DETERMINANTS OF PACE OF LEARNING FOR LEARNERS WITH VISUAL IMPAIRMENTS AT ST. FRANCIS SCHOOL FOR THE BLIND, POKOT COUNTY, KENYA

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

MAY, 2015
DECLARATION

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

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The work reported in this thesis was carried out by the candidate under our supervision as University Supervisors.

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DEDICATION

To my family who are ever encouraging me to work tirelessly. I also appreciate my master’s colleagues of the year 2010 for the patience they portrayed during the long lecture hours and their participation in group discussions, which sharpened our academic skills. May God shower His abundant blessings to all!
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Thanks to my family, friends and colleagues who in their own way contributed to the success of this document, without them I could not have come this far.

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<td>ADL</td>
<td>Activities of Daily Living</td>
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<tr>
<td>CBM</td>
<td>Christoffel Blinden Mission</td>
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<tr>
<td>EARC</td>
<td>Educational Assessment Resource Centre</td>
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<td>EFA</td>
<td>Education for All</td>
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<td>FPE</td>
<td>Free Primary Education</td>
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<td>H/T</td>
<td>Headteacher</td>
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<tr>
<td>IEP</td>
<td>Individualized Educational Programme</td>
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<tr>
<td>KCPE</td>
<td>Kenya Certificate of Primary Education</td>
</tr>
<tr>
<td>KCSE</td>
<td>Kenya Certificate of Secondary Education</td>
</tr>
<tr>
<td>KESSP</td>
<td>Kenya Education Sector Support Programme</td>
</tr>
<tr>
<td>KICD</td>
<td>Kenya Institute of Curriculum Development</td>
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<td>KISE</td>
<td>Kenya Institute of Special Education</td>
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<td>KNEC</td>
<td>Kenya National Examination Council</td>
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<td>MoEST</td>
<td>Ministry of Education Science and Technology</td>
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<td>SNE</td>
<td>Special Needs Education</td>
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<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<td>St</td>
<td>Saint</td>
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<td>USA</td>
<td>United States of America</td>
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<td>VI</td>
<td>Visual Impairment</td>
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ABSTRACT

The aim of this study was to identify the pace of learning for learners with visual impairment in St. Francis School for the Blind in Pokot County. The study adopted a case study research design that used the mixed method that utilized both qualitative and quantitative techniques. The target population comprised learners with visual impairment (VI), teachers and the school headteacher, total of 170 participants. A sample size of 35.30% of the total population was used. The headteacher and the teachers were purposively selected, while random sampling was used to select the learners with visual impairment. Structured questionnaires, interviews and observational schedules were used to collect data. The research instruments were pretested to establish their validity and reliability using the expertise of university supervisors. The qualitative data collected were analyzed in themes, while quantitative data were analyzed fully by using the descriptive statistics and, coded in statistical package for social sciences (SPSS). The findings indicated that more extra time was required to enable learners with visual impairments to complete academic tasks and the learners to be taught at a slower pace because of having diverse needs. Due to visual challenges they complete schooling later than the sighted, as their academic transitional ladder was hindered by determinants brought by severity of visual loss; therefore, they end up repeating classes. The teachers teaching learners reiterated that there was no content coverage due to the learners pace of learning. Therefore, the study recommended that the field officers had to do early screening for appropriate referrals and placement. Also, the Kenya Institute of Education to slot in clearly extra time in the time-table and even to come up with a Special Needs Education syllabus rather than relying on the regular one. Likewise, the Teachers’ Service Commission to reduce the teacher-learner ratio from 1:15 to 1:5 in order for a teacher to assist a learner with visual impairment effectively.
CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Historically, the Church is known to be the first to give persons with visual impairment recognition and charitable care, (Ndurumo, 1993). This enabled persons with visual impairment to attain some recognition as some became well-known poets and musicians, especially in the middle Ages (Allen & Schwartz, 2001). It led to the period of self-emancipation, during which persons who were blind demonstrated their abilities to be productive, such as Nicholas Sanderson, who became a famous professor of mathematics. Professionals working with persons with visual impairment started advocating for education and vocational training for those persons, after perceiving them as capable of benefiting from the education offered. Therefore, it implied that with the necessary training and support, it was possible for persons with visual impairment to emancipate themselves and become valuable members in the society.

The education for persons with visual impairment started from segregated institutions to integration to the current trend of inclusive education, (GoK, 2003). Globally, countries started institutions for persons with visual impairment and different terms were used, such as residential which were segregative in nature. By 1950s in United States of America (USA), learners with disabilities were put into public schools to be integrated with their non-disabled peers. The integration period came after normalization concept had been adopted. The learners were grouped in categories and put in public institutions. However, even with these efforts, during the late 1950s,
denial of education to persons with the visual impairment was still evident in USA (Rosanne & Sharon, 1998).

Furthermore, the challenges facing persons with disabilities were also rampant in Africa. Although there is no enough literature to show how persons with blindness were viewed locally, Muchiri (1982) notes that persons with disabilities were perceived as incapable of engaging in gainful employment. This implies that, negative treatment of persons with disabilities was still rampant across continents.

In Kenya, the education of persons with disabilities started in 1946. The first to receive education were persons with visual impairment. An institution for the blind was started by the Salvation Army Church as a vocational school, because the targeted learners were past school age (Ministry of Education, 1976). Later, the vocational school grew and it became known as Thika School for the Blind. In 1958, St. Lucy’s School for the Blind was established by the Catholic Church. In 1961, Kenya Society for the Blind built St. Oda School for the Blind, and then the Salvation Army Church started Likoni School for the Blind and in 1965, and Kibos School for the Blind. This was happening, when Kenya was struggling to rebuild itself after attaining independence from the colonial government.

Immediately, after independence, Kenya witnessed changes and expansions in its educational opportunities. The government took innovative steps and concern to collaborate with non-governmental organizations to better the education sector, and a national commission was formulated, referred to as Ominde Commission in 1964. This commission gave recognition to the education of persons with disabilities by looking into the needs of learners with visual impairments (Ndurumo, 1993). The
commissions played an important role in the education of learners with visual impairment.

According to Silsil (2008), the Ominde Commission in 1964 gave a positive concern to persons with disabilities to join regular schools. Likewise, Gachathi commission of 1976 promised to improve the standard and services of persons with disabilities. It is also important to note that the schools for the visually impaired in Kenya were still five from 1946 to 1979.

Thereafter, Doctor Cox, an eye specialist who was working in West Pokot District Hospital in Kapenguria diagnosed many cases of trachoma among adults. The doctor decided to invite Philip Lucas who was by then the Principal of Thika School for the Blind. The principal began a familiarization tour all over West Pokot looking for children with visual impairment, but only adults were identified. Then, a decision was reached to start a vocational training centre and name it Kapenguria centre for visually handicapped. In 1979, Philip Lucas who was blind became the first director of the institution. As the centre started with about twenty (20) male adults, it became necessary to employ a teacher. Then, three untrained teachers were employed to train the adults.

In 1980, parents began bringing younger children with visual impairment of primary going age. The number of children with visual impairment grew and a decision was reached that the centre be altered into a primary school. The blind adults were transferred to Kong’elai in Kachaliba. Then in 1982, the director contacted the government for trained teachers. The government accepted the request and sent three teachers. The school name was changed to St. Francis School for the blind, (Resource
teacher St. Francis School for the blind, 2011). Since then, the education for the learners with visual impairment in the school has expanded for both boys and girls, but the learner’s pace of learning is very slow.

It is stipulated that education is a prerequisite requirement for an individual for self-fulfillment and for national development. It is, therefore, essential to enhance the productivity of learners with visual impairment in order to protect their rights to leading meaningful lives. Therefore, professionals and learning institutions are encouraged to accept the learners with visual impairment regardless of their disabilities (Gok, 2003b). Furthermore, schools should provide education to learners with special needs in a barrier free environment so that the learners can enhance access to equitable education (GoK, 2003a).

In addition, (KESSP, 2005) urge that all the Ministry of Education officers, teachers for the visually impaired and other stakeholders are to be committed and work as a team so that the learners with visual impairment can access quality education. In the financial allocation for special education and the regular education, there should be equity as the government policy is clear on the elimination of disparities for enhancement of equity and equality of all learners (GoK, 2009). The government is also struggling to identify itself with the international agenda of providing education for all learners including those with visual impairment (EFA, 2003).

The recent legislations laid down by the government which support the education for the learners with visual impairment are: The children’s Act (2001), persons with disabilities Act (2003) and the constitution of Kenya (2010). All of them stipulated the necessities of giving persons with disabilities a level playing ground. The real
focus, for these acts is to see the realization of learners with visual impairment learn and achieve education as their sighted peers.

Despite these, initiatives from the government, the pace of learning for learners with visual impairment in St. Francis School for the Blind is still very low, this is evident by the learners’ performance in Kenya Certificate of Primary Education from 2000-2010. Those who score low marks outnumbered the average achievers. Therefore, the proposed or amended legislation has remained a statement of pious intent that is just a statement on paper. All the stakeholders are still hoping for a vibrant, proactive and instrumental legislation for learners with disabilities (GoK, 2009). There are still challenges to get a good number of learners with visual impairments to join tertiary institutions for higher learning. The very few that progress to higher levels of learning come from other special schools and programmes, but not from St. Francis School for the blind. If this is left to continue, education for all (EFA) will remain an empty promise on the part of St. Francis School for the Blind. Due to this, this study aims at exploring determinants that contribute to the low education achievement of learning for learners with visual impairment in the school.

1.2 Statement of the Problem
Despite the fact that the government of Kenya has laid down the essential efforts on the education of learners with visual impairments, by training of special needs education teachers, opening institutions such as Kenya Institute of Special Education, and other programmes such as in Kenyatta and Maseno universities to assist and uplift the education of learners with visual impairment, the educational achievement levels of learners with visual impairment are still very low especially at St. Francis School for the Blind.
The learners’ performance in national examinations was very demotivating and discouraging; those who score average Kenya Certificate of Primary Education (KCPE) marks are few and sometimes none. The Kenya Certificate of Primary Education performance of (2000-2010) was evident that candidates registered for the examination during that period were one hundred and seven (107). Those who obtained average marks were forty six (46), while those who scored below average were sixty-one (61). As quoted in a standard newspaper (2012), the learners are blamed for dragging the school’s mean score down. Often times, little was said of the underperforming learners, so examination failure attracts frequent condemnation and many learners end up not coping well under fear. Parents complain of wasting their resources on underachieving learners.

In such situation, learners went into cramming for examinations in order to pass and earn credit from both parents and teachers. Considering that national examinations are terminal and summative, their purpose is mainly for selection and even certification into the next level of education (MoEST, 2003:58), they place learners with visual impairment at a disadvantage as year after year, they miss the chance of pursuing education, because of their pace of learning. The school every year registers a very high number of dropouts. That was because some learners with visual impairment enrolled in the school quite late and complete their schooling when older and finally perform poorly in national examinations. Shah, Trevours and Arnold (2004), argue that such failure would influence the learners’ future career success which depends on achievement in education. This is because those who do well in examinations proceed for further studies and even training.
Furthermore, majority of researchers had taken their studies mostly in integrated programmes and Thika School for the Blind. Kimeto (2010), who did his research in integrated programmes, argues that lack of funds to purchase books, leisure materials and to maintain braille machines contributed to slow pace of learning of learners with visual impairment. Since the inception of free primary education (FPE), the funding of special schools had improved, even in St. Francis School for the Blind, yet there is no improvement in learner's pace of learning and achievement. The rate of dropouts is still very high compared to those who go for higher learning. The age range of the majority of the learners with visual impairment was above the primary school-going age, as echoed by Burckhardt (2004). Her study was on the educational and occupational aspiration of young disabled people aged eighteen to nineteen and compared them to non-disabled peers. Her findings showed that persons with disabilities, schooling periods are likely to last longer. No study has been conducted to investigate dismal performance of St Francis School for the Blind. Therefore, this study would try to uncover the possible determinants hindering the upward progress of learners with visual impairment in the school.

1.2.1 The Purpose of the Study
The purpose of this study was to explore the determinants responsible for the slow pace of learning among the learners with visual impairment in St. Francis School for the Blind.

1.3 Study Objectives
The objectives of the study sought to:

i. Explore how severity of vision loss influences the pace of learning of learners with visual impairment.
ii. Investigate the content covered by learners with visual impairment in a term.

iii. Find out the required time in relation to lesson development in order for learners with visual impairment to acquire new concepts.

iv. Establish the transition rate from one class to the other.

v. Explore the effectiveness of communication skills during the teaching learning process.

vi. Investigate the influence of gender in the pace of learning.

1.4 Research Questions

i. How does the severity of vision loss influence the learners with visual impairments’ pace of learning?

ii. How much content do learners with visual impairments cover in a term’s period?

iii. How much time does a learner with visual impairment required in a lesson development to acquire a new concept?

iv. How is the transition of learners with visual impairment from one class to other?

v. How effective is the communication between a teacher and learners during the teaching learning process?

vi. How does gender of learners with visual impairment influence the pace of learning?

1.5 Significance of the Study

The study might be of value to the teachers teaching learners with visual impairments, because the determinants which contributed to slow pace of learning might be highlighted for possible improvement. It might help the teachers to review the content
coverage in subjects they teach in order to seek remedy appropriately. Likewise, it was hoped that the school stakeholders might use the study findings to adjust the normal school time to suit learners with visual impairment. Also, teachers might use the findings to counter check gender disparity, repetition, dropout rate, retention rate and the effectiveness of braille and print proficiency in communication. Even the policy-makers and curriculum developers might use the findings to review their policies and curriculum respectively for learners with visual impairment. It was also hoped that it would help the quality assurance personnel to prepare adequate curriculum-based establishment for learners with visual impairment. In addition, the educational assessment resource centre (EARC) officers might use the findings for proper follow-up of the placed children.

1.6 Limitations and Delimitations

The study would discuss the limitations and the delimitations as follows:

1.6.1 Limitations of the Study

The study was limited by time required to conduct the research. Likewise, materials and printing expenses were prohibitive. Hence, collection of data required a lot of funds. Therefore, the researcher had to solicit for funds.

1.6.2 Delimitations of the Study

The study focused mainly on the learners with visual impairment and their teachers in St. Francis School for the Blind which is found in Kapenguria, Pokot County. The study did not go beyond this scope as St. Francis is the only school offering education for learners with visual impairment in the county. There are also various factors affecting the education of learners, but this study focused only on the determinants contributing to slow pace of learning.
1.7 **Assumptions of the Study**

In the study the following were anticipated assumptions:

- There are learners with visual impairment ranging from mild to total loss of vision.
- Teachers of learners with visual impairment in the school are qualified and have enough experience to facilitate adequate progression in transition from one class to the other.
- All respondents to this study would cooperate and give honest information.

1.8.1 **Theoretical Framework**

This study embraces an attribution theory of achievement motivation by Weiner (1996). This theory explains the emotional and motivational entailments of academic success and failure. Weiner identified differences in people’s achievement and then studied individual issues people face when they think of their own successes and failures. He looks into cognitive process that has motivational influence. The attribution theory is a three-stage process that explains the causes of an event or behaviour. The three stages include: observation, determination of behaviour and attribution to causes. There are two types of attributions; external and internal. External attribution relates to causality by outside agents, whereas internal attribution focuses on personal behaviour. Therefore, this leads to self-perception and perception of others. Certain attributions are maladaptive, in that they are likely to reduce achievement strivings. Among these are attribution of failure to lack of ability which reduces self-expectancies of future success, low self-esteem, humiliation and shame, as well as low personal inspiration to achieve, take pleasure and pride in achievement.
In education, there are similar psychodynamics in the classrooms; learners tend to seek explanation for personal failure. In such cases, if caution is not taken, internal and external attributions can ruin an individual if he/she perceives it negatively, for instance, self-image of a learner with visual impairment may be negative, because he/she thinks that nothing good will come out of him/her as he/she is unable to perform or achieve to aspired levels. This poor self-image might create low self-esteem, which will lead to poor achievement in school activities. Further, a learner with visual impairment who had low self-esteem might lack confidence and therefore, become, reluctant in learning. The learners with visual impairments could attribute their pace of learning to sight problem, gender, and differences in aptitude, intelligence level or disability.

Likewise, learners with visual impairment might attribute success and failure on how people perceive them as incapable, foolish, low achievers and the way they are rated by the sighted peers as different from them. The same is true from the perspective of a teacher who might ascribe a learner’s failure to low ability. He/she would offer sympathy instead of empathy, and if such external perspective was compromised, it might hinder the learner’s prosperity in academics.

1.8.2 Conceptual Framework
The conceptual framework was developed based on the theoretical framework. It would help to answer the research questions in the proposed study. Internal factors, which had reduced the motivations and achievements, include severity of visual impairment, proficiency in communication, mood, ability, gender and aptitude. When there is severity of sight, the learners with visual impairment doubt their capability, resulting to slow pace of learning. Poor proficiency also reduces his/her ability to
succeed. Ineffective communication hinders a learner with visual impairment from expressing oneself in both written and spoken, while the external factors which also reduce the motivation and achievement of a learner with visual impairment are content coverage, inadequate time to cover syllabus, teachers’ expectations, gender disparity and transition rate.
Figure 1.1: Conceptual framework on determinants of the pace of learning for learners with visual impairment
1.9 Operational Definition of Terms

**Blind**: Refers to individuals who use tactile and auditory abilities as the primary channels of learning, they may have some minimal light perception or be without sight.

**Communication**: It refers to verbal, non-verbal and written means of transmitting and decoding messages from one person to the other.

**Disability**: This is lack of ability to perform an activity within the range considered normal by the human culture.

**Handicap**: This is a condition which can either be physical or mental and it can limit a person’s proper functioning or behaviour.

**Low vision**: This is a visual impairment which is not correctable by standard glasses, contact lenses, medicine or surgery, that interferes with the ability to perform everyday activities.

**Pace of learning**: Refers to a rate of progression from one class to another.

**Special Needs Education**: This is education which provides appropriate modification in curriculum delivery method, educational resources, medium of communication and the learning environment in order to cater for individual differences in learning.

**Special School**: It refers to a school which offers education to learners with special needs in education based on the type of disability.

**Visual impairment**: This is a functional loss of vision or visual disorder which interferes with optimal learning and achievement unless modifications are in the methods of learning, the type of materials used and the learning environment.
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction
This chapter reviews existing literature related to the study and identifies the gaps which have not been addressed by scholars. The study focuses on the following sub-topics: the influence of severity of vision loss on learners with visual impairment, the content coverage in a term, the time required in relation to lesson development for acquisition of new concept, the transition rate from one class to the other, the effectiveness of communication skills during the teaching learning process and gender disparity.

2.1 The Influence of Severity of Vision Loss on Learners with Visual Impairment Pace of Learning
Several studies have been carried out both in and out of Kenya on the education of the learners with visual impairment, Lowenfield (1973). Lowenfield describes the impact of visual impairment on a learner after losing sight as a challenge. Instantly, the affected learner resorts to other senses like touch, hearing to replace vision. Though, these senses do not compensate entirely the visual sense as, it is a challenge for a learner with visual impairment to explore objects by size, colour and spatial relationships, because other objects are too small, far and even large to be conceptualized. Likewise, ability to move around is restricted due to visual defect, as vision is known to allow for free movement, quick gathering of information at a distance, but due to lack of vision, a learner with visual impairment cannot control the environment.
Hunt and Marshal (2002), Steinman, Lejeune, and Kimbrough (2006), state that blindness has an impact on the learner’s cognitive development, which in turn affects the academic skills. The possible skills which might be affected are the reading and writing skills, and even the speed of reading and writing. These might make a learner exhibit a wide range of cognitive and intellectual abilities detached from the learning environment. Scholars had stipulated that learners with poor visual figure ground skills as well as poor visual closure skills encounter difficulties to analyze details in a book and even to fill incomplete detail (Holland, 2012). This implies that learners with visual problems often find it hard to recall spellings as visual images and therefore, rely heavily on phonetic spelling. Therefore, teachers teaching learners with visual impairments have to respond to individual needs. Further, existence of visual issues which affects convergence, focusing and eye movement skills might have significant impact on a learner’s visual perception. As having visual perception difficulties, a learner might show reduced skills when accessing visual tasks.

On the other hand, there are misconception studies which have shown that, there is a general assumption that disabled persons are mentally incapable and hence cannot achieve or attain education. This applies partly to some cases of the mentally challenged persons (Mwathi, 1998). These assumptions might be implemented when proper methods, modified teaching materials are used by a specially trained teacher to enable a learner with visual impairment to succeed in academics.

Further, the public have negative attributes which stereotype the learners with visual impairment as fools, ignorant and incompetent (Conley-Jung & Olkin, 2001). This implies that such attributes might have negative impacts on the learner with visual
impairment; hence their pace of learning may be conceptualized to mean inability to perform. Such stigmatization would hinder the education of learners with visual impairment in the school and even the entire Kenya. Teachers have cues of predicting the needs of the learners. Though, majority of the regular teachers have two expectations from a learner. First, success, and then failure. On the same note, teachers of learners with visual impairment expect a low vision learner to respond to visual task with a slower pace of reading. A learner with low vision needs to be encouraged to concentrate more in order to develop visual functioning faster (Barraga, 2006). As efficiency is enhanced, the residual vision is frequently stimulated, by providing visual activities that will improve a child’s vision and even the learning pace.

2.2 The Content Coverage in a Term for Learners with Visual Impairment

The instructional materials which are presented to the learner with visual impairment are similar or identical to the ones used by the sighted learners (Kirk, 1989). Therefore, the learner with visual impairment may be disadvantaged if the impact of the handicap is not determined while preparing of a national curriculum for appropriate modification (GoK, 2003).

According to Jose (1985), the learner with visual impairment takes longer to accomplish the curriculum content coverage. He further argues that the learner with visual impairment tires quickly due to the effort required in reading and writing using the low vision devices. This makes the learner, with visual impairment to be slow at accomplishing the academic tasks. He/she requires more time to complete the curriculum content designed for the primary cycle. The 8.4.4 curriculum is not responsive to educational needs of the learner with visual impairment. Consequently,
majority of them complete primary education above age 20. The learner takes time struggling with the too broad curriculum, and often repeats classes in order to acquire as much content as possible. Hence, education of learners with visual impairments and age restriction does not apply. As demonstrated by St. Francis School for the Blind, a learner with visual impairment completed standard eight at age 28, did KNEC in 2010 and joined secondary school.

According to (GoK, 2003), the national examinations are based on the central curriculum developed by KICD. These examinations measure academic achievement, and further use the mean score type of grading. Actually, these examinations are not responsive to the needs and diversity of the learner with visual impairment. The examinations are adapted to cater for the learner with visual impairments without adapting the syllabus as the case of Kenya Primary Certificate of Education (KCPE). The learner with visual impairment is left at the discretion of the test developer. Thirty extra minutes are always allowed for a learner with visual impairments, which is not even enough, to sit for examinations. So, the essence of adding time during examination period, is of no value, while during the content coverage, the learner is not given such time for adequate preparation. Consequently, the above discussion implies a number of gaps and shortfalls in provision are likely to be identified in implementation of curriculum content. The curriculum content does not sufficiently match the diversity of the learner with visual impairment in both pace and level of learning. The curriculum content coverage in a term for the visually impaired is far from completion in academic ladder of education in primary school. This point justifies a study in this research area.
2.3 The Time Required in Relation to Lesson Development for Acquisition of New Concepts by Learners with Visual Impairment

Hunt & Marshal (2002) argues that teaching learners who are blind and those with low vision in one class in a lesson is like teaching several classes. Every learner requires a different approach to learn in the same class. Others need braille explanation, while others need elaboration of large print. A learner with visual impairment may require extra time to learn various braille dots, contractions and letter shapes, then memorize them. Okungu (2005) looked at reading habits and recommended more time to be provided for a learner with visual impairment to complete assignments and tests in braille and print for the low vision.

June (2005) posits that teachers feel that the learner with visual impairment who falls behind in learning, needs to be taught at a slower pace. The learner may take a lot of time to work on a task because he/she wants to produce correct answers, yet he/she is hindered by the speed of learning he/she has. Lewis (1991) also cautions that whenever the learner with visual impairment tries to be successful, the society attributes him/her as an exceptional learner.

The Kenya National Examinations Council has taken the task of training the stakeholders to enable them to provide specialist support to candidates with special needs during examination. This is to ensure that time allocated for examination paper is determined by the nature and severity of the special needs (GoK, 2009). In addition, the above studies mainly focused on extra time for a learner with visual impairment to complete the required content. Hence, the need to explore the amount of content covered in a term among learners with visual impairment.
2.4 The Transition Rate from One Class to the Other by Learners with Visual Impairment

Transition is a process, which is simultaneous. The stakeholders come together and dialogue or negotiate for success. The stakeholders comprise the learner, the parent/guardian and the teacher. According to scholars, transition has to begin from childhood phase and move from intervention programmes to pre-school and beyond. Also, transition has to be based on the learners’ individual needs as learners with visual impairments have unique preferences and interests. In Kenya, nursery education starts from age four to six. The first class of a primary school is known as standard one (1). The final year is standard eight. The primary learners are known as pupils. Even the learners with visual impairment follow the same educational ladder as their sighted peers. The educational levels to climb need to be gradual and barrier free (GoK, 2009).

The early childhood transitions are very important because they set a stage for all future transitions. For transition to succeed there must co-ordination, comprehensive planning and development of an individualized educational programme (Clark, Patton, Moulton, 2000). In the pre-school, the learners with visual impairment learn prerequisite activities and activities of daily living (ADL). However, many of the studies conducted focus on integrated programmes at Thika School for the Blind. A few may be cited such as Kimeto (2010) who did his study in integrated programmes in Bomet District on the challenges to effective learning of English braille and cited shortage of trained teachers for learners with visual impairment as a challenge, limited teaching/learning resources/materials as the major hindering factors.
On the other hand, Mang’ula (2010) focused on the girls’ performance in mathematics in Thika High School for the Blind. The following are the factors she notes to hinder the girls’ attainment/achievement in Kenya Certificate of Secondary Education (KCSE): psychological, socio-economic and cultural factors respectively. Frequent failing automatically leads to a learner not to be promoted to the next class or learner dropout of school. Both studies did not check or investigate the transitional rate of the visually impaired learner, from nursery school to the high school. Furthermore, the studies do not investigate the learner’s pace of learning to gauge the possible cause of frequent failure from (KCPE) to (KCSE) level of summative evaluation. Hence, this study sought to find out if transition rate from one class to the other determines the pace of learning at St. Francis School for the Blind.

2.5 The Effectiveness of Communication Skills During the Teaching Learning Process

It is paramount that every learner needs a medium of communication which is fairly comfortable, as communication difficulties may affect the learner’s academic achievements, since the learner may feel immature and intellectually inferior. He/she tends to perceive his/her defect as diminishing one’s self-worth (Hegarty, 2002). Those who have enough vision use print, while those without vision use braille as a medium of communication. Braille is actually the primary reading mode, which enables learners with visual impairment to lead independent lives. Though there are claims and counter claims about the superiority and inferiority of one media over the other, the argument is on braille and print, regardless of these not being the only modes. There are other effective modes of communication which can assist a learner with visual impairment as well, such as tape recorder and voice activated computer.
Moodley (2002) describes braille as a mode of communication which enables learners with visual impairment to communicate effectively like their sighted counterparts through print reading and writing. The learners with visual impairment need intensive teaching from the early years of schooling in order to gain adequate braille literacy (Rex, Koenig, Wormsely, & Baker, 1995). The learners also, need to identify the six dots which are used to construct the alphabetical letters, numbers, punctuations, equations for efficiency. However, the World Bank report (2004) indicates that the education of learners with visual impairment is far behind the required attainment level. This scenario calls for more reinforcement from all the stakeholders, so that the learners with visual impairment can compete favourably in this era of information technology. Therefore, this alerts the teachers of learners with visual impairment to motivate their learners to perceive braille as an easy medium of communication rather than lamenting its complexity of contractions.

Wanjohi (2003) also argues that teachers’ attitude towards the learners with visual impairment should be positive to enhance their learning. Giving a learner with visual impairment hope and identification will possibly eradicate the notion that braille is a difficult medium. Negative attitude causes a tactual learner with visual impairment to leave the school less well-prepared than the print writers.

Mwangi (2009) attributes poor braille literacy of learners with visual impairment to the braille courses undertaken by the teachers of learners with visual impairment as too few sighted teachers are proficient in braille. She further, questions the teachers’ teaching experience, also another factor which she concurs with Songe (2003) is lack of braille learning resources as a factor that affects braille literacy. The researcher
generalized her findings mainly on Thika Primary School for the Blind, but this could also be true, of St. Francis School for the Blind. The school receives trained teachers from Kenya Institute of Special Education (KISE) and Kenyatta University. The teaching/learning resources are almost adequate in the school as the Christoffel Blend Mission (CBM) in conjunction with the government sends the facilities to the school. Despite all these strengths, learners with visual impairment lag behind in academics, as many of them have slow pace of learning. The dropout rate is also high. Hence needs investigation on, how communication skills influence pace of learning in St. Francis School for the Blind.

2.6 Gender’s Pace of Learning

Children’s foundation depends on the material support from their parents. Parents are also core role models for children to emulate, therefore, they need to shun from discriminative practices which may lead to gender disparity. Boys get first priority compared to girls when resources are few, either the learner is disabled or ‘normal’ the boy child comes first, either in Africa or abroad (Mutesa, 2003). In Palestine, girls with disabilities were perceived as failures, but the boys with the same were tolerated, so it was very normal for a disabled female to be hidden (Hershey, 2000). Further, career stereotyping restricts girls with visual impairment to traditional courses which require manual skills like knitting and weaving instead of guiding them to venture into broad-based courses such as education, agriculture medicine, engineering and architecture (MoEST, 2007).

According to (Abosi, 1999), girls with disabilities were mostly devalued and were thought to attain marital status which was valued in the African culture. On the other hand, boys were considered to be the breadwinners, but girls the care-takers (Rousso,
Likewise, in Kenya, similar stereotypes are experienced on female fraternity who are perceived as the less capable and weaker gender than males (Gok, 2009). The community and society further, have negative attitude towards people with special needs. It is even worse for a girl child, who faces a bigger challenge than their male counterparts. Further, the girl child still encounters gender disparities on activities like sex education, Human immunodeficiency virus (HIV) and Acquired immune deficiency syndrome (Aids) and life skills. Therefore, this study may explore on how gender disparity affects pace of learning in St. Francis School for the Blind.

2.7 Summary

Blindness has an impact on a person’s cognitive development, resulting in academic limitation of a learner with visual impairment. The reading as well as the writing speed is reduced (Steinman, Lejeune and Kimbrough 2006). Hence, stakeholders attribute the pace of learning to disability and conceptualize the learner to be incapable of performing academic tasks. This perception comes about as the learners with visual impairment take longer time to do class work, tests and examinations, which might lead to less content coverage. While there might be few learners with visual impairment who can memorize new concepts and require no extra time, majority of learners with visual impairment may need extra time to acquire concepts. Likewise, on transition, learners with visual impairment are expected to follow the same timeframe as the sighted peers, such as from pre-school, primary and tertiary institutions. When failure hinders one from ascending the academic ladder, as promotion is gauged on performance, determinants of this failure are not clearly investigated. Early intensive teaching of braille and print may curb the slow pace of learning. However, if teachers who teach braille are not themselves proficient,
learners may be affected by lack of adequate communication skills. Finally, without attention from parents and teachers, the pace of learning for a girl child with visual impairment might not be at par with a boy’s pace due to cultural prejudices that often put a girl child at a disadvantage. Therefore, the plight encountered by both boys and girls who have visual impairment needs to be addressed jointly to explore the determinants of slow pace of learning by learners with visual impairments.
CHAPTER THREE

METHODOLOGY

3.0 Introduction
This chapter presents research design, variables, location of the study, target population, sampling techniques and sample size, construction of research instruments, pilot study, validity, reliability, data collection techniques, data analysis, logistical and ethical considerations.

3.1 Research Design
This study used a case study research design to explore the determinants contributing to slow pace of learning among the learners with visual impairment. This method gave an in-depth exploration of the existing relationship between variables. Also, this design helped to answer questions pertaining to the present pace of learning for the learners with visual impairment at St Francis School for the Blind (Creswell, 2003). This design used the mixed method in order to build and strengthen the outcome of the study, as data should be qualitatively collected by interviewing the headteacher and learners with visual impairment and tabulates the observation. Questionnaires for Special Needs Education Teachers (SNE) in St. Francis School for the Blind would also be used and analyzed quantitatively.

3.2 Variables
The independent variables in this study are: severity of vision loss, content coverage in a term, learning time required in lesson development to acquire new skill, proficiency in communication, gender and the pace of learning of learners with visual impairment would be the dependent variable.
3.3 Location of the Study
This study was carried out at St. Francis School for the Blind. From Nairobi, the school is in the north, the counties boarding are: Transoia to the south, Elgeyo Markwet to the east, and Turukana to the north. It specifically deals with the education for learners with visual impairments, for both boys and girls. The school is within Kapenguria Municipality, one kilometer south-west of the District commissioner’s residence.

3.4 Target Population
The target population in this study would include learners with visual impairment, the headteacher and the teachers teaching the learners with visual impairment at St. Francis School for the Blind. The school has one headteacher, 19 teachers, 86 boys and 64 girls, giving a total of 170 respondents.

3.5 Sampling Techniques and Sample Size
3.5.1 Sampling Techniques
In this study, the researcher employed the interval and purposive sampling techniques. The population included the headteacher who is the manager of the institution, the teachers, and learners with visual impairment. The headteacher and the teachers were purposively sampled, whilst the learners with visual impairment were sampled randomly. The sample size was sixty participants. The classes that were used for the study were: classes four, five, six, and seven, because they were capable of expressing their ideas.

Through the school administrator, the researcher requested to meet all the teachers in a central venue, particularly in the staffroom. The researcher systematically selected the learners with visual impairment by requesting the class teacher for a class register
then, called out the names of learners with odd numbers. This helped to select the
class members at intervals of five. Every class member stood at an equal chance of
being selected. The formula to use is I=N/n, cited by (Qureshi, 2005).

3.5.2 Sample Size
As cited by Mugenda and Mugenda (2004), a sample size of thirty cases or even
more were required for descriptive studies, and ten percent of the accessible
population was enough, as this sample is 35.30% of the target population, which was
adequate. Table 3.1 shows the distribution of the headteacher, teachers and the
learners with visual impairment. The table below represents the sample size of the
study.

Table 3.1: The Sampling Grid

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Target Population</th>
<th>Sample Size</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head-teacher</td>
<td>1</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Teacher</td>
<td>19</td>
<td>19</td>
<td>100</td>
</tr>
<tr>
<td>VI learners</td>
<td>150</td>
<td>40</td>
<td>26.70</td>
</tr>
<tr>
<td>Total</td>
<td>170</td>
<td>60</td>
<td>35.30</td>
</tr>
</tbody>
</table>

3.6 Construction of Research Instruments
The researcher developed research instruments: questionnaire, an interview guide to
gather required data and observation checklist to record the observations. The
researcher used questionnaire to obtain data from teachers who were always in touch
with the learners with visual impairment, by using few open and more of closed ended
structured questions. The questionnaire was used because it allowed the respondent’s time to fill their answers in the blank spaces, (Hawkins, & Ulin, 2001).

3.7 Pilot Study

Twenty-five respondents were involved in pilot study. The respondents used were boys and girls with visual impairments. They were selected from Kibos School for the Blind. The school was taken because it is residential like St. Francis School for the Blind that offers special needs education for learners with visual impairment. The researcher paid a visit to the identified school and got permission of using the school for pre-testing of the tools.

3.7.1 Validity

This study used construct validity, to validate the instruments and also, consult the supervisors to scrutinize and ascertained validity. This was validated through expert advice.

3.7.2 Reliability

Orodho (2004), states that reliability of measurement concerns the degree to which a particular measuring procedure gives similar results over a number of repeated trials. The researcher used test-retest method to determine the reliability of the research instruments. Headteacher was interviewed twice and six questionnaires to six (SNE) specialists. The instruments were collected and marked. The same procedure was followed after two weeks. To establish the reliability of the research instruments, the researcher evaluated collected data using the Spearman’s rank-order correlation of 0.80, which was considered sufficient for the study.
3.8 Data Collection Techniques

The researcher arranged to go to the school and meet the school administration and established rapport with the staff. An appointment for briefing and presenting the questionnaires to the respondents was sought. Then, researcher observed lessons being taught in the classrooms. The researcher also recorded down the behaviours’ observed, with the help of the research assistance. Likewise, the teaching learning lesson development was a concern, the time taken was noted, and even the learners’ communication skills were observed. Finally, the researcher conducted face-to-face interview with the headteacher and learners with visual impairments.

The instrument was administered to assembled teachers; each was given a questionnaire to fill in the presence of the researcher. Three of the respondents were absent; therefore the researcher used sixteen respondents to fill the questionnaires. After the respondents had filled the questionnaires they were handed back to the researcher. The second, instrument was the interview schedule. This was essential as the researcher readily collected appropriate information from the headteacher and children with visual impairment, as they expressed themselves verbally. The school headteacher was in his office and the researcher had a briefly oral discussion. It was face to face interaction, as the researcher recorded the responses on a note book.

Then, the researcher went to the class teachers of classes four, five, six, and seven for the class registers. Each class was given an equal participation, ten participants each. Thereafter, the researcher started with the learners of class four; unfortunately it did not work as class four had lesser learners. Therefore, the researcher opted to use gender. The girls were three with five boys, they were all taken. Then, the researcher created rapport with the respondents as he prompted them to answer questions orally.
The researcher interviewed one at a time by reading the structured items covering the entire objectives of the study.

Class five had eleven, two of them were touch readers while, three were girls. The researcher picked all the touch readers and the girls thereafter wrote numbers one to five leaving the sixth paper plain then folded them for the respondents to pick, the one who picked the plain paper was eliminated. Class six had nine girls, eight boys it was hard on whom to leave out, the researcher requested each group to surrender half, and it was difficult to get half of nine. Democratically four girls, four boys were given, totaling to eight.

Then, class seven was having the highest number of learners with visual impairments; the researcher had to line them up in a straight line and prompted them to say number one to twenty seven. Then, the researcher took the odd numbers that was fourteen of them. Then, the researcher interviewed the learners, and with their consent tape recorded, all answers stated by learners with visual impairment which was analyzed later. During the actual interview, four respondents did not participate, reducing the number to thirty six.

The third to be used was the observational checklist. This enabled the researcher to observe the respondents in a learning process and recorded what was seen with the help of a research assistant. The study aimed at establishing the factors which determines the pace of learning for learners with visual impairment. To attain this, the researcher requested for permission to be allowed to observe an ongoing lesson development. The interview guide and observation checklist complimented questionnaire data because sometimes questionnaires limit more data.
3.9 Data Analysis

Bell (2005), states that data analysis is a research technique for compiling a comprehensive report after interpretation. The researcher analyzed the collected data descriptively by scoring the response from teachers. Then, numbered and coded responses from the headteacher and the learners. The result of the scored, coded responses were tabulated and reported by use of descriptive statistics such as frequencies, graphs, pie charts, tables and percentages. Qualitative data from taped interview and observation responses were analyzed in themes and used content analysis for interpretation. Then, the researcher discussed the interpretation and findings on the research based on the data in the research questions stated in chapter one. Thereafter, the researcher made recommendations in relation to determinants of the pace of learning of learners with visual impairments in St. Francis School for the Blind.

3.10 Logistical and Ethical Considerations

In research, a researcher is expected to be a person of a high integrity who will not undertake a research for personal gain or a study that will have a negative effect on others. The researcher will prepare before starting, during and even after collecting the data. For this study to succeed, the following ethical considerations acted as a guideline:

- By safeguarding the respondents by maintain high confidentiality and privacy, Neuman (2000).
- By maintain anonymity (using numbers not names) of the participants.
- By having informed consent, that was getting permission from the administrator of the special school, and the respondents
CHAPTER FOUR
DATA ANALYSIS, RESULTS AND DISCUSSION

4.0 Introduction
This study was conducted to determine the pace of learning for learners with visual impairments at St. Francis School for the blind, Pokot County, Kenya. The chapter presents findings of the study in three sections. Section one presents data on methods of data analysis, while section two presents data on demographic information and section three presents findings touching on each of the following study objectives: severity of vision loss and pace of learning, content coverage and pace of learning, time required for lesson development and pace of learning, transition rate and pace of learning, effectiveness of communication skills and pace of learning, gender and pace of learning, finally, observation findings and conclusion of the findings.

4.1 Methods of Data Analysis
The researcher compiled together the filled questionnaires, interview schedule and the observation checklist. Then, quantitative data from the questionnaire were analyzed to establish descriptive statistics such as mean, percentages, frequencies, and graphs. The presentation was done by discussing the main themes from the study objectives. While, the qualitative data from the interview schedule and the observation data were analyzed in themes. Also, the whole data responses were numbered coded for easy understanding and presented in figures, charts, percentages and tables.
4.2 Demographic Information of the Learners

The study covered the following; ages of the learners, background of the teachers school information and history.

4.2.1 Ages of the Learners in the Various Classes

The researcher sought to establish the learners mean age, actual learning age, and variance in various classes as indicated below.

Table 4.1: Learners average ages in the various classes

<table>
<thead>
<tr>
<th>Class</th>
<th>Number of learners</th>
<th>Mean age (Years)</th>
<th>Actual learning age</th>
<th>Variance in years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 4</td>
<td>6</td>
<td>15</td>
<td>09</td>
<td>-6</td>
</tr>
<tr>
<td>Class 5</td>
<td>7</td>
<td>16</td>
<td>11</td>
<td>-5</td>
</tr>
<tr>
<td>Class 6</td>
<td>8</td>
<td>15</td>
<td>13</td>
<td>-2</td>
</tr>
<tr>
<td>Class 7</td>
<td>15</td>
<td>16</td>
<td>14</td>
<td>-2</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>15.5</td>
<td>11.8</td>
<td>-15</td>
</tr>
</tbody>
</table>

As shown in table 4.1, the average ages of six class four learners with visual impairment is 15, while the actual learning age is nine years. It indicates that the learners are six years behind the sighted learners whom they started schooling with. In class five, there were seven having the same visual challenge having mean age of 16, actual learning age of 11 years and a variation of five years. As indicated from the table above, class six were eight with an average age of 15 years, actual age of 13 years and variant of two. The table above also, shows that classes seven were 15 having mean age of 16 with an actual learning age of 13 and variation of two. On the arithmetic calculation, the average ages of the learners with visual impairment in the table above range from 13.5 to 15.5, plus or minus. As the researcher did further probed same learners with visual impairment they stated their ages from 10 to 22.
years. The older ages arose, because the learners with visual impairment were admitted at any age.

4.2.2 Background of the Teachers
Teachers in the school were mainly male teachers 10 (62.5%), whilst eight (37.5%) were female and were aged between 31 – 60 years. Then, four (25%) had taught for mainly over twenty-five years and least was one (6.25%). As indicated, gender representation in the school is well represented; hence the learners’ needs were catered for. Also, that majority of teachers were experienced in their work, hence capable to handle learners with visual impairment. This was so, because they were able to design and implement programmes that enhanced communication skills for learners with visual impairment.

4.2.3 School Information and History
The study sought to establish when the school was started; the data collected from the head teacher gave the findings. Based on the head teacher’s record, this school was started in 1979. The headteacher also said, “The school started as a rehabilitation Centre for the blind with around twenty adults.” This findings concurred with the (Resource teacher St. Francis School for the Blind 2011) who revealed that a Missionary Doctor named Cox pioneered for the establishment of the school. Currently, the school has 144 learners. During admission of the learners to the school, the head teacher stated that learners are admitted at any age provided they are willing to learn.

The researcher observed and noted that there was age variation in the classes. This might have been a contributing factor of slow pace of learning among learners with
visual impairment. Through interview, the head teacher admitted that they have plans in place to assist the learners complete the syllabus. The method cited to help the learner was through remedial work. This was in line with the conceptual framework whereby individualized education programme was mentioned as an intervening variable.

4.3 Severity of Vision Loss and Pace of Learning

Objective one sought to establish from the learners with visual impairment the current class they were, to compare with those they started schooling with regardless of their vision challenge. The findings are given in tables 4.2, 4.3, 4.4, 4.5 and figure 4.1.

Table 4.2: Learners current class and the distribution of those they started schooling with (n = 36)

<table>
<thead>
<tr>
<th>Current class</th>
<th>Classes for those who started schooling at the same time with the learners</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Class 4</td>
<td>Class 5</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

From table 4.2, it is clear that five class four; eight class five, eight class six and fifteen class seven learners with visual impairment were interviewed. This was done to establish the current class of learners with visual impairment as well as present classes of their peers who they started schooling with. In total, there were 36 (100%)
of the respondents and were drawn from standard four to seven. As indicated from the table above, the learners with visual impairment are shown in the current class and the classes of their peers they started schooling with. The researcher intended to affirm how many of the learners with visual impairment had lagged behind in academics. The table indicated that two learners from class four, one from class five, and one from class six respectively had not repeated. Most of the learners who have managed to progress to higher classes up to secondary school are those with mild low vision while the interviewed learners with severe visual impairment remained in their current classes. According to the learners interviewed, lagging behind had been contributed by poor performance, severity of vision loss, and lack of early intervention in order to enroll in the school for learners visual impairment at the recommended age of six years.

Then, the researcher sought to investigate the frequency at which learners with visual impairment repeated classes. Table 4.3 presents the findings.

Table 4.3: The number of times the learners had repeated classes (n = 36)

<table>
<thead>
<tr>
<th>Type of impairment</th>
<th>Gender</th>
<th>Not repeated</th>
<th>Ones</th>
<th>Twice</th>
<th>Thrice</th>
<th>Four times</th>
<th>Five times</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TB</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Moderate low vision</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Severe low vision</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>15</td>
<td>8</td>
<td>10</td>
<td>9</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>36</td>
</tr>
</tbody>
</table>

Table 4.3 shows the number of times learners with visual impairment had repeated classes, 10 (27.8%) had repeated once, nine (25.0%) repeated twice, five (13.9%)
repeated thrice, three (8.3%) repeated four times, one (2.8%) repeated five times while, eight (22.2%) had not repeated any class. Generally, both learners with moderate low vision, and those with severe low vision had highest repetition rate, compared to those learners with total blindness. Probable, these learners are not well-understood in terms of their visual functioning and educational implications. Total blindness is usually considered as profound. However, when needs are met effectively, the study shows the pace of learning may not be grossly affected. From the interview conducted by the researcher, the learners with severe vision loss insisted that they had to repeat classes due to pressure from parents and because of poor performance. As one learner said, “my parent told me to repeat for the sight to improve.” Then, it seemed severity of vision loss hinders the learner’s transition from one class to the other.

Further, the study sought to establish the respondents’ expectations after completing school as indicated on table 4.4 below.
Table 4.4: Learners expectation in future after completing school

<table>
<thead>
<tr>
<th>Career preference</th>
<th>Type of impairment</th>
<th>Gender</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TB</td>
<td>Low vision</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Teacher</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Lawyer</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Nurse</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Driver</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Lecturer</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Pilot</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pastor</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Doctor</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Accountant</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Broadcaster</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Musician</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21</strong></td>
<td><strong>15</strong></td>
<td><strong>36</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4.4 indicates the career choices chosen by learners with visual impairments; as shown, six (16.7%) male four (11.1%) female respondents chose teaching as one of the favorite profession. As five males, (13.9%), three (8.3%) females chose lecturing, whereas, three (8.3%) males one 92.8%) female took law as their career preferences. The data further revealed that none of the female learners chose to be a nurse, a pilot, a doctor, an accountant, and a broadcaster.

Despite the visual challenges encountered by the learners, they had higher expectations in life and hoped mainly to take teaching as their profession, while others chose to be lawyers, lecturers, nurses, drivers, pilots, pastors, doctors, accountants,
broadcaster and musicians. This also revealed that career stereotyping still restricted learners with visual impairment to traditional courses, mainly teaching, as well as singing instead of competitive ones like law and medicine which had also been noted by (MoEST, 2007). Expectation of the low vision learners were slightly varied compared to those learners with total blindness which determined their career preferences, as they chose driving, piloting, pasturing, doctoring, accounting, and broadcasting.

Likewise, as shown from the table, both female touch learners and those with low vision. Three and one respectively (11.1%) chose teaching as a future career thus restricting themselves to stereotypes. The moderate male learners with low vision took competitive career courses like piloting, doctoring and accounting, at a percentage of (2.8%) per profession. These implied that the severity of vision loss influenced the learners’ career preferences.

Thirdly, question thirteen in the learners interview guide required the learners to state how teachers view them on ability, the table below summaries their responses.

**Table 4.5: Learners’ views on the teachers saying they have the same ability as the sighted children (n = 36)**

<table>
<thead>
<tr>
<th>Type of impairment</th>
<th>Responses</th>
<th>Gender</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>TB</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate low vision</td>
<td>Yes</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Severe low vision</td>
<td>Yes</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>19</strong></td>
<td><strong>17</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>
As indicated in table 4.5, more of the male than the female touch learners (22.2%) stated that teachers said that they have the same ability as the sighted, while few of both male and female touch learners (8.3%) mentioned that teachers said they do not have the same ability as the sighted peers. The majority of the male and female learners with low vision argued that the teachers did not value and accept them as having the same ability like other learners. They continued to state that teachers undermined them by judging them on their vision loss. Further, the learners voiced that teachers responded more or less favourably to different groups of learners. The learners with blindness were more favourably perceived than those with severe vision and other handicapping conditions, either moderate or severe. Those learners with severe low vision (22.2%) stated that teachers regarded them as entirely different with different abilities, while few (8.3%) learners with low vision mentioned teachers gave them some recognition. The above discussion showed that the learners with visual impairment received attention differently from their mentors. It implied, therefore, that when learners were not given the same recognition, internally they get stressed and their self-esteem goes down. Therefore, influencing their academic performance, which at the end resulted to pace of learning.

Fourthly, the study wanted to inquire from the blind and learners with low vision on how they thought the sighted peers perceive them at home, the figure below shows how they are perceived.
Figure 4.1 portrays that there were two groups of learners, those who felt the sighted perceive them differently, and those who said same as them. As learners with visual impairment live within the society, interacted and shared common features with the sighted peers, the community sympathized with them instead of empathy. In the study, the learners with visual impairment mentioned that 27 (75.0%) sighted peers perceive them differently, as they interacted at home. This concurred with (Conley-Jung & Olkin, 2001) who argue that there are harmful attributes which stereotype learners with visual impairment as fools, and incompetent, such attributes might impact on learners negatively. Though nine (25.0%) respondents with visual impairment however, felt that sighted peers perceive them to be the same as them.

4.4 Content Coverage and Pace of Learning
Objective two sought to establish whether the teachers educating learners with visual impairment covered the intended syllabus, the figure below summaries the coverage. The findings are shown on figure 4.2
Figure 4.2: Teachers syllabus coverage

Figure 4.2 indicates that there were two groups of teachers, those who covered the syllabus and those who did not. Figure 4.2 indicates that 13 (81.25%) teachers accepted that they did not normally cover intended syllabus content. When further probed, the teachers stated the following as their main reasons for not covering the intended syllabus: the slowness of learners, heavy workload, lack of enough materials, learners coming late to school, teachers move at the pace of the learners, lack of teaching aids.

The teachers further gave arguments that because of having learners with blindness, moderate and severe low vision, and each learner had their own unique pace of learning. The learners with low vision required large print as well as bold exercise books; also learners with visual impairment required the teachers’ additional attention in order for them to cope with their academic work. Therefore, meeting each and every unique individual difference delayed the content coverage. Then, the uncovered syllabus contributed to pace of learning for learners with visual impairment, while three (18.75%) revealed that they covered the syllabus as required. The teachers who
stated to cover the intended syllabus for learners with visual impairment gave no reason to justify their coverage completion.

4.5 Time Required for Lesson Development and Pace of Learning

Objective three sought to find out from the teachers teaching learners with visual impairment when time was crucially needed, and to establish from the learners if they needed more time to complete a given task. The findings are indicated on tables 4.6, 4.7, 4.8, 4.9, and 4.10

**Table 4.6: Suggested time for learners with visual impairment (n = 16)**

<table>
<thead>
<tr>
<th>When time is needed</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>When new concepts were being taught</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td>During lesson development</td>
<td>6</td>
<td>37.5</td>
</tr>
<tr>
<td>During remedial lessons</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>During mathematics lessons</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td>100</td>
</tr>
</tbody>
</table>

From table 4.6, it shows that 16 (100%) is the total number of respondents that said learners with visual impairment needed more time, when teaching new concepts, during lesson development, remedial lessons and during mathematics lessons. It also indicates that eight (50%) of the teachers were of the opinion of providing more time during when teaching new concepts, while six (37.6%) required more time to be provided always when teaching, one (6.25%) mentioned additional time to be given on remedial lessons, one (6.25%) suggested more time to be provided while teaching of mathematics subject to learners with visual impairment. This was in line with Hunt & Marshal (2002) who argues that teaching learners with visual impairment in one class in a lesson is like teaching several classes.
The researcher observed and noted that majority of teachers were for the suggestion that time is preciously needed and especially when learners learn new concepts. When examined those for both teaching new concepts plus those who said during lesson development, the difference is slightly small teaching and therefore, the respondents concurred with (Gok, 2009) which articulated for more provision of time to assist learners with visual impairment to complete an academic task.

In the questionnaire, question seven in the learners interview guide sought to establish whether learners needed more time to learn new concepts. Their responses are summarized in the table below.

Table 4.7: Need for more time to learn new concepts (n = 36)

<table>
<thead>
<tr>
<th>Responses of Learners with visual impairment</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>35</td>
<td>97.2</td>
</tr>
<tr>
<td>No</td>
<td>01</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>100</td>
</tr>
</tbody>
</table>

The data in Table 4.7 shows that 35 (97.2%) of the respondents gave yes as their responses for more time, as one (2.8%) who stated no to indicate that she or he had contention on the time given. When learners were asked if they required more time, 35 (97.2%) of the learners mentioned that they needed more time to complete their class work as stipulated time of thirty five minutes was not sufficient. Whereas one (2.8%) was content with the time provided. This suggests that learners needed more time to complete conceptualization of new concepts and was significant for all the learners. Both the learners using print and those using braille required more time to
complete their class tasks. As one learner, suggested, “If given at least one hour I will complete my work.” This was in line with Weiner’s (1996) attribution theory of achievement motivation who argues about external and internal attributes which affect self-perception as well as perception of others. The researcher observed that the learners were in need of more time to safeguard his/her self-esteem. As more time provision leads to task completion and high self-expectancies, less time provided causes a learner not to complete work, this leads to humiliation and shame.

Likewise, the researcher inquired from the teachers the duration the learners with visual impairments take to complete primary education. So, teachers were asked to state their views about learners with visual impairment completion of primary education, the findings are summarized in the table below.

<table>
<thead>
<tr>
<th>Teachers responses’</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>13</td>
<td>81.25</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>18.75</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4.8 indicates that 13 (81.25%) teachers felt that learners with visual impairment take longer to complete primary level of education. This concurred with Jose (1995), who argues that learners with visual impairment take more time to cover the intended curriculum content. Reasons given by the teachers for the long stay in primary education were; lack of enough facilities, pupils repeating classes due to poor performance not expected by the parents and the learner’s absenteeism and learning difficulty because of their sights. Three (18.75%) teachers however, felt that not all
learners with visual impairment complete primary education late. They argued that it depended on the ability of the learner and the severity of disability.

Also, the study required the learners to indicate whether they completed a given task within the stipulated time and if they could not to explain why. The following were their responses.

Table 4.9: Task completion by learners with visual impairment (n= 36)

<table>
<thead>
<tr>
<th>Type of impairment</th>
<th>Responses</th>
<th>Male</th>
<th>Female</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB</td>
<td>No</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>19.4</td>
</tr>
<tr>
<td>Moderate low vision</td>
<td>Yes</td>
<td>9</td>
<td>7</td>
<td>16</td>
<td>44.4</td>
</tr>
<tr>
<td>Severe low vision</td>
<td>No</td>
<td>8</td>
<td>5</td>
<td>13</td>
<td>36.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>21</td>
<td>15</td>
<td>36</td>
<td>100</td>
</tr>
</tbody>
</table>

As indicated from table 4.9, four male and three female (19.4%) touch learners did not complete the task given. These learners really required extra time in order to finish a given task. The 16 learners (44.4%), both male and females with moderate low vision stated that they completed the academic tasks given within the stipulated time. Thirteen learners (male and female) learners with severe low vision revealed that they had difficulties in completing the work given. These learners were braille users and expressed need for more time to read and write braille. The findings obtained concurred with Okungu (2005) who recommends for more time to be provided to learners with visual impairment to complete assignments and tests.

Also, the researcher wanted the teachers educating learners with visual impairment to state suggestions on when to provide extra time for tasks completion. The table below shows their responses.
Table 4.10: Teachers suggestion on time (n= 16)

<table>
<thead>
<tr>
<th>Responses</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
<td>87.50</td>
</tr>
<tr>
<td>No</td>
<td>02</td>
<td>12.50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The data presented in the table 4.10 revealed that 14 (87.50%) of the respondents agreed that learners with visual impairment require extra time to complete an academic task, apparently two (12.50%) of the respondents do complete work. This concurred with June (2005) who posits that teachers of learners with visual impairment felt that the learners who fall behind in learning needed to be taught at a slower pace in order to complete their tasks. A probing question on the same indicated that extra time was needed mainly during teaching new concepts and remedial work. This exactly concurs with the observation made by the (Gok, 1999), that there were low pacing standards among learners with visual impairment.

4.6 Transition Rate and Pace of Learners

Objective four sought to establish the transition rate. The findings are shown in tables 4.11, 4.12, and 4.13.

Table 4.11: Transition rate (n = 16)

<table>
<thead>
<tr>
<th>Transition</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slow</td>
<td>12</td>
<td>75</td>
</tr>
<tr>
<td>Moderate</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>Fast</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4.11, shows that there were 16 respondents, who gave their views on the transitional rate of learners with visual impairment. The findings showed that,
according to the teachers, transition rate of the learners with visual impairment from one class to another was slow, 12 (75.0%) responses were given by teachers. Four (25.0%) of the teachers felt, that learners with visual impairment were moderate and did not follow the same transition ladder as their sighted peers. The respondents further claimed that the transition rate for learners with visual impairment were more complex compared to the sighted learners. Further, a learner’s transition was crucial to the life and success of an individual (Clark, Patton & Moulton, 2000). This implied that transition ought to be the forethought of all teachers teaching learners with visual impairments, but it seemed teachers do not understand. The teachers teaching learners with visual impairment stated the following reasons to justify the variations; learners need real items to understand the concepts, because of reporting late to school, inadequate facilities, poor performance due to lack of enough mastery of content and multiple disability.

4.7 Effectiveness of Communication Skills and Pace of Learning

Objective five inquired from the learners the mode they were comfortable with. As well as listing why they preferred their choices, the findings are summarized in tables 4.12, and 4.13.

**Table 4.12: Preference mode of communication (n = 36)**

<table>
<thead>
<tr>
<th>Type of impairment</th>
<th>Mode of communication</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totally blind (TB)</td>
<td>Braille</td>
<td>8</td>
<td>22.2</td>
</tr>
<tr>
<td>Moderate low vision</td>
<td>Print</td>
<td>11</td>
<td>30.6</td>
</tr>
<tr>
<td>Severe low vision</td>
<td>Print</td>
<td>9</td>
<td>25.0</td>
</tr>
<tr>
<td>Severe low vision</td>
<td>Braille</td>
<td>8</td>
<td>22.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>36</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
From the table above eight (22.2%) touch learners were more comfortable with braille. This concurred with Moodley (2002) who described braille as a mode of communication best for learners with visual impairment to communicate effectively. Eleven (30.6%) moderate low vision learners were however, comfortable with print, while nine (25%) who had moderate low vision indicated that they struggled to read the print material, and were often forced to bring reading material very close to their eyes.

Likewise, eight, (22.2%) learners with severe low vision preferred braille because they were unable to see print as well as the small lines in the exercise books. Then, eight (22.2%) severe low vision who were touch learners, preferred using braille, because seeing a white braille paper was a problem, their sight was a problem; the eyes of the learners ache when using print; some of the learners were not able to see small prints. As indicated by Rex et al., (1995), learners with visual impairment should acquire communicative skills to enable them to communicate effectively with other individuals. The researcher also, observed and noted that learners with visual impairment avoided reading and writing braille words with contractions.

Then, the researcher intended to inquire from the teachers reasons why learners with visual impairment were not proficient in the mode of communication they use. The table below indicates the type of impairment, and mode of communication.
Table 4.13: Reasons why learners are not effective with the mode of communication (n = 16)

<table>
<thead>
<tr>
<th>Type of impairment</th>
<th>Mode of communication</th>
<th>Learners proficiency</th>
<th>Total number of teacher</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totally blind (TB)</td>
<td>Braille</td>
<td>proficient</td>
<td>3</td>
<td>18.75</td>
</tr>
<tr>
<td>Moderate low vision</td>
<td>Print</td>
<td>proficient</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>Severe low vision</td>
<td>Print</td>
<td>Not proficient</td>
<td>5</td>
<td>31.25</td>
</tr>
<tr>
<td>Severe low vision</td>
<td>Braille</td>
<td>Not proficient</td>
<td>7</td>
<td>43.75</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>16</td>
<td>100</td>
</tr>
</tbody>
</table>

From table 4.13 analysis it is clear that three teachers stated that learners with blindness use braille, while seven teachers stated that seven learners with severe vision loss use braille. As one respondent mentioned that learners with moderate vision use print effectively, and five teachers confirmed that some learners with severe vision loss use print as a mode of communication. The data further shows that seven (43.75%) teachers indicated that communication of the learners with visual impairment was not proficient in braille and five (31.25%) were also not proficient in print, while three (18.75%) teachers felt that communication was proficient in braille and one (6.25%) was also proficient in print. The teachers also argued that ineffective communication hindered learners in answering questions as the learners do not get concepts well therefore, ineffective communication contributed to pace of learning. This was indicated by the teachers when further probed on the same stated that learners did not get the concepts well, therefore, lack of communication meant barrier to learning, if they were not proficient in braille then, communication of learners with visual impairment becomes difficult.
4.8 Gender and Pace of Learning

Objective six intended to inquire among the genders who were more in classes, to determine its influence of pace of learning. The findings are given below in the following tables 4.14, 4.15, and 4.16.

Table 4.14: Gender distribution per class (n= 36)

<table>
<thead>
<tr>
<th>Class</th>
<th>Type of impairment</th>
<th>Gender</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low vision</td>
<td>TB</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>2</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>14</td>
<td>21</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 4.14 indicates that there were more 22 low vision learners compared to the learners with total blindness, who were 14. The total number of male learners with visual impairment was 21, while that of female was 15. When the learners were asked which gender was more in their classes, learners in classes four, five and seven stated that they had more of the boys while those in class six said, “class six is the only class with more girls”. The study found out that, the number of boys in three classes (four, five and seven) was more? According to the teachers sampled in the study, the average learner enrolment in their classes was 9.0 boys and 8.0 girls. This concurred with Mutesa (2003) who states that in many communities, the boy child comes first, when it comes to provision of education, actually this had led to disparity, whereby material provision benefits only one sex, rendering the other with less learning resources leading to lagging behind in academic progression.
Further, the researcher sought to probe the learners to determine whether they discuss their future career choices with teachers as indicated below.

**Table 4.15: Discussing career choices with their teachers (n = 36)**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Type of impairment</th>
<th>Responses</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TB</td>
<td>Moderate low vision</td>
<td>Severe low vision</td>
<td>Do not discuss</td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Female</td>
<td>6</td>
<td>4</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>9</td>
<td>17</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 4.15 indicate that the numbers of males were four touch learners, five moderate low vision, and eight severe low vision, while that of females were; six touch learners, four moderate low vision and nine severe low vision. From the table 4.11 above, it was established that the learners would like to pursue various careers in future, only five male learners (13.%), two female (5.6%) and one moderate (2.8%) low vision had courage to discuss their career choices with their teachers. Then, 12 (33.3%) male learners with blindness, and 17 (47.2%) female were unable to discuss their future career with their teachers. The reason was lack of communicative skills to express issues. From the table above, there were more females who were shy to discuss their future educational career, compared to the males who were more courageous and aspirated to discuss their career choices however, as indicated from the table, vision loss and gender contributed to pace of learning.

Also, the researcher sought to find out on how the learners with visual impairment felt on how community rates them academically, Tabulated in the table below.
Table 4.16: How the learners felt they are rated. (n = 36)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Gender</th>
<th>Type of impairment</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>TB</td>
<td>Moderate low vision</td>
</tr>
<tr>
<td>High achievers</td>
<td>10</td>
<td>4</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Low achievers</td>
<td>12</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>14</td>
<td>12</td>
<td>14</td>
</tr>
</tbody>
</table>

The table 4.16 indicates that four learners with blindness, five moderate low vision and one learner with severe vision loss stated that they were rated as high achievers. Among them were four male learners with blindness, five male with moderate low vision and one male with severe low vision (27.8%). Then, one female learner with blindness, two female with moderate low vision and, no female learner with severe low vision on the same category felt that they are also taken as high achievers. Only three (8.3%) female, learners with visual impairment were rated as high achievers. The ten were male; it clearly showed that the community rated the learners with visual impairment based on severity of vision loss and, gender.

Further, 12 (33.3%) males with visual impairment were rated as low achievers. It seemed the community stereotypes the learners with visual impairment as low achievers. As indicated from the table, three learners with blindness, four with moderate low vision and five with severe low vision of the males stated that they were branded low achievers as well as the four learners with blindness, three learners with moderate low vision and four learners with severe low vision were female 11 (30.6%)
learners with visual impairment. When the learners were further probed on the same, the study revealed that, the community did not recognize them as performers. Such assumptions had impacted self-identity and self-image of the learners negatively.

Lastly on gender, the researcher probed the head teacher to establish way forward for the learners with visual impairment after completion of primary education. The head teacher stated that after completion of standard eight, (38.8%) of the learners join Form One. The rest (61.2%) never join form one. The learners with VI complete school at an average age of 16 years. A few of the learners, mainly girls drop out before reaching class eight. These learners drop out mainly because of pregnancies and neglect by the parents. The head teacher expressed that the challenges faced by these learners restrict their progression to higher education and indicated that between the years 2002-2009, only five learners with visual impairment managed to join university education. The headteacher said, “Out those who managed to university, four were boys and one girl.”

4.9 Observation Findings
The researcher made two observation findings to observe the activities which took place in the classroom and noticed that teachers provided group teaching and hardly got time to offer individualized education programme to the learners. This goes against the view of Kirk, (2000). That braille teaching techniques had to be individualized and be learner-centered for the unusual diverse needs of the learner, with visual impairment. The findings revealed that the learner-teacher relationship was not satisfactory and time frame for a lesson was not adequate for both the teachers and the learners. Learners’ communication, participation and content
facilitation by the teachers were inadequate. The researcher also observed that some of the visually impaired had problems in using both print and braille.

4.10 Conclusion of the Findings
From the data analysis presented, the study was able to address all the objectives of the study. The researcher observed that the teacher’s subject lesson coverage was brought to a halt, because of shortage of time; the learners with visual impairment also suffered the same, because the bell rung before they completed the classwork tasks. The teacher likewise, was unable to provide individualized education programme to the learners who were in need of it. Further the findings revealed that learners with visual impairment were not proficient in both braille and print so that they could communicate effectively and there were more boys than girls. The learners with blindness, moderate and severe low vision were not given the same recognition by the teachers, and the sighted peers and even the community.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction
The chapter presents the summary of the core findings, conclusions drawn and recommendations to improve the determinants of pace of learning for learners with visual impairment. The chapter also includes suggestions for further research.

5.1 Summary
The following section focuses on the summary of the core findings established from the study. It includes sub-topics like severity of vision loss, content coverage, time required for lesson development, transition rate, and gender, conclusion of the findings, recommendations, recommendations to parents, recommendations to teachers, ministry of basic education, Kenya institute of curriculum development, suggestion for further research.

5.1.1 Impact of Severity of Vision loss
According to the findings the learners with visual impairments lagged behind because of the severity of vision loss they incurred. It also indicated that the severity of vision loss influenced the learners’ career preferences, as more learners opted for traditional courses rather than the competitive ones. The respondents also felt the sighted peers perceive them differently, while few of the sighted viewed them as the same, as the community rate them basing on the severity of vision loss. The learners further mentioned that they were not given recognition because of the severity of vision loss. Lack of recognition, the learners felt internally stressed and their morale and self-
esteem went down. Due to lack of recognition, the learners’ academic performance had deteriorated.

5.1.2 Content Coverage
The finding revealed that majority of the teachers did not cover the intended syllabus as required. The teachers claimed that they teach according to the pace of the learners with visual impairments. The teachers also, argued that majority of the learners with visual impairment open the school very late. The teachers teaching learners with visual impairment also, asserted that the learners open school two weeks later. Likewise the teachers affirmed that teaching learning materials influenced the upward progress of the learners with visual impairment as the learners required real objects for manipulation and understanding. Further the teachers mentioned that the learner’s with visual impairment required additional attention, because of the learner’s varied individual differences.

5.1.3 Time Required for Lesson Development
The findings of the study showed that more teachers agreed that learners with visual impairment required extra time to complete their academic tasks. The rate of work completion was very slow for both learners with severe blindness and severe low vision. It also indicated that time was needed when teaching new concepts and when teaching mathematics to learners with visual impairments. Further the teachers elaborated that teaching learners with visual impairment in one class is like teaching several classes, as the teacher had to cater for the touch learners, the low vision and even the severely affected learners. It was noticed that thirty five minutes for a lesson was not sufficient. The study suggested for one hour, because more time leads to high self-expectancies, less humiliation and shame. Likewise, the learners who lagged
behind in learning needed to be taught at a slower pace in order to understand and complete their tasks.

5.1.4 Transition
The general indication from the findings was that the learners with visual impairment did not follow the same transition ladder as the sighted learners, as majority of the learners with visual impairment repeated classes. That implied that the learners with visual impairment had a slow and complex transition. It was also indicated that the learners with visual impairment lacked enough mastery of content therefore, hindered the progress from one class to the other. These findings met the objective for which it sought to find out the determinants of pace of learning among learners with visual impairments.

5.1.5 Effectiveness of Communication Skills
The study established that moderate learners with low vision were comfortable with print, though they brought the reading materials closer to their eyes, while the severe learners with visual impairment preferred braille, because they were unable to see the small print. The findings revealed that, majority of the learners with visual impairment were not competent in using braille especially persons with severe low vision. It further indicated that they got distorted with braille contractions. Other, learners even avoided reading and writing words with contractions. Also, the study had found out that majority of the learners with visual impairment were not proficient in both braille and print. This implied that ineffectiveness in communication had influenced the learners from answering questions.
5.1.6 Gender

The study established that there were more boys than girls. It also showed that when it comes to material provision the boy child come first. This had lead to the girl child to lag behind in academia. The study also noticed that the more male discussed their career choices with their teachers, while the female were unable to discuss their future career choices. The female were not courageous compared to the male. Also the study established that the male were rated as high achievers, while the blind, the low vision were branded as low achievers. Such branding and assumptions had impacted self identity, self-image of the learners negatively. The study further revealed that majority of girls drop out of school, because of pregnancies and neglect by parents.

5.1.7 Syllabus Coverage

The research study showed that many of the teachers accepted that they do not normally cover the syllabi, due to the pace of learning by learners with visual impairment, as well as lack of sufficient time for the intended content in a lesson. Also, the findings showed that learners with visual impairment did not complete the classwork tasks, because the time offered during teaching was not enough, because the learners with visual impairment have diverse needs.

5.2 Conclusion of the Findings

The core purpose of the study was to explore the determinants of pace of learning among learners with visual impairment. The findings already discussed have revealed the need to address all the isolated areas as formulated in the study objectives mainly the time frame, course content, effectiveness of communication, time provided for teaching and learning and the general attitude towards learners with visual impairment, hence the recommendations stated below.
5.3 Recommendations

Based on the study findings, and in accordance to the pace of learning process in St. Francis School for the Blind, the following recommendations were made for consideration by the relevant authorities:

5.3.1 Recommendations to Parents

It could be identified from the research findings that gender disparity could be dealt with at the school community level. Therefore, there is need for creating awareness to parents. Parents should be encouraged to provide school needs for both boys and girls equitably. Another way also, is to educate the parents on the value of early schooling of learners with visual impairment. This could help to reduce the tendency of learners repeating classes. The head teacher could organize public barazas with the help of parents’ teachers association to sensitize the community, that all children are the same regardless of gender or disability. They deserve to be given same treatment and attention in provision of education so that they could realize their potentials.

5.3.2 Recommendation to Teachers

Teachers should ensure that learners were proficient in both print and braille to make communication easier during teaching learning processes. Where teachers themselves were not proficient in those skills, in-service courses and capacity building within the school should be encouraged. Teachers should show positive attitude towards learners with visual impairment whether they had blindness or low vision. Teachers should also embrace and implement individualized education programme in their classes. Likewise, teachers should start the teaching of braille contractions from class three, for the learners to get basic skills. The headteacher should solicit for more special
needs education teachers to be deployed into the school to reduce teacher pupil ratio to enable them to practice the use of individualized education programme.

Teachers could also be flexible with remedial work especially with learners with visual impairment who had low mental abilities. Teachers should consider alternative curriculum for learners with multiple disabilities instead of making them repeat classes.

5.3.3 Ministry of Basic Education
The ministry of education has to review the policy and formulate guidelines on the time-frame. Likewise Ministry of Basic Education to use trained special needs education field officers to identify learners with visual problem, also the government to assign educational assessment teachers, to visit regular schools and villages for sensitization. When a child is identified, early screening should be encouraged for appropriate referrals and placement.

5.3.4 Kenya Institute of Curriculum Development
The Kenya Institute of Curriculum Development to develop curriculum which is friendly to learners with visual impairment. As the study findings indicate, the curriculum developers have to slot in the curriculum (time-table) the extra time.

The Institute to consider to re-evaluate, the thirty five minutes, in a lesson to at most one hour. The institute has to indicate clearly the Special Needs Education syllabus rather than using the adapted which is the replica of the regular syllabus. However, regarding the teacher learner ratio in schools for learners with visual impairment, the researcher observed that it is 1:15. If the institute could work jointly with Teachers
Service Commission to improve teacher learner ratio to 1:5, the pace of learning might improve.

5.4 Suggestions for Further Research

Based on discussions of the findings, the researcher suggests the following crucial areas for further research:

i. To investigate the possible reasons why the KICD is rigid to providing extra, time for mild and severe learners with visual impairment to accomplish their academic tasks.

ii. To investigate the factors that can narrow down gender disparity among learners with visual impairment in Pokot County.

iii. To investigate the content which is appropriate to learners with visual impairment
REFERENCES


Clark, G.M. Patton, and Moulton, L.R. (2000). Informal assessment for transition planning Austin, TX: PRO-ED.


Hershey, L. (2000). An interview with DR. Anita Ghai, one of India’s advocates for rights of disabled women .org.


APPENDICES

APPENDIX A

TEACHERS QUESTIONNAIRE

Instruction
The following questions are aimed to establish factors contributing to slow pace of learning for the learners with visual impairment. Please take your time and kindly respond to all the questions as honestly as possible. Do not write your name. Your responses will be highly treated with confidentiality.

SECTION 1

Background information sheet

1. Gender: Female ( )
   Male ( )
2. Age: 19-30 years ( )
   31-40 years ( )
   41-50 years ( )
   51-60 years ( )
3. Teaching experience in a school for learners with visual impairment
   0-5 years ( )
   6-10 years ( )
   11-15 years ( )
   16-20 years ( )
   21-25 years ( )
   over 25 years ( )
4. What is the enrolment in your class?
   Boys _________________
   Girls__________________

SECTION 2

1. (a) Do you think the learners with visual impairment take longer to complete primary level of education? Yes ( )
   No ( )
   (b) If yes in one above, state the reasons behind this________________________
2. Do the learners with visual impairment receive any additional attention to cope with their academic work? Yes ( )
   No ( )
3. Does a learner with visual impairment complete the intended content coverage for each class? Yes ( ) No ( )

4. (a) Do you normally cover the syllabus as required? Yes ( ) No ( )
   (b) If no state the reasons of not covering the syllabus________________________

5. (a) Does the 8.4.4 system of education favour the learning pace of a learner with visual impairment? Yes ( ) No ( )
   (b) Show how it favours/does not favour learners with visual impairment____________________

6. (a) Does a learner with visual impairment require extra time to complete an academic task?
   Yes ( ) No ( )
   (b) If yes in six above, are they given such time? ______________________________

7. In your opinion, when is it appropriate to give learners with visual impairment extra time when teaching or during examination? ______________________________

8. How is the transitional rate of a learner with visual impairment from one class to another? Slow ( ) Moderate ( ) Fast ( )

9. (a) Does a learner with visual impairment follow the same transition ladder as their sighted peers? Yes ( ) No ( )
   (b) Give reasons for your answer ______________________________

10. (a) Are there learners with visual impairment who repeat classes? Yes ( ) No ( )
    (b) If your answer is yes, explain why they repeat_________________________

11. (a) Is the communication of a learner with visual impairment effective in both Braille and print? Yes ( ) No ( )

12. (a) Is there a medium which is taken to be more complicated to the other in the school? Yes ( ) No ( )
    (b) If yes which one____________________________

13. (a) Does ineffective communication contribute to slow pace of learning?
    Yes ( ) No ( )
    (b) If yes suggest how____________________________
APPENDIX B
INTERVIEW SCHEDULE FOR THE HEADTEACHER

Instructions
Please Sir/Madam, this information will be treated with confidentiality and will only be used for the purpose of the study.

1. When was the school started? ________________________________

2. What is the current enrolment of your school? ________________________________

3. Do learners with visual impairment repeat classes? ________________________________
   (b) If yes, state reasons for repeating classes ________________________________

4. Do you sometimes send the learners with visual impairment home for fees? ____
   ________________________________

5. At what age are learners with visual impairment admitted to standard one? ______
   ________________________________

6. Do learners with visual impairment complete each class syllabus on time? (b) If no, state the reasons why they do not. ________________________________

7. Are there plans on how to assist the learner with visual impairment at least complete the syllabus? ________________________________

8. How many learners with visual impairment join form one after STD 8 KCPE examination? ________________________________

9. What is the average completion age for learners with visual impairment in your school? ________________________________

10. Are there learners with visual impairment who drop out of school before class 8? ________________________________

11. Who drops out most, boys or girls? ________________________________
   (b) Why do you think they drop out of school? ________________________________

12. Are there learners who have completed university education from your school? ________________________________
   (b) If yes, about how many? ________________________________
APPENDIX C

INTERVIEW SCHEDULE FOR LEARNERS

1. You are in class ____________________________________________

2. Who are more in your class? Boys ( ) Girls ( )

3. What do you use to write? Braille ( ) Print ( )

4. Did you attend a nursery school? Yes ( ) No ( )

5. Those you started nursery with are they now in what class? _________________

6. Do you do class tests? Yes ( ) No ( )

7. Do you need more time to complete your examination? Yes ( ) No ( )

8. (a) Between print and Braille, which mode of communication are you comfortable with? Braille ( ) Print ( )

   (b) Give a reason why you are not comfortable with the mode you have not chosen? ________________________________

9. (a) How many times have you repeated classes? _________________

   (b) Give reasons why you repeated classes __________________________

10. What would you like to be after completing your school? ________________

11. Do you discuss your future career with your teachers? ________________

12. Do you think your teachers say you have the same ability as the sighted children?

   Yes ( ) No ( )

13. How do your sighted peers perceive you? Same as them ( )

   Different from them ( )
APPENDIX D

OBSERVATION FORM

The researcher will observe various activities taking place in the classroom and tick appropriately.

<table>
<thead>
<tr>
<th></th>
<th>Excellence</th>
<th>Adequate</th>
<th>Inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learners-teacher relationship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time frame for a lesson</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learners’ communication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learners participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content coverage in the class</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E

AUTHORIZATION LETTER

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Phone: 254-020-2213401, 2541349, 254-020-2673550
Mobile: 0713 788 787, 0735 484 245
Fax: 254-020-2213215
When replying please quote
secretary@ncst.go.ke

Our Ref:
NCST/RCD/14/013/271

Reuben Yaran
Kenyatta University
P.O.Box 43844-00100
Nairobi.

Date: 25th March, 2013

RE: RESEARCH AUTHORIZATION

Following your application dated 15th March, 2013 for authority to carry
out research on “Determinants of pace of learning for learners with
visual impairment at St. Francis School for the Blind, Pokot County,
Kenya,” I am pleased to inform you that you have been authorized to
undertake research in Pokot County for a period ending 31st May, 2013.

You are advised to report to the District Commissioners and the
District Education Officers, Pokot 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.

DR M.K. RUGUTT, PhD, HSc.
DEPUTY COUNCIL SECRETARY

Copy to:
The District Commissioners
The District Education Officers
Pokot County.
APPENDIX E

RESEARCH PERMIT

THIS IS TO CERTIFY THAT:

Prof Dr [Name]/Mr [Name]/Mrs [Name]/Miss [Name]/Institution

[Name] of [Address] [University]
P.O.Box [Number], [City]

has been permitted to conduct research in

Location

[Location]

District

[District]

County

[County]

on the topic: Determinants of pace of learning for learners with visual impairment at St. Francis School for the Blind, Pokot County.

for a period ending, 31st May, 2013.

Applicant’s Signature

[Signature]

Secretary

National Council for Science & Technology

CONDITIONS

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do so may lead to cancellation of your permit.

2. Government Officers will not be interviewed without prior appointment.

3. No questionnaire will be used unless it has been approved.

4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.

5. You are required to submit at least two (2) four (4) bound copies of your final report for Kenyans and non-Kenyans respectively.

6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.

REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT

GPK/6655/3mt10/2011

(CONDITIONS--see back page)