assisting them in doing homework, 27%, n=4 of the parents purchased learning materials, 7%, n=1 provided private tutors and 13%, n=2 of parents attended parents teacher meetings. The findings from the learners are as presented in figure 14 above. According to Rogers, et al. (2009), and Gerstein,
(2006), much of the research that has been conducted in this area has been descriptive in nature, measuring levels of parental role for various subgroups of learners with disabilities, or has involved a comparison of the levels of parental role of learners in the general population and special education learners.
Table 4.13: Teachers’ ratings of the influence of parental involvement on learners with VI academic performance

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing required learning materials for Learners with VI by parents</td>
<td>4 F 50.0 %</td>
<td>0 F 0.0 %</td>
<td>0 F 0.0 %</td>
<td>2 F 25.0 %</td>
<td>2 F 25.0 %</td>
</tr>
<tr>
<td>Replacing lost learning materials by parents also enables Learners with VI</td>
<td>2 F 25.0 %</td>
<td>2 F 25.0 %</td>
<td>0 F 0.0 %</td>
<td>4 F 50.0 %</td>
<td>0 F 0.0 %</td>
</tr>
<tr>
<td>Attending parent teacher meetings enables parents to know their learners</td>
<td>0 F 0.0 %</td>
<td>2 F 25.0 %</td>
<td>0 F 0.0 %</td>
<td>6 F 75.0 %</td>
<td>0 F 0.0 %</td>
</tr>
<tr>
<td>Providing Learners with VI with tutors improves the learners academic</td>
<td>0 F 0.0 %</td>
<td>0 F 0.0 %</td>
<td>0 F 0.0 %</td>
<td>0 F 0.0 %</td>
<td>8 F 100.0 %</td>
</tr>
<tr>
<td>Personally helping Learners with VI with their studies and homework</td>
<td>4 F 50.0 %</td>
<td>2 F 25.0 %</td>
<td>2 F 25.0 %</td>
<td>0 F 0.0 %</td>
<td>0 F 0.0 %</td>
</tr>
<tr>
<td>Parents lack knowledge on how to take care of learners with VI which</td>
<td>8 F 100.0 %</td>
<td>0 F 0.0 %</td>
<td>0 F 0.0 %</td>
<td>0 F 0.0 %</td>
<td>0 F 0.0 %</td>
</tr>
</tbody>
</table>
Both teachers 100%, n=8 and learners with VI 100%, n=50 agreed that parental involvement influenced their academic achievement. Findings from the teachers presented in table 14 show that 50%, n=4 agreed that purchasing required learning materials for Learners with VI by parents enabled the learners to compete equally with others hence improving their chances of performing well academically and 50%, n=4 disagreed that replacing lost learning materials by parents also enabled Learners with VI to compete equally with peers academically and improves their academic achievement as parents do not do this. There were 75%, n=6 who disagreed with the statement that attending parent teacher meetings enabled parents to know their learners weaknesses hence they worked together with the teachers to improve their learners academics which improved their academic achievement, 100%, n=8 strongly disagreed with the statement that providing learners with VI with tutors improved the learners academic achievement, 50%, n=4 strongly agreed that personally helping Learners with VI with their studies and homework improved their academic achievement, while 100%, n=8 strongly agreed that parents with VI children lack education and knowledge on how to take care of Learners with VI and this hinders their ability to assist the learners academically making it difficult for Learners with VI to improve academically. These results show that every aspect of parental involvement in their children with VI education has specific outcomes with positive involvement improving academic achievement and negative involvement diminishing these children’s academic achievement. The association between parental role and student achievement has also been investigated by measuring the amount of naturally occurring parental role (according to the parent, the child or a teacher) and evaluating its relationship to achievement. Some of the research has supported the positive effects of PR on student achievement, particularly for
activities that are not directly related to school but rather to general academics (Pomerantz, et al., 2007).
Table 4.14: Learners with VI ratings of the influence of parental involvement on their academic performance

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Purchasing required learning materials for me by my parents enables me to compete equally with others hence improving my chances of performing well academically</td>
<td>30</td>
<td>60.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Replacing lost learning materials by my parents also enables me to keep up academically and improves my academic achievement</td>
<td>20</td>
<td>40.0</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>Attending parent teacher meetings enables parents to know my weaknesses hence they work together with the teachers to improve my academics which improves my academic achievement</td>
<td>10</td>
<td>20.0</td>
<td>20</td>
<td>40.0</td>
</tr>
<tr>
<td>My parents have provided a tutor which has improved my academic achievement</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Personally helping me with my studies and homework improves my academic achievement</td>
<td>25</td>
<td>50.0</td>
<td>5</td>
<td>10.0</td>
</tr>
<tr>
<td>Parents lack of education and knowledge on how to take care of me hinders their ability to assist me academically making it difficult for me to improve academically</td>
<td>50</td>
<td>100.0</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Finally, results from learners with visual impairment indicate that a majority of 60%, n=30 strongly agreed with the statement that purchasing required learning materials for learners by parents enable learners with VI to compete equally with others hence improving their chances of performing well academically, 40%, n=20 strongly agreed that replacing lost learning materials by parents also enables learners with VI to keep up academically and improves their academic achievement, 40%, n=20 agreed that attending parent teacher meetings enabled parents to know learners weaknesses hence they worked together with the teachers to improve learners academics which improved the academic achievement of learners with VI, 60%, n=30 strongly disagreed with the statement that parents had provided a tutor which improved academic achievement of learners with VI, 50%, n=25 strongly agreed with the statement that personally helping learners with VI with their studies and homework improved their academic achievement and lastly, 100%, n=50 strongly agreed that parents lack of education and knowledge on how to take care of me hindered their ability to assist learners with VI academically making it difficult learners to improve academically as results presented in table 15 indicate. More findings from the learners are presented in the table below. The results show that parental involvement plays a significant role in the academic achievement of learners with VI. Hence, it is essential that schools find a way of ensuring maximum involvement of parents with children who are visually impaired in their education if these children are to gain same benefits from education as those who are not VI in Kakamega County.

In a study carried out in America, Kelly (2009) observed that high levels of continued parental involvement may help learners with VI get the appropriate
accommodations and supports they need to function better and therefore perform better academically. In the same country, negative relationship between parental involvement and achievement has also been found by some studies, particularly those focusing on homework help (Patall, et al., 2008; Pomerantz, et al., 2007). Similarly, Ukeli and Akem (2013), in a study conducted in Nigeria revealed that a positive relationship exists between parental involvement and Mathematics achievement among primary school pupils. The findings indicated that parental involvement is important for learners with visual impairment.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

In this chapter, the researcher presents a summary of the study findings and this is divided as follows, impact of teaching methodologies on academic achievement of learners with visual impairment, influence of types of teaching and learning materials on academic achievement of learners with visual impairment, effects of teachers and learners attitude towards integration of learners with visual impairment on academic achievement of learners with visual impairment and effects of parental involvement on academic achievement of learners with visual impairment. This is followed by conclusions drawn from the findings presented in chapter four and ends with researchers’ recommendations which are also guided by the study results.

5.1 Summary

5.1.1 Impact of Teaching Methodologies on Academic Achievement of Learners with Visual Impairment

The results presented in the previous chapter indicated that the main teaching methodology employed by teachers in the studied schools with Learners with VI in Kakamega County was chalk and board method a view shared by both teachers and learners with VI. The study further showed that teaching methodologies used influenced learners with VI’s academic performance in one way or the other. Based on the results depending on the methodology employed, learning can become easy, enjoyable and capable of improving learners’ academic performance in examinations. Therefore, the results indicate that there is a significant relationship
between teaching methodologies employed by teachers while teaching learners with VI and these learners academic achievement in Kakamega County Kenya.

5.1.2 Influence of Types of Teaching and Learning Materials on Academic Achievement of Learners with Visual Impairment

Teaching and learning materials available in the studied schools mainly consisted of large print teaching and learning materials in most of the educational institutions visited. Teaching and learning materials in schools were found by the study to influence achievement differently while the use of sound recorders, large text on the board and academic print media improved learners academic achievement whereas there was no positive association between the use of Braille and academic achievement of learners with VI.

5.1.3 Effects of Teachers’ Attitude towards Integration of Learners with Visual Impairment on Academic Achievement of Learners with Visual Impairment

The study also established that teachers’ attitude influenced the performance of learners with VI in Kakamega County. The teachers in this County have both positive and negative attitude towards the integration of learners with VI in general classroom. According to the results, teachers’ indifference towards Learners with VI negatively affects the pupils’ academic achievement while teachers’ positive attitude towards Learners with VI improves their engagement in class and eventual academic achievement.
5.1.4 Parental Involvement and Academic Achievement of Learners with Visual Impairment

Lastly, the findings of this study also revealed that academic achievement of learners with VI greatly depended on their parents’ involvement in their education. However, the level of involvement of parents in these learners education is not satisfactory as the results showed. While some parents engaged in these learners education by purchasing of the learning materials the Learners with VI require, others attended parent teacher meetings organized while some assisted their children with VI with homework.

The influence of parental involvement on academic achievement of learners with VI was found to vary and purchasing required learning materials for Learners with VI by parents enabled the learners to compete equally with others which had improved their chances of performing well academically. On the other hand, it was clear that parents with VI children lacked the needed education and knowledge on how to take care of Learners with VI hindered their ability to assist the learners academically making it difficult for the Learners to improve academically.

5.2 Conclusions

Based on the results obtained, the researcher concludes that though teaching methodologies can influence academic achievement of learners with VI, the methodologies mainly employed in Kakamega County did not adequately address the instructional needs of learners with VI. The study also concluded that the teaching and learning materials required to educate learners with VI were generally lacking in most of the schools as the ones available were not enough and essential
materials such as Braille were even lacking within these schools. The researcher also concludes that teachers attitude towards integration of learners with VI in integrated education was an obstacle towards the achievement of these learners academically. Lastly, the researcher also concludes that there was a low level parental involvement in learners with VI education within the study area an issue which may also affect these learners academic achievement in exams.

5.3 Recommendations

5.3.1 Recommendations for Policy

The researcher therefore recommends that;

- Head teachers, teachers and education ministry offer in-service training for teachers on appropriate teaching methodologies for learners with VI if these learners academic achievements are to improve
- Parents, teachers, community and the government need to come together and source for relevant teaching and learning materials required by learners with VI in schools. If these learners are to improve their education and academic achievement
- That all teachers’ be offered with basic training on integrated education in colleges and also sensitization campaigns be carried out by the ministry of education in order to improve teachers attitude towards integrated education which may also improve learners with VI’s academic achievement
- Lastly, parents with VI children should be offered training by the school administration on how to manage these children’s education and how to
motivate them academically in order to improve these learners academic achievement.

### 5.3.2 Recommendations for Further Research

The researcher recommends the following areas for further studies:

- Assess the effectiveness of teaching methodologies for teaching learners with VI in integrated primary schools in Kakamega County Kenya. This was informed by the fact that most learners with learning disabilities in the study area were taught using chalk and board methods.

- Assess measures in place for improving availability of teaching and learning materials for learners with VI in integrated public primary schools of Kakamega County Kenya.

- Assess measures in place to improve teachers attitude towards education of learners with learning disabilities in integrated public primary schools.
REFERENCES


Odongo G. (2012). *Examining the Attitudes, Perceptions, and Concerns of Kenyan Teachers toward the Integration of Learners with Disabilities in General Education Classrooms*. Texas Tech University. Pdf


APPENDICES

APPENDIX I: RESEARCH INSTRUMENTS

TOOL I: RESEARCH QUESTIONNAIRE FOR CLASS TEACHERS AND HEAD TEACHERS

This instrument is meant to explore the predictor variables of academic achievement among learners with visual impairment in integrated schools, Kakamega County, Kenya. Kindly fill in your responses in the provided spaces or choose among the provided responses by marking the correct choice. Thanks.

SECTION A: DEMOGRAPHIC INFORMATION

1. What is your gender?
   a. Male
   b. Female

2. What is your age?
   a. Below 20 years
   b. 21-30 years
   c. 31-40 years
   d. Over 40 years

3. In which of the following categories do you belong in?
   a. Class teacher
   b. Head teacher

4. What is your marital status?
   a. Married
   b. Single
   c. Separated
   d. Widow/widower
5. What is your level of education?
   a. Secondary school
   b. College level
   c. Undergraduate
   d. Post graduate

6. Which course did you study if you attended post secondary education?
   (Please state).............................................................................................................

7. For how long have you worked as a class/head teacher in an integrated education school?
   a. Less than a year
   b. 2-5 years
   c. 6-10 years
   d. Over 10 years

8. Do you have learners with visual impairment in your class?
   a. Yes
   b. No
SECTION B: IMPACT OF TEACHING METHODOLOGIES ON ACADEMIC ACHIEVEMENT OF LEARNERS WITH VISUAL IMPAIRMENT

9. Kindly mention the teaching main teaching methodology normally used in an integrated classroom? (State one) …………………………………………
…………………………………………………………………………………………………………………………

10. Do you think that this teaching methodology affects academic achievement of learners with visual impairment? …………………………………………

11. If your answer is yes, kindly rate the following statements as strongly agree [SA], agree [A], neutral [N], disagree [D] and strongly disagree [SD]

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking loud while teaching enhances learners with visual impairment understanding of the subject content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of lecture method of teaching improves Learners with VI participation in the discussions during learners enhances their academic achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeating the lessons contents being taught enhances Learners with VI understanding and academic achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talking slowly enables Learners with VI to be able to take down notes making it possible to perform well academically</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Provision of audiovisual pre-recorded lessons enhance Learners with VI academic achievement as it allows them to listen to the record as many times as they want until they understand the subject</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using big letters while writing on the board enables partially learners who are blind to participate in class hence improves their academic achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of group discussions among all learners improves academic achievement of Learners with VI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Kindly state any other teaching methodology used and how it is affecting academic achievement of Learners with VI?
…………………………………………………………………………………………………………………………
………………………………

82
SECTION C: INFLUENCE OF TYPES OF TEACHING AND LEARNING MATERIALS ON ACADEMIC ACHIEVEMENT OF LEARNERS WITH VISUAL IMPAIRMENT

13. Does your school have teaching and learning materials for Learners with VI?
   a. Yes
   b. No

14. If yes, which are the teaching and learning materials available for Learners with VI in your school? (Kindly state) ………………………………………

15. Does the availability and type of teaching materials affect academic achievement of learners with visual impairment? ……………………………

16. If yes, kindly rate the following statements as strongly agree [SA], agree [A], not used [NU], disagree [D] and strongly disagree [SD]

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>NU</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The use of sound recorders improves academic achievement of Learners with VI</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The use of large text on the board and academic print media improves Learners with VI academic achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of Braille by Learners with VI improves their academic achievement as it allows them to take notes that they can easily read</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of computer screen reader improves Learners with VI ability to read texts hence improving their academic achievement</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>The use of electronic magnification such as video magnification devices which includes closed-circuit television (CCTV) a device that enlarges written or printed text enhances Learners with VI ability to read hence improving their academic achievement</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The use of large print which provide relative size magnification by enlarging the print size enables readability of texts by Learners with VI making it possible for them to keep up with the rest and perform well academically</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
17. If there is a specific way in which the type of learning and teaching materials is affecting academic achievement in the school kindly state?

………………………………………………………………………………………………………

SECTION D: EFFECTS OF TEACHERS ATTITUDE TOWARDS INTEGRATION OF LEARNERS WITH VISUAL IMPAIRMENT ON ACADEMIC ACHIEVEMENT OF LEARNERS WITH VISUAL IMPAIRMENT

18. What attitude do teachers have towards integration of Learners with VI into integrated education?
   a. Positive
   b. Negative

19. Has the mentioned attitude affected academic achievement of Learners with VI in your class? …………………………………………………………………………………

20. If teachers attitude affects academic achievement of Learners with VI, in what ways do teachers attitude affect academic achievement of Learners with VI in your class?
   a. Teachers positive attitude towards Learners with VI improves their engagement in class and eventual academic achievement
   b. Teachers indifference towards Learners with VI negatively affect the pupils academic achievement
   c. Teachers intolerance towards Learners with VI is negatively affecting these learners academic achievement
   d. Teachers attitude does not in any way influence Learners with VI academic achievement
**SECTION E: PARENTAL INVOLVEMENT AND ACADEMIC ACHIEVEMENT OF LEARNERS WITH VISUAL IMPAIRMENT**

21. Do parents of VI get involved in their education? ……………………………

22. If yes, in what ways do these parents get involved?
   
a. Purchasing of the learning materials the Learners with VI require
   
b. Attending every parent teacher meetings organized
   
c. Arranging private tuition
   
d. Assisting their Learners with VI with homework
   
e. Any other please state ……………………………………………………

23. Does parental involvement affect Learners with VI academic achievement?
   ………………………………………………………………………………..

24. If yes, kindly rate the following statements as strongly agree [SA], agree [A], neutral [N], disagree [D] and strongly disagree [SD]

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing required learning materials for Learners with VI by parents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>enables the learners to compete equally with others hence improving their</td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>chances of performing well academically</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Replacing lost learning materials by parents also enables Learners with</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI keep up academically and improves their academic achievement</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Attending parent teacher meetings enables parents to know their learners</td>
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<tr>
<td>weaknesses hence they work together with the teachers to improve their</td>
<td></td>
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<tr>
<td>learners academics which improves their academic achievement</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Providing Learners with VI with professional tutors by parents after</td>
<td></td>
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</tr>
<tr>
<td>school also assist the learners to improve their academic achievement in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>exams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personally helping Learners with VI with their studies and homework</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>improves their academic achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learners with VI parents lack of education and knowledge on how to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>manage Learners with VI hinders their ability to assist the learners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>academically making it difficult for Learners with VI to improve</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>academically</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
25. If there is any other way that parental involvement is affecting academic achievement of Learners with VI kindly state?

........................................................................................................................................

THANK YOU FOR YOUR PARTICIPATION AND GOD BLESS
TOOL II: RESEARCHER READ QUESTIONNAIRE FOR LEARNERS WITH VI

This instrument is meant to explore the determiner variables of academic achievement among learners with visual impairment in integrated schools, Kakamega County Kenya. Kindly respond appropriately. Thanks

SECTION A: DEMOGRAPHIC INFORMATION

1. What is your gender?

………………………………………………………………………………………………………………

2. What is your age?

………………………………………………………………………………………………………………

3. In what class are you in?

………………………………………………………………………………………………………………

4. What type of visual impairment are you suffering from?

a. Partial impairment

c. Complete blindness

d. No idea

e. Any other please state
SECTION B: IMPACT OF TEACHING METHODOLOGIES ON ACADEMIC ACHIEVEMENT OF LEARNERS WITH VISUAL IMPAIRMENT

5. Kindly mention the teaching main teaching methodology normally used in your class? (State one)


6. Do you think that this teaching methodology affects your academic achievement?


7. If your answer is yes, kindly rate the following statements as strongly agree [SA], agree [A], neutral [N], disagree [D] and strongly disagree [SD]

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking loud while teaching enhances my understanding of the subject content hence improves my academic achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of lecture method of teaching improves my participation in the discussions during lessons which enhances my academic achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeating the lessons contents being taught enhances my understanding and academic achievement</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Talking slowly enables me to be able to take down notes making it possible for me to perform well academically</td>
<td></td>
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</tr>
<tr>
<td>Provision of audiovisual pre-recorded lessons enhance my academic achievement as it allows me to listen to the record as many times as I want until they understand the subject</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Using big letters while writing on the board enables my learners to participate in class hence improves my academic achievement</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>The use of group discussions improves my academic achievement</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
8. Kindly state any other teaching methodology used and how it is affecting your academic achievement?

……………………………………………………………

SECTION C: INFLUENCE OF TYPES OF TEACHING AND LEARNING MATERIALS ON ACADEMIC ACHIEVEMENT OF LEARNERS WITH VISUAL IMPAIRMENT

9. Does your school have teaching and learning materials for you?
   a. Yes
   b. No

10. If yes, which are the teaching and learning materials available in your school? (Kindly state)

……………………………………………………………

11. Does the availability and type of teaching materials affect your academic achievement?

……………………………………………………………………

12. If yes, kindly rate the following statements as strongly agree [SA], agree [A], not used [NU], disagree [D] and strongly disagree [SD]

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>NU</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The use of sound recorders improves my academic achievement</td>
<td></td>
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</tr>
<tr>
<td>The use of large text on the board and academic print media improves my academic achievement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The use of Braille by us improves our academic achievement as it allows us to take notes that we can easily read</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of computer screen reader improves my ability to read texts hence improving my academic achievement</td>
<td></td>
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</tr>
<tr>
<td>The use of electronic magnification such as video magnification devices which includes closed-circuit television (CCTV) a device that enlarges written or printed text enhances my ability to read hence improving my academic achievement</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>
The use of large print which provide relative size magnification by enlarging the print size enables readability of texts by us making it possible for us to keep up with the rest and perform well academically

13. If there is a specific way in which the type of learning and teaching materials is affecting your academic achievement in the school kindly state?
SECTION D: EFFECTS OF TEACHERS ATTITUDE TOWARDS INTEGRATION OF LEARNERS WITHVISUAL IMPAIRMENT ON ACADEMIC ACHIEVEMENT OF LEARNERS WITH VISUAL IMPAIRMENT

14. What attitude do your teachers have towards integration of Learners with VI into integrated education?
   a. Positive
   b. Negative

15. Has the mentioned attitude affected your academic achievement? …………

16. If teachers attitude affects your academic achievement, in what ways do teachers attitude affect this?
   a. Teachers positive attitude towards Learners with VI improves my engagement in class and eventual academic achievement
   b. Teachers indifference towards Learners with VI negatively affect my academic achievement
   c. Teachers intolerance towards Learners with VI is negatively affecting my academic achievement
   d. Teachers attitude does not in any way influence my academic achievement
SECTION E: PARENTAL INVOLVEMENT ON ACADEMIC ACHIEVEMENT OF LEARNERS WITH VISUAL IMPAIRMENT IN INTEGRATED SCHOOLS WITHIN KAKAMEGA COUNTY

17. Does your parent get involved in your education? ……………………………

18. If yes, in what ways do your parents get involved?
   a. Purchasing of the learning materials I require
   b. Attending every parent teacher meetings organized
   c. Arranging private tuition
   d. Assisting me with homework
   e. Any other please state
      ………………………………………………………………………

19. Does parental involvement affect your academic achievement?
   ……………………………………………………………………………………………

20. If yes, kindly rate the following statements as strongly agree [SA], agree [A], neutral [N], disagree [D] and strongly disagree [SD]

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing required learning materials for me by my parents enables me to compete equally with others hence improving my chances of performing well academically</td>
<td></td>
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<tr>
<td>Replacing lost learning materials by my parents also enables me to keep up academically and improves my academic achievement</td>
<td></td>
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</tr>
<tr>
<td>Attending parent teacher meetings enables parents to know my weaknesses hence they work together with the teachers to improve my academics which improves my academic achievement</td>
<td></td>
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</tr>
<tr>
<td>Providing me with professional tutors by my parents after school also assist me in improving my academic achievement in exams</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personally helping me with my studies and homework improves my academic achievement</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Parents lack of education and knowledge on how to take care of me hinders their ability to assist me academically making it difficult for me to improve academically</td>
<td></td>
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</tbody>
</table>
21. If there is any other way that parental involvement is affecting your academic achievement kindly state?

............................................
APPENDIX II: CONSENT FORM

TITLE: Determinants of Academic Achievement among Learners with visual impairment in Integrated schools within Kakamega County Kenya

Researcher: Elizabeth Macharia

Master Student Kenyatta University

Reg no: ……………………………………………

Cell: 0715238650

Mark in the Box

1. I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason.

3. I agree to take part in the above study.

_________________________   ______________   _______________________
Name of Participant            Date                Signature

_________________________   ______________   _______________________
Name of Researcher             Date                Signature
APPENDIX III: NACOSTI LETTER

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241349, 3310571, 2219420
Fax: +254-20-318245, 318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying Please quote Ref: No. NACOSTI/P/16/89969/13244

9th September, 2016

Elizabeth Wamaitha Macharia
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Determinants of academic achievement among learners with visual impairment In Integrated Primary Schools, Kakamega County, Kenya,” I am pleased to inform you that you have been authorized to undertake research in Kakamega County for the period ending 7th September, 2017.

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

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

Boniface Wanyama
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Kakamega County.

The County Director of Education
Kakamega County.

CONRTITIONS

1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.
2. Government Officer will not be interviewed without prior appointment.
3. A questionnaire will be used unless it has been approved.
4. Excavation, filing and collection of biological specimens are subject to further permission from the relevant Government Ministry.
5. You are required to submit at least two (2) hard copies and one (1) soft copy of your final report.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.

THIS IS TO CERTIFY THAT

ELIZABETH WAMATHA MACHARIA

OF KENYATTA UNIVERSITY, B-50127

NUNBACHA, has been permitted to conduct research in Kakamega County on the topic: DETERMINANTS OF ACADEMIC ACHIEVEMENT AMONG LEARNERS WITH VISUAL IMPAIRMENT IN INTEGRATED PRIMARY SCHOOLS, KAKAMEGA COUNTY, KENYA for the period ending:

7th September, 2017

Applicant's Signature

[Signature]

Permit No: NACOST/P/16/89969/13244
Date Of Issue: 9th September, 2016
Fee Received: Shs 1000

Director General
National Commission for Science, Technology & Innovation
APPENDIX IV: RESEARCH PROPOSAL APPROVAL LETTERS

KENYATTA UNIVERSITY
GRADUATE SCHOOL

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

FROM: Dean, Graduate School
TO: Macharia Elizabeth
     C/o Special Needs Education Department.

DATE: 19th July, 2016
REF: E55/CE/24249/13

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

We acknowledge receipt of your revised Research Proposal as per our recommendations raised by the Graduate School Board of 8th June 2016 entitled “Determinants of Academic Achievement among Learners with Visual Impairment in Integrated Primary Schools, Kakamega County, Kenya”.

You may now proceed with your Data collection, subject to clearance with the Director General, National Commission for Science, Technology and Innovation.

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

Thank you.

HAERLEI EBBOKE
FOR: DEAN, GRADUATE SCHOOL

CC: Chairman, Educational Foundations Department

Supervisors:

1. Dr. Joel M. Chomba
    C/o Special Needs Education Department
    Kenyatta University

2. Dr. Margaret Murugami
    C/o Special Needs Education Department
    Kenyatta University
APPENDIX V: RESEARCH AUTHORIZATION LETTER

KENYATTA UNIVERSITY
GRADUATE SCHOOL

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

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: E55/CE/24249/13

DATE: 19th July 2016

Director General,
National Commission for Science, Technology
& Innovation
P.O Box 36023-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR MACHARIA ELIZABETH – REG. NO.
E55/CE/24249/13

I write to introduce Ms. Macharia Elizabeth who is a Postgraduate Student of this
University. He is registered for M.Ed degree programme in the Department of
Special Needs Education.

Ms. Macharia intends to conduct research for a M.Ed. Proposal entitled,
"Determinants of Academic Achievement among Learners with Visual
Impairment in Integrated Primary Schools, Kakamega County, Kenya".

Any assistance given will be highly appreciated.

Yours faithfully,

MRS. LUCY N. MBAABU
FOR: DEAN, GRADUATE SCHOOL
APPENDIX VI: MAP OF KAKAMEGA COUNTY