

Primary Schools' Preparedness To Integrate Visually Impaired Learners Into Inclusive Education In Bomet County, Kenya

Mrs. Lynner Sophie Maemba

Masters student, school of Education,
Maasai Mara University

Anne Maina

School Of Education, Maasai Mara University

Prof. Fredrick O. Ogola

School Of Education, Maasai Mara University

Abstract: Inclusive Education is an approach in which learners with special needs receive services and support appropriate to their individual needs within the regular education setting. The study sought to find out how regular public primary schools have been prepared to integrate the visually impaired learners into inclusive education in Bomet County, Kenya. The objectives of the study was to investigate the determinants of primary schools' preparedness to integrate the visually impaired learners into inclusive education in primary schools. The research adopted descriptive survey design as this allowed description of issues as they are. Purposive sampling procedure was used to select the sample population. Questionnaires were used to obtain data from teachers, head teachers and EARC coordinators while interviews were designed for learners with V.I.C. Data was analyzed using descriptive statistics and presented in graphs, pie-charts and frequency tables for interpretation. The study was pegged on constructivist theorist of Zone of Proximal Development (ZPD) of Lev Vygotsky and Maria Montessori. The study found out that integration of inclusive education for the V.I learners faced many challenges which included; insufficient skills by teachers to teach these learners, since most of them have not undergone any training in special education, most did not have braille skills and could not teach the V.I learners effectively with the other normal learners. Major conclusions therefore were: schools should adapt the environment to suit the V.I, teachers be trained adequately to teach the V.I meaningfully, the government to give more fund to support SNE programmes in schools, more SNE personnel to be employed to supervise these programmes.

I. BACKGROUND OF THE STUDY

Ndurumo (1993) noted that Inclusive education or mainstreaming is placing of children with disabilities in regular classes with those without disabilities. He further acknowledges that there are several names that refer to the process of integrating children with disabilities in regular classroom. This concept has been identified by some school system as "mainstreaming," "regular education initiatives "full inclusion," "partial inclusion, "or "inclusion." Regardless of the selected terminologies, current federal laws in Kenya, such as in individual with Disabilities Education Act (2003) mandate that a child with a disability has a right to attend free and appropriate public education in the least restrictive environment provided by his/her local school system. In

response to these legislative directories some schools and districts have made tremendous efforts in overcoming challenges in providing disabled children with access to education (Ndurumo, 1993. Huffman 2003) indicate that the U.S census Bureau indicates that 6.5 million children have some type of disability and that 95% of these students attend regular schools with their normal classmates (Huffman, (2003).

Towett, (2012) EARC Coordinator, Bomet County explained that in line with integration of learners with visual impairment who have been included in regular schools, the schools have not paid attention in terms of what it takes to integrate such learners. The schools have no pavements for easy movement of the visually impaired learners using the white canes. There is grass all over the compound which

makes their mobility very difficult and very hard to get proper orientation. Teachers' attitude towards the visually impaired learners is still negative since they lack adequate skills to teach them. Parents on the other hand would prefer such children hidden away at home since they are considered a curse or bad omen to the family and society as a whole. Some parents are however ignorant of the integrated programmes which have been introduced in Kenyan schools. Large numbers of the visually impaired learners are likely to be found at home. Finally the few integrated schools lack very important supportive devices like the braille machines, white canes and stylus pens to name but a few. These devices of which without them the visually impaired learners would not be able to learn (Towett, 2012).

UNISE and KISE (1993), states that the importance of school in the lives of all children is well known and for the children with disability being in school accords them a sense of normalcy and acceptance. Teachers, therefore, play an important role in enhancing the disabled child's self-esteem and assist them to have a positive view in attaining education (UNISE & KISE, 1993). UNESCO (2010) in Child Friendly School Manual put forward that children with disabilities are usually isolated due to cultural beliefs of the society. These children were previously and to some extent are still isolated even today; this has led to stigmatization of the individual child as well as the entire family.

Kenya Society for the Blind Report (2011) indicates that the education service department in conjunction with the Ministry of Education and with the help and support of Sight Savers International are involved in the implementation of the Kenya Integrated Education Programme (KIEP) in 34 Sub-counties in Kenya Bomet Sub-County included. The programme integrates the blind learners together with the sighted children in ordinary school within the environment of the learners. These learners share the same educational facilities (Kenya Society for the Blind annual report 2011). Intervention programmes as well as in-servicing of teachers is also supported. There is also provision of equipment like Braille machines, paper cassette recorders and white canes among others.

Government of Kenya (GOK), Sessional Paper No.1 (2005), aims at paying special attention to vulnerable and disadvantaged children. It is the government's policy that children with visual disabilities are not excluded from the mainstream education. In the year 2003, the government declared Free Primary Education (FPE) and has continued her commitment to Universal Primary Education (UPE). It has been noted that the Visually Impaired Children (VIC) have the lowest access to participation in education in Kenya due to stigmatization, cultural beliefs, poor attitudes and Parental ignorance. Recent analysis by KIEP indicate that the implementation of inclusive education for the visually impaired learners faces a lot of challenges therefore prompting the researcher to carry out the study on primary schools preparedness to integrate inclusive education for the visually impaired learners in Bomet County, Kenya. Children with disabilities should be integrated / mainstreamed and should attend public schools in places where they are found (UNESCO, 2010). The question here is how prepared are the schools with their teachers to integrate the learners with

disabilities. The study will try to find out how prepared the schools are to integrate the visually impaired learners in inclusive education in Bomet County.

A. STATEMENT OF THE PROBLEM

The Government of Kenya has introduced inclusive education for learners with disabilities in regular public primary schools. This was made real by the declaration that all persons are entitled to Free Primary Education regardless of their disabilities. Children with disabilities should be integrated and should attend public primary schools in places where they are found (UNESCO, 2010).

KIEP (2003) recent analysis indicates that implementation of inclusive education for the visually impaired learners face a lot of challenges which range from; poor parental attitudes towards the visually impaired children and their ability to achieve, availability of facilities in schools to facilitate learning, the government inputs in the regular schools. According to Towet, EARC coordinator, Bomet County, there are twelve teachers who have been trained to teach the visually impaired learners in the entire Bomet County. Out of these twelve only six teach the visually impaired children and others are in regular primary school. This fact has led to failure in effective implementation of policies and programmes that support inclusive education for the visually impaired learners (UNESCO, 2010). This sought to find out how prepared are public primary schools to integrate inclusive education for the visually impaired learners.

B. PURPOSE OF THE STUDY

The purpose of this study was to investigate the preparedness of regular public primary schools to integrate the visually impaired learners in inclusive education in Bomet County, Kenya.

C. OBJECTIVES OF THE STUDY

- ✓ To analyze determinants of primary schools' preparedness to integrate the visually impaired learners into inclusive education in Bomet County.

D. RESEARCH QUESTIONS

- ✓ What are the determinants of primary schools' preparedness to integrate the visually impaired learners into inclusive education in Bomet County?

E. SIGNIFICANCE OF THE STUDY

The study sought to provide information that may help the government of Kenya to improve inclusive education of the visually impaired learners in regular public primary schools. The findings of the study would be beneficial to the key stakeholders in terms of better implementation of inclusive education for the visually impaired children. The findings also would help the government of Kenya to see the need to review the existing policy on the integration of the V.I

children in regular public primary schools. There would be need also to improve the existing personnel in terms of training, seminars and induction courses for them to acquire skills to handle these learners effectively and thus reviewing of the existing curriculum to cater for the visually impaired learners.

II. LITERATURE REVIEW

A. GLOBAL PERSPECTIVE OF INCLUSIVE EDUCATION

Smith and Tyler (2010) discussed that schools for the blind children began to open as early as, the 18th century. In 1784, the first school was opened in France by Valentine Hally, the institute for blind youth as it was called. He conceived a system of raised letters on the printed pages. However, during the French revolution in 1789, it ended Hally's work. By the early 1800s another French man, Louis Braille had developed a tactile for reading and writing. He also designed an embossed six-dot cell system, the forerunner of the reading and writing method used today. In 1821, Samwel Gridle Howe opened the first centre school for the blind students in United State of America (Smith & Tyler, 2010).

Smith and Tyler (2010) continued to state that around 1832, the New York Institute for the blind and Pennsylvania institute for the introduction of the blind were founded. These were private boarding schools usually attended by blind children from wealthy families. In Scotland the first class for the visually impaired started in 1872. The Scottish Education Act required students who were blind to be educated with their sighted classmates and to attend schools in their local communities. Mainstreaming and inclusion movements were no longer new concepts; their roots are deep in the history of education of students with disabilities. In the United States, the first concentrated attempts to integrate students who were blind into public schools were made in Chicago.

In 1900, Frank Hall, superintendent for the Illinois school for the blind convinced people to allow students who were blind to attend local schools in Chicago region, near where they lived. These students attended general classes but also had special education teachers who taught Braille and helped them participate in the general education curriculum. Hall also developed a small portable machine for taking notes and completing other written tasks in braille - the precursor of the sophisticated technology available today. In addition to reading and writing difficulties, freedom of movement is a challenge for those with limited vision or no sight. The more popular method to assist mobility is the long cane or white cane which was developed around 1860 by Richard Hoover after whom the Hoover cane is named; he developed mobility and orientation system in 1944. Before this time there was no systematic method for teaching individuals how to move freely in their environment (Smith & Tyler, 2010).

Sacks and Rosen (1998) argue that during the 1960s the rubella (German measles) epidemic in Europe, left many children with disabilities which included blindness. This caused increase in students with visual impairment and it

therefore strained the capacity of residential schools and at the same time parents began to call for their children to attend their local public schools. Advance in technology has significantly influenced the lives of individuals with visual impairment over the past 30 years, improvement in computer capabilities have allowed for efficient and inexpensive print enlargement and translation of print to Braille. The first print-to-voice translator, the Kurzwei Reader was developed in 1970s today there are versions of optical scanners as well as every day computer that translate print to voice, these provide immediate access to printed text not available before (Sacks & Rosen, 1998).

Education for the learners with the disabilities has come a long way in South Africa. It started in 1863 when Roman Catholic Church established the first school for the blind children in Cape Town which grew to 20 schools for the blind mainly private initiated (churches and other private organization). In 1928 the government assumed the responsibility of managing special education. The schools however were established for specific race groups. After the introduction of the apartheid in 1948, education was provided within racial boundaries. The government in 1994 moved towards inclusive South African Community and hence the education sector had to reflect the new approach. South African constitution (1997) spelt out that "there may be no discrimination against any person on the ground of race, gender, age, disability." And that "Everyone has a right to education" two commission of inquiry and education support service were appointed and they gave their report in November 1997. The ministry of Education responded with Education White paper 6: special needs education-building an inclusive education and training system, July 2001.

The government of South Africa is determined to create special needs education as a non-racial and integrated component of education, the government wish to achieve this through strategies such as, the qualitative improvements of special schools for learners to be done after an audit of special schools, mobilization of about 280,000 disabled children and the youth in compulsory education, the designation and conversion of approximately 500 mainstream primary schools to full service schools, beginning with 30 schools in identified districts, orientation and introduction of management governing bodies and professional staff at schools, the establishment of district based support team to provide a coordinated professional support service to special schools, full service schools and the implementation of national advocacy and information programme in support of the inclusion model.

B. GENERAL EDUCATION CURRICULUM OF INCLUSIVE EDUCATION IN KENYA

Smith and Tyler (2010) suggest that today large percentage of children with visual difficulties attend neighborhood schools in Kenya. They are supported by resource specialists or itinerant teachers. These students participate in the general education curriculum with their sighted classmates and can perform well in education. The blind learners use tactile senses while others use Braille for reading (Smith & Tyler 2010).

UNESCO document (1998) indicate that special school in Kenya were mainly started by the missionaries and non-governmental organization at first as boarding institution in order to reduce the need for recourses and also to accommodate children from different parts of the country. At the time there existed few special day schools mainly in urban areas and where integration of handicapped children was possible. Education for children with special needs in Kenya is mainly the responsibility of the Ministry of Education although other ministries are involved to a very small extend (UNESCO, 1988).

Education for the visually impaired began in 1940, and it was not until 1980 when there was establishment of teacher training programme and that is when there was an evolution of a serious consideration for the visually impaired education. Increased attention was paid to orientation, mobility and activities in daily living for the visually impaired. A major breakthrough came when the royal common wealth for the blind set up computer center to produce books for the blind in eastern and central African. Education of the visually impaired learners is one of the areas in special education where there have been achievements as many students have been able to achieve even university degrees (UNESCO,1998)

According to GOK Sessional Paper No. 1 (2005), before inclusive educations is implemented much preparatory work need to be done, administrators, Educators, (NGO) Non-Governmental Organizations and community structures concerned with education of learners with challenges, should be involved in the process. The government aims at paying attention to gender, vulnerable and disadvantaged children; it is therefore a policy of the government that visual disabilities are not excluded in mainstreaming in education. The government declared this in 2003 at the onset of Free Primary Education.

C. INTERVENTIONS AND STRATEGIES OF TEACHING THE VISUALLY IMPAIRED LEARNERS

KISE (2007) explains that early intervention is the earliest service or training that one offers a child immediately a problem is identified. In visually impaired children early intervention will providing children with activities that stimulate vision and hence improve their vision efficiency. It also involves medical intervention. Early intervention should be offered during the sensitive phase when vision is still developing. It further explains that early intervention is important in many ways that include establishing urgent needs of an individual, planning programs to remediate the difficulties of the individual, setting objectives to be achieved, referral for medical attention, referral for further assessment, training in daily living activities and deciding on the materials to use (KISE, 2007). KISE (1993) states that children in programmes for the visually impaired follow the regular 8-4-4 syllabus that is taught to all children in Kenya. Their curriculum and materials however, need adaptation for them to cope with class work. Adaptation of materials means modification of materials to suit major sense used for learning. They are mainly taught to read and write through braille using the sense of touch. For Mathematical computation, children use abacus. The following areas need consideration when

planning the classroom environment so that children gain educational services (KISE,1993).

D. CLASSROOM ARRANGEMENT

KISE (1993) further explains that the teacher ensures safety all the time for the visually impaired children not only in the classroom but also in other places. Dangerous situations must be anticipated before the cause accidents. Ensure that the arrangement of the room does not change too often and that the children are aware of the layout of the room. Potential dangers to the child include; windows left half open especially those that project outwards onto the pathways around the buildings, sharp objects in hands of other children such as biro pens , pencils or sticks, doors left half open, locker doors or cupboards left half open at head height , school bags or objects left on the floor. The teacher should also inform the visually impaired children areas that are not safe (KISE,1993).

TEACHING MATERIALS

KISE (1993) states that children who are visually impaired need textbooks that have been transcribed into braille of which they cannot share with the others in class during lessons because they need to read while touching the raised dots that form written words. They will also need tactile maps and diagrams in order to follow lessons in the classroom. The visually impaired children require the following teaching materials; an abacus for computing numbers, a brailier for making notes, a thermoform which is a machine for duplicating braille work and other embossed diagrams, braille papers these are special type of papers on which braille is written and a slate and stylus which are used for taking notes and doing other work when a brailier is not available.

KISE (2007) explains that the government has established training for teachers on special education at the Kenya Institute of Special Education (KISE). However few teachers have been trained and those trained were given diverse skills to handle the vast needs of children with different disabilities not only the visually impaired. Those trained have been placed in various school not necessarily the schools that offer inclusive education for the visually impaired children. It further attributes that in its planning and establishment of inclusive education has insisted on pre-school programmes for children in all categories in areas of handicaps. The teacher-pupil ratio is considerably lower for the visually impaired children because of the following reasons; immobility, their intellectual capacity, techniques for teaching and availability of assistive devices (KISE, 2007).

E. THEORETICAL FRAMEWORK

This study was guided by the following two theories;
✓ Maria Montessori (1870-1952)
✓ Lev. S Vygotsky (1896-1934)

MARIA MONTESSORI (1870- 1952)

Maria Montessori handled the handicapped children

whom she claimed could also be educated. She developed teaching materials for the handicapped children and later on started integrated education which is totally inclusive education or mainstreaming. Her main emphasis was that children should have a conducive environment to stimulate their senses and to enhance their learning.

Maria Montessori also emphasized in her constructivist theory that handicapped children also learn using well-structured materials and instruction which lead to discovery. The study attempts to find out whether schools are adequately prepared to handle the visually impaired children in terms of environment orientation, training of teachers and use of appropriate apparatus or devices to assist in learning in inclusive education classes in Kenya today (Smith & Tyler, 2010). These children should be able to learn individually in what is called principle of self-education using well devised apparatus or assistive devices like Braille and white cane in the case of my study (Smith & Tyler, 2010).

The V.I children could be able to learn if provided with a stimulating environment. The environment for the V.I should be well structured to ensure easy mobility; they should be able to move from one place to another safely without being hurt and also move with minimal assistance from the other children. Their learning should take advantage of their sense of touch in manipulation of materials in form of using braille machines while learning. White canes should help them to move from one place to another. Teachers should be equipped with adequate skills to help them to develop materials and come up with suitable teaching methods that meet the learning needs of the V.I. The teachers should have knowledge of using braille machines to impart knowledge to the children.

LEV VYGOTSKY (1870-1934)

Vygotsky’s vision as put forward by B. Gindis (1999) under the topic understanding disability as a developmental process, Vygotsky pointed out the dynamic nature of disability. He argues that constant changes in structure content of disability take place during development under the influence of education. He further says that education development is the result of social learning through the internalization of culture and social relationship.

In the Zone of Proximal Development (ZPD), and Dynamic Assessment Model, Vygotsky observed that with the proper assistance from an adult or a more advanced peers, a child is capable of learning much more than on their own. (Gindis,1999). Vygotsky says Special Education programme should have the same social and cultural goals as the general education and that effectiveness of the compensatory strategies may be relative from the severity of the child’s disability. Timeliness and appropriateness in terms of methodology used are therefore important. He further points out that civilization has developed different means to help correct the visually impaired children in the development of assistive devices like Braille machine stylus and white cane among others.

Inclusion as he says, should be a designed setting where entire staff is able to exclusively serve the individual needs of the child with disability, should also be a special system which

employs its specific methods because learners with disabilities require modified and alternative education methods (Gindis, 1999).The V.I require assistance from advanced peers and adults, the V.I can be able to learn and master their environment within the school. The teachers should therefore be in a position to teach them using various skills. These learners also need modified alternative teaching methods unlike the other learners without disabilities. They should be taught mobility and orientation, where mobility refers to that ability to travel safely and efficiently from one place to another while orientation is developing the mental map about the surrounding.

F. CONCEPTUAL FRAMEWORK

The conceptual framework represented below was based on research objectives and it helped to identify the key variables of the study.

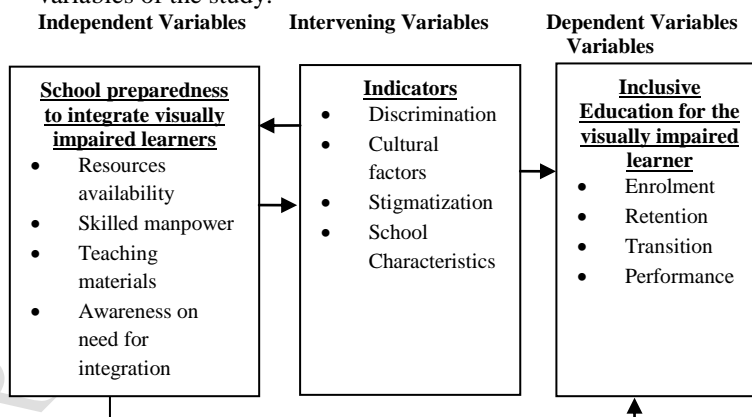


Figure 1: Relationship between school preparedness and inclusive education for the visually impaired learners

Figure 1 represents a conceptual framework showing the relationship between inclusive education of the visually impaired learners and schools preparedness. The success of inclusive education for the visually impaired learners was affected directly by the availability of trained personnel and resources (assistive devices). For the visually impaired learners to undergo education from one level to another there must be a trained teacher who is skilled to use assistive devices in teaching the children. The learners should be orientated properly on the environment which includes being made aware of the main landmarks in the school for example classrooms, toilets gate and even the seating arrangement in the classroom. Availability of adequate training of the learner will enable the child to move from one level to another (transition) and therefore enrollment of the visually impaired learners will certainly go up as a result of the success attributed to a given school. In this study, independent variables are the skilled manpower, methods of teaching/learning the curriculum and resources. These are variables which are affected and influenced by the independent variables. In this study, these will be the visually impaired learner's ability to learn, their performance, their transition, (promotion from one level to another) and the enrolment of the learners in the integrated schools.

III. RESEARCH METHODOLOGY

The study adapted a descriptive survey design. The descriptive survey design is appropriate for the present study, because it sought to gain insight into related phenomenon as a means of providing basic information in the area of study (Gay and Airasian ,2009). The study population in this study comprised of four groups which included all the regular primary schools which have integrated the visually impaired learners, Educational Assessment and Resource Center (EARC) coordinators, headteachers of the integrated regular primary schools, teachers handling the visually impaired children and the visually impaired learners.

Category	Target Population				Sample Size			
	EARC Coordinators	Head teachers	Teachers	Learners	EARC Coordinators	Head teachers	Teachers	Learners
	3	3	35	11	3	3	15	11
Total	3	3	35	11	3	3	15	11

Source: Bomet County Education Office 2013

Table 1: Categories of Schools, Learners, Teachers, Headteachers Study Population and their accessible Population Sizes

The study employed questionnaires, observation method and interviews schedules as instruments of data collection. Questionnaires were administered to the sampled teachers, head-teachers and EARC coordinators in the county, while the visually impaired learners were interviewed. The completed questionnaires were collected and sorted out and cleaned for completeness, accuracy and consistency of the data with other facts gathered. Those that were not completed fully were considered spoilt and hence was not used for the study. The questionnaires were coded and entered in the computer software; Statistical Package for Social Sciences (SPSS) was used as a tool to assist in the analysis. SPSS helps to summarize the data into frequencies and percentages during the data analysis.

IV. FINDINGS OF THE STUDY

A. DEMOGRAPHIC DATA

The population of respondents was a reflection that learners and teachers formed the largest target population this comprised 34% and 47% respectively. Three head teachers of the integrated public primary schools and three EARC coordinators also participated in the study and they comprised 10% and 9% respectively.

The findings show that a few teachers fall at the age bracket of 30 -40 years, 23.33%. While the majority fall between 41-50 years, 46.67% of teachers, 100% of head teachers and 66.7% of EARC coordinators. Those above 50 years however were also few, 20% of teachers and 33.33% of EARC coordinators fell in this category. This implies that most of the respondents are of ages between 41 and 50. Eight of the pupils who were interviewed were below 8 years, three of them were between 8-10 years and the other three were

slightly above 10 years. Though children of this age are not expected to be found in ECDE classes, this was due to the challenge of visual impairment. These children with V.I are not enrolled in school at the right age of school entry like the other children without disabilities and so they ended up being over age in their classes.

The results of the study presented in figure 5 above show that all the integrated primary school head teachers 100 % were male. Among the teachers who participated in the study, 60% were male compared to 40% who were female. The EARC coordinators were 100%. According to the statistics above, it was noted that there are more male than female both in the secretariat and among primary school teachers in the county. The results indicated that amongst the learners, five of them who were interviewed were female 45.45% and 54% were male.

B. DETERMINANTS OF PRIMARY SCHOOLS' PREPAREDNESS TO INTEGRATE VI INTO INCLUSIVE EDUCATION

Statement	Yes %	No %
Do your teachers teach until you understand when teaching verbally?	72.7	27.2
Do your teachers use braille machines and other supportive devices when teaching?	10	90
Able to move freely in school without being assisted by others	81.8	18.2
Do your parents and relatives think it is bad to be blind	45.5	54.5
Do head teachers and Deputy head teachers help you while you are in school	90	10
Are you able to move alone to your class, field and to the toilet	18.2	81.8

Source: Field Data

Table 2: Pupils' responses in regard to determinants of primary schools, preparedness to integrate learners with VI into inclusive education

According to table 1, eight 72.7% above a third of the Pupils indicated that their teachers made sure they understood what they were being taught verbally while 27.3% of them felt that their teachers did not teach them until they understood. When asked to indicate what they like about their teachers the pupils said they liked when the teacher took time to explain to each and every pupil what they did not understand, (individual attention) they also noted that they like when the teacher explained something twice for the whole class to remember and when the teacher rewarded them for saying the correct answers.

The learners' results further showed that their teachers were not using braille machines when teaching them or other supportive devices for their efficient learning. Most of the visually impaired learners 90% felt frustrated since they did not have skilled teachers who could use braille when teaching them. This made them not learn much since the sense of hearing was mainly used and hence forgetting most content was bound to happen. These learners could only feel but could

not be able to see the colours, shapes, and many other things associated to the development of learning process.

Another 10% felt that there were enough supportive devices at school. When asked to indicate the factors that have been frustrating them when learning, majority of the Visually impaired learners noted that they had been frustrated by their colleagues, other children as they grew up and also when they joined with them back at home since others can have fun and their situation cannot allow them to have fun. In short they cited negative attitude towards them as the most frustrating aspect. When VIC were asked whether they got adequate administrative support while they are in school, 90% agreed that the head teacher assisted them and only 10% of them did not feel that they were given adequate support from the administration.

Most respondents 81% were not able to move alone to their class, field and to the toilet while 19% were able to. This implied that the visually impaired children have a big challenge when moving around the school, indicating that there is poor orientation for the learners with VI. Teachers who do not have adequate skills to teach using braille end up not developing the desired skills for the V.I and hence they gain less. These challenges among many gave indications that these integrating schools are not adequately prepared to carry out inclusive education for the V.I.

Statement	SA %	A %	U %	D %	SD %
1. Inadequate assistive devices for the VI learners.	0	100	0	0	0
2. School environment not adapted to suit learners with VI.	0	100	0	0	0
3.School structures and facilities are friendly to the learners with VI	0	26.7	0	73.3	0
4.Negative attitude towards the VI learners affecting their learning	0	73.3	0	26.7	0
5.Cultural beliefs affects the psychology of the VI learners	0	86.7	0	13.3	0
6.Inadequate administrative support for the VI learners	80	0	0	20	0
7.Nature of the curriculum is examination oriented	100	0	0	0	0
8.Ordinary learners able to assist the VI learners in the school	0	46.7	0	53.3	0
9.VI learners able to identify places in the school on their own	26.7	0	0	73.3	0

Source: Field Data

Table 3: Percentage responses from the teachers on the extent of primary schools' preparedness to integrate learners with VI into inclusive education

The second objective of the study sought to analyze the extent of primary schools' preparedness to integrate the VI learners into inclusive education. The results presented in table 5, showed that all the respondents, 100% said that lack of

equipment and teaching materials was a major problem encountered when teaching the integrated classes with pupils having visual impairment. The result also showed that the materials available in the schools are not adequate to support the actual learning process of the pupils. This shows that most of the schools are not equipped with the resources required for the integration process. This affected the preparedness of the school for the integration process of the pupils with visual impairment in the Integrated Public Primary School in Bomet County.

It was also noted from table 5 that the schools environment was not supportive to ensure implementation of the programmes with a response of 100% indicating that the school environment was not friendly at all to the visually impaired. The schools lacked proper structures like pavement to help ease movement of the learners with VI when using white canes. It was sadly noted by 73.3% of the teachers that there was negative attitude towards the visually impaired learners in the society thus affecting their learning and 26.7% of the teachers did not agree that there is a negative attitude towards these learners they argued that the visually impaired are seen by society like any other children.

Most of the teachers 80% as shown, agreed that there was inadequate administrative support in the school for the visually impaired children and 20% disagreed to the fact. As indicated, on the assistance given to the VI children according to 53.3% teachers felt that the assistance accorded to the VI was not enough and 46.7% of the teachers also agreed that the VI were assisted adequately by the other learners. Most teachers cited that visually impaired learners were not properly orientated in the school environment which clearly shows that the VI learners cannot move from one place to another on their own this comprised 73.3% of the respondents. On the contrary, 26.7% of teachers thought that the visually impaired learners were properly orientated in the school environment and hence they were able to move with ease from one place to another within the school environment. This clearly indicates that the visually impaired children have difficulties moving about in school.

Statement	SA %	A %	U %	D %	SD %
1. Inadequate assistive devices for the VI learners	0	100	0	0	0
2. School environment not adapted to suit learners with VI.	0	100	0	0	0
3.School structures and facilities are friendly to the learners with VI	0	33.3	0	66.7	0
4.Negative attitude towards the VI learners affecting their learning	100	0	0	0	0
5.Cultural beliefs affects the psychology of the VI learners	100	0	0	0	0
6.Inadequate administrative support for the VI learners	0	10	0	90	0
7.Nature of the curriculum is examination oriented	100	0	0	0	0

8. Ordinary learners able to assist the VI learners in the school	0	33.3	0	66.7	0
9. VI learners able to identify places in the school on their own	0	33.3	0	66.7	0

Source: Field Data

Table 4: Percentage responses from the head teachers on the extent of primary schools' preparedness to integrate learners with VI into inclusive education

All the head teachers 100% being the administrators of their schools supported as indicated in table 6 that there were inadequate supportive devices found in the school. The learners with VI were taught like the other learners without disabilities, it meant therefore that the learners with VI may not gain much in academics since they were disadvantaged with the lack of these very essential supportive devices. They indicated that there were no braille machines, stylus pens, braille papers and the white canes.

All the head teachers, 100% also cited that the school environments were not well adapted to suit learners with visual impairment, on the friendliness of school structures and facilities, the head teachers 66.6% agreed that there was a challenge in the school structures and facilities since the environment had not been modified to suit the needs of the learners with VI but 33.3% of them felt that there was no problem with the layout of the school structures and facilities. This clearly shows that the little achievements by the V.I pupils in the Integrated Public Primary Schools for the visually impaired children may be attributed highly to the poor learning environment and poor structures and facilities. The researcher observed that the environment in which the visually impaired children operated was not friendly in that in one of the schools the field was covered with very tall grass which made it very difficult for the VI to move around easily using the white canes. This was a dangerous indicator especially to VI learners because it could lead to accidents and injuries. All the head teachers, 100% attested to the fact that there was a negative attitude towards the VIC in that the society did not readily accept the learners with VI.

On cultural beliefs affecting the psychology 86.7% attributed that this affected the psychology of the VIC since these children were aware of the fact that they are different from other learners in the school and 13.3% disagreed with this fact as indicated in table 6. Total response on the statement was made of the head teachers 100%, as they agreed that both the non- blind learners and the visually impaired followed the same curriculum. It was established that all of the schools which have integrated learners with VI used the ordinary curriculum meant for normal learners. The ministry of Education has not reviewed the curriculum that enhances the integration process of the visually impaired learners hence this is noted to be a factor affecting the preparedness of the Integrated Public Primary schools for the visually impaired children in terms of the curriculum being used.

While 33.3% of head teachers observed that the VI were given adequate assistance by the school administration and other learners. 66.7% disagree to the fact that learners with visual impairment were accorded enough assistance. Most head teachers cited that visually impaired learners were not

properly orientated in the school environment this comprised 66.6%, on the contrary, 33.3% head teachers thought that the visually impaired learners were properly orientated in the school environment and therefore were able to move freely within the school.

Statement	SA %	A %	U %	D %	SD %
1. Inadequate assistive devices for the VI learners.	0	100	0	0	0
2. School environment not adapted to suit learners with VI.	0	100	0	0	0
3. School structures and facilities are friendly to the learners with VI	0	33.3	0	66.7	0
4. Negative attitude towards the VI learners affecting their learning	0	100	0	0	0
5. Cultural beliefs affects the psychology of the VI learners	0	100	0	0	0
6. Inadequate administrative support for the VI learners	0	100	0	0	0
7. Nature of the curriculum is examination oriented	100	0	0	0	0
8. Ordinary learners able to assist the VI learners in the school	0	33.3	0	66.7	0
9. VI learners able to identify places in the school on their own	0	33.3	0	66.7	0

Source: Field Data

Table 5: Percentage responses from the EARC co-ordinators on the extent of primary schools' preparedness to integrate learners with VI into inclusive education

All the EARC coordinators 100% attested to the fact that the assistive devices like braille machines, stylus pen, braille papers and white canes were inadequate in the schools with VI children. This fact alone indicated that it was very hard to implement inclusive education for learners with visual impairment since these assistive devices are very essential for their learning. Being the supervisors on behalf of the Ministry of Education on the ground, all of them, 100% felt that the school environments were not well adapted to suit the learners with VI. They noted issues like absence of pavements for easy mobility, unsafe playing fields some with tall grass and generally poor layout of structures. 66.7% stated that the school structures and facilities were not friendly at all to learners with VI, while 33.3% were of the contrary opinion.

The results further showed that there was also a negative attitude towards the VIC both at school and in the community at large. On cultural beliefs affecting the psychology 100% of the respondents attributed that this affected the psychology of the VIC since these children are aware that they are different from other learners in the school.

These results do not agree with Mitchell (1999) who stated that it is the teacher who makes sure that learners with special needs have the same rights to quality education as those without special needs (Mitchell, 1999). 33.3% of them

agreed that the normal learners assisted the learners with VI within the school while 66.7% of EARC coordinators felt otherwise. This means that the VI learners had difficulties in moving about both in school and outside the school. It followed therefore by 66.7% of these respondents indicating that the learners with VI were not well orientated within the school environment. However 33.3% agreed that learners with VI were well oriented and so they could move from one place to another with ease within the school compound.

The total response on the statement was made of the EARC coordinators 100% agreed that both the non-blind learners and the visually impaired followed the same curriculum. It was established that all the schools that have integrated learners with VI used the ordinary curriculum. This shows that most of these schools have not adapted a curriculum that enhances the integration process of the visually impaired learners hence this was noted to be another factor affecting the preparedness of the Integrated Public Primary schools for the visually impaired children. The current curriculum does not favor the visually impaired pupils in the integrated classrooms because the curriculum used in most of the Integrated primary schools is tailored to favor only the normal children hence it automatically excludes the children with visual impairments.

The researcher observed that visually impaired pupils had a challenge since there were no enough teachers who could transcribe and interpret materials from print to braille. Hence pupils would take long to get somebody who would give them instructions on braille because there are few itinerant teachers in the county. These are teachers who have been trained to teach the learners with VI. They keep rotating from one integrated school to another. It was found that most learners lack proper role models and they were not motivated towards the learning process. While 33.3% of EARC coordinators observed that the VI children were assisted adequately, 66.7% disagree to the fact that learners with visual impairment were accorded enough assistance by the other learners without visual impairment. Most EARC coordinators cited that visually impaired learners were not properly orientated in the school. This comprised 66.6%. On the contrary, 33.3% of EARC coordinators thought that the visually impaired learners were properly orientated in the school environment. This clearly indicated that the visually impaired children have difficulties moving about in school.

V. SUMMARY OF THE FINDINGS

The results showed that about 90% of the respondents agreed that there are many challenges facing the implementation of inclusive education of the visually impaired learners. These challenges included lack of adequately trained teachers to handle the visually challenged children in our public primary schools today, lack of supportive devices to facilitate the effective inclusive education, the environments are not friendly to the visually impaired learners and so this make it difficult for the proper orientation of the visually challenged children in schools.

The issue of gender easily taught among the visually impaired, most respondents felt it was not a challenge when it

came to teaching them in an inclusive set up. As indicated by the findings, 66.7% of the respondents said that both boys and girls were easy to handle. Though some visually impaired children felt the stigma of being different from the others, this suggested the negative attitude towards them by the society at large.

Lastly, there several suggestions put forward by 85% of the respondents which included; training of more teachers with skills to handle the visually impaired learners, more government funding to meet the cost of implementation of inclusive education for the VIC, parental sensitization on the importance of educating the VIC, specialized equipment be made available for use by VIC and more EARC coordinators be employed to oversee effective inclusive education.

A. CONCLUSION

The study considered the preparedness of the public primary school in the integration of pupils with visual impairment in Bomet County. Most of the respondents indicated that those handling the visually impaired learners lacked the know how since they have not been equipped with the necessary skills. This shows that adequate funding and proper co-ordination of stakeholders in provision of physical and monitoring resources has an influence on the development of skills for visually impaired learners. Lack of funds will mean that implementation is at a stand- still especially in terms of resource provision. The government should aspire to provide the teaching learning resources and supportive devices and should play a vital role in the whole process of providing education for the visually impaired children.

These results agree with those of Songe (2003) who noted that lack of resources and supportive materials like braille is a major hindrance to effective teaching and learning of the visually impaired learners. They also agree with Okumu (2005), who noted that there is a pressing need of providing relevant and adequate braille materials for learners with visual disabilities and they are also echoed by Wanjohi (2003), who found out that visually impaired learners cannot learn effectively in braille unless they are provided with resources and materials that fit their needs and professionals who have the skills on braille.

B. RECOMMENDATIONS

From the findings of the study, the researcher recommends that:

- ✓ The government of Kenya should allocate more funds to support Special Needs Education in this case inclusive education for the visually impaired learners as the policy is emphasizing on integration.
- ✓ More teachers should be trained to handle the visually impaired children effectively in integrated public primary schools.
- ✓ The government should ensure that parents are sensitized on the importance of education for the visually impaired children found in the community.
- ✓ The government should ensure that all policies in place have implementation guidelines that would ensure the actualization of the strategies given.

- ✓ More EARC coordinators should be employed by the government to coordinate Special Needs Education activities both in the counties and national government.
- ✓ EARC officers should intensify supervision and coordination activities in schools in the integration programmes.
- ✓ Distribution of available trained teachers in the schools that integrate children with V.I
- ✓ The Ministry of Education should post teachers with relevant skills on handling the V.I learners to integrated schools.

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