

Challenges Faced by Learners with Visual Impairments in Inclusive Setting in Trans-Nzoia County

Lydia Agesa

Institution: Educational assessment and resource centre (EARC), Kwanza Sub-county P.O. Box 768, Postal Code 30200, Kitale, Kenya Email: Lydia.agesa451@gmail.com

Abstract

Learners with visual impairment are a heterogeneous group with varied nature of difficulties that require adequate attention in curriculum implementation in order to achieve good academic performance when placed in regular or main stream institutions. This study investigates the challenges faced by learners with visual impairments in inclusive setting, in Trans-Nzoia County Kenya. The study used descriptive survey design to explore the challenges that face learners with visual impairment in the County. The target population included one hundred and eighty four learners with visual impairments, twenty classroom teachers and six itinerant teachers out of whom an accessible sample population of one hundred and ten was derived. Both qualitative and quantitative data collection procedures were employed through use of questionnaires, interviews and documentary analysis. The study found out that most learners with visual impairments performed poorly in academics due to lack of implementation of the visually impaired school which calls for a differentiated curriculum as per the laid down policy on Special Needs Education, which is attributed to social, economical and partly cultural factors. The nature of varied differences in needs of learners with visual impairments calls for more teachers in special needs education so that at least each regular school has one. Parents to learners with visual impairments and community should also be sensitized on their education.

Keywords: challenges, learners with visual impairments, inclusive setting, Trans-Nzoia County

Introduction

Visual Impairments refer to Loss of vision, even when an individual person wears corrective lenses. According to Keefe (1999), visual impairments are the reduced vision caused by Eye Diseases, Accidents or Eye conditions present from birth. Visual impairments include blindness that even with correction adversely affects a child's educational performance (Olmstead 2005). Visual impairment is categorized into the blind and the low vision.

Types of Challenges Experienced by Learners with Visual Impairment

Visual loss imposes three basic limitations on children. These limitations include the range and variety of experiences, the ability to get about and the limitations in the ability to control the environment and oneself. The stated restrictions adversely affect the learning of children with visual impairments. According to ([http://www/unco/2010](http://www.unco/2010)), only a thorough understanding of these limitations can lead to special methods in education of learners with visual loss. The teaching of Braille and other tool subjects in which the remaining senses take the place of sight are only the obvious and elementary attempts to meet the needs of the blind child. Special provisions to this group of children must take into consideration all implications of perceptual restrictions which go far beyond adaptation of tool subjects. According to (<http://www.tsbvi/2011>), totally blind children who are born without sight or those who have lost their sight early in life must build up their conception of the world by the use of their remaining senses. In doing this, they rely almost entirely on tactual and auditory perception and kinesthetic experiences. Although auditory sense provides certain clues in regard to distance and direction, it does not convey any concrete ideas of objects as such. The main importance of the sense of hearing to a child with blindness is to facilitate verbal communication and aid in movement. Hearing therefore is of very limited value in acquisition of concrete clues of an object for a blind child.

According to (<http://www/unco2010>), the blind child who hears the twitter of a bird may know with more or less accuracy from where the bird sound comes from, but all his listening will not give him any idea of the shape of the bird's body, or of his size or its physical characteristics. It becomes very challenging for a learner who is blind to perceive spatial qualities of objects without being provided with materials in form of models or embossed diagrams for touch and manipulation in which kinesthetic sensation participates. Even though, tactual experiences among learners with visual impairment have distinct limitations due to the fact that tactual perception requires direct contact with the object to be observed, Horton (1998) in (<http://www/cbi/2012>). This is due to inaccessibility of some objects for observation for instance, the sun, the moon and the clouds, where as some objects can be so dangerous to touch, other objects are so large that they cannot be observed tactually; these include objects such as mountain, rivers, or large buildings. Many authors have agreed that Objects that are too small cannot be observed by touch with any degree of accuracy, as is the case with the small animals like flies or ants. Fragile or tender objects, such as butterflies, spider webs, or soap bubbles, cannot be tactually observed. Furthermore, objects in motion and live objects do not lend themselves well to touch observations,

partly because of the dangers involved in any direct contact. Apart from this, objects under certain conditions for instance burning wood or coal, or cooking food, cannot be touched. Liquids do not have shapes of their own and must therefore be kept in containers which often do not permit the observation of the enclosed substances. This is particularly the case with liquids used in gauging instruments. (Lowenfield, 1992; Levack 1994; Hatler, 1996 and Olmstead, 2005).

It therefore indicates that a lot of experiences which are taken for granted with seeing children are either impossible or much more difficult for blind children. Unlike the sighted children who are privileged to access most of classroom activities, for the blind learners, tactual perceptions only give partial meaning of objects. Knowledge is not only acquired through observation, but also communicated through language. According to Best (1993), blindness does not seriously interfere with vocal language but may induce a tendency to “verbalism” in blind children and more often in their educators. Such verbalism confines the child to description, or even worse, to meaningless word symbols, when experience should give him knowledge of actual objects and situation. A serious handicap is caused by blindness in area of reading. Braille is a slow medium by which a good reader can cover only a small fraction of the material that can be read by a seeing reader in the same amount of time. This slowness reduces the information and experience which blind children can derive from reading. They present the material at the speed of oral reading but even this is comparatively slow. Thus the blind child is not only limited in his experience but also in his acquisition of knowledge by reading.

Children with visual impairments are also restricted in the ability to get about. This restriction in the ability to get about is regarded by many as the most severe single effect of blindness. The total blind person is indeed greatly handicapped in his mobility and at best must reconcile himself to a considerable declaration of his movements. Even a small amount of sight, skillfully used, makes a marked difference in the individual’s ability to guide himself through familiar and unfamiliar territory, (<http://www/etd/2010>).

The implications of the restricted ability to get about by oneself are a twofold handicap (<http://www/education/2010>). It limits the blind person in his mobility so that he cannot change his surrounding and secure opportunities for observation and activities as seeing persons can do normally. It also makes him depend upon the assistance of others and thereby affects his social relationship and attitudes. Thus, blind individual, besides being limited to perceptual field are, from infancy on, restricted in their ability to expose themselves to experience.

While sighted children have the opportunity to move about and discover their surrounding with ease, the blind child who cannot do this with any comparable ease needs to be supplied with experiences and opportunities for activities which most other children meet in the ordinary course of their development and in their learning environment. The blind child has much less chance to explore his surrounding, and even if he does now and then, his experience does not give him any comparable amount of knowledge. Besides the factual experience that he may be able to secure, he perceives many cues as just indicators but not reality (Olmstead, 2005).

Mobility, which is the capacity or facility of movement, has two components. One is mental orientation and the other is physical locomotion, According to Norris et al (1957) in Ndurumo (1993) mental orientation has been defined as the ability of an individual to recognize his surroundings and their temporal or spatial relations to himself, and locomotion as the movement of an organism from place to place by means of its organic mechanism. Both are essential for mobility but are not separate functions.

Even if the blind person is able to keep his bearings, he will still need to follow a safe path by avoiding all obstacles on the way to his destination. The best orientation does not help him if he cannot do the step by step locomotion successfully. In this task of finding his way in familiar or in unfamiliar surroundings, the blind person makes use of practically all of his senses. His sense of hearing is constantly active in observing all kinds of sounds, including echoes; he interprets odors which come from many sources; he notices changes of temperature and air current; his feet feels the nature of the ground he observes distance in terms of time, through movement and through sound in fact any clue that he can obtain is interpreted for the purpose of locomotion and inseparably also for that of orientation. In walking, for instance, the feet not only takes steps which may lead up or down or upon the same level, but they also feel the quality of the ground, whether it is soft soil a graveled path, a paved road, or the wooden floor, carpeted or uncarpeted. The feet also warn of small obstacles in the path such as stones or bushes and may keep one from bumping into furniture (<http://www/education/2010>).

In addition to these sensory activities it has been found that blind people are also able to perceive and avoid obstacles without having direct contact with them. This obstacle sense although widely investigated, has not yet been fully explained. Recent research cleared up some of the problems and indicates that aural stimulation is

responsible for the perception of obstacles with sound waves of higher frequencies playing an important role. It should be stressed that actual performance of moving a bout, obstacle perception as such is only one of many perceptions which contribute to the individual's mobility Lowenfield in (<http://www/tsbvi/2011>).

(<http://www/education/2010>) asserts that in the comparatively sheltered life of either the parental home or the institution the restriction in mobility does not make itself fully felt. The child becomes used to his environment and knows it well enough to find his way around it on his own. While he is very young, he leaves his immediate environment only when accompanied by others as is also the case with young seeing children. Skojoten (1997) asserts that when the child grows up he also grows out of his environment and is confronted with task of adjustment to the world of the seeing. Then his restriction in mobility becomes a factor of major importance and carries new implications. For instance, the youngster who is transferred from the residential school to a public high school or graduates from residential school must now pursue his activities in a changed and more complex environment. If he has not been encouraged and taught to develop his ability to move about and has not achieved a reasonable independence in it, his whole success may be jeopardized. In the extreme case, he may not only take for granted being helped to get about, but may gradually tend to expect to be helped along all lines.

Jose in (<http://www/atechpak/2011>) also confirms that under the impact of the new environment, a child with blindness may be affected to a point of starting again as in case of an infant. On the other hand, the change from the accustomed environment to a strange one, with its challenge in regard to mobility, may make the blind youngster resent and even revolt against being aided in many activities which he finds seeing persons pursuing independent of others. This may result into dislike or develop into a general hostility toward a seeing society. Either of these attitudes, regression or hostility, if it persists as disturbing influence, indicates a lack of adjustment and the need for careful guidance aiming at the building of individuals self confidence. Educational methods for blind children in the area of mobility should aim at developing the highest degree of independence in getting about by cultivating each individual's mobility potential and encouraging him to make use of aids individually suited to him and to the specific occasion.

Children with visual loss also experience restriction in the control of the environment and themselves in relation to it. Ndurumo (1993) asserts that this restriction, although least obvious, profoundly affects the development of blind children and makes itself strongly felt in the everyday activities of each blind child. Among the human senses, sight is the one which overcomes distance and gives at the same time details and relationships of form, size, and position. Visual experiences have therefore an actual perception of an object which intern facilitates a contact with and control of the environment far greater than that achieved by the other senses. Lack of sight, on the other hand, causes a detachment from physical and, to a lesser degree, from the social world. A blind person, for instance, who finds himself in unaccustomed surrounding, cannot become informed about his situation within the environment by any rapid process as seeing person do by just glancing around. The clues which he might get through hearing and through tactual observation within his reach provide very little that could assist him in controlling his environment and himself in relation to it.

Maltz (1962) in Jose (<http://www/atechpak/2011>) stated that one's perception of self and environment are based on imagination not facts. A person performs according to what he believes to himself and his environment. Therefore, his image is what he believes to come of himself. Low vision individuals differ to the adjustment of their conditions because low vision affects their self concept (<http://www/atechpak/2011>). The learners with low vision find it difficult to perceive themselves as sighted or blind. These perceptions result from attitudes and environmental demands made by significant others. According to Baraga (1983) the detachment from physical environment affects the blind individual in different ways during his development. The blind infant, for instance, does not reach out for or crawl towards objects, as seeing child does, because nothing entices him to do so. Other sensory impressions, mainly audible ones, may make him aware of some objects and he may be induced either to reach out for them or move towards them. Such stimulation however occurs comparatively rarely and the blind child is kept from experiencing many situations and from reacting, to many stimuli which affect seeing children in normal course of their development.

Scholl (1986) states that from infancy on, the blind individual cannot acquire behavior pattern on the basis of visual imitation. This factor greatly affects a child's development, particularly in regard to posture, learning to walk, to talk, to play, to learn the expressive movement, and to perform the great variety of other actions which are generally learned by imitations. Many of the daily activities which the child must learn assume different proportions when they are not controlled by sight. For example, eating a meal is not only a greater strain to a blind person, if it must be done according to accepted standards, it also takes much longer. Such actions as getting properly dressed, using transportation facilities, shopping in a store, are considerably more complicated

when learned and performed without sight., some retardation in blind child's rate of development as compared with that of seeing children can be expected Mburu (1999).

It has been mentioned that lack of sight is also responsible for some detachment in social sphere of individual's life. The ability to communicate with language is the most important factor in social contact. Scholl (1986) confirms that blindness does not seriously interfere with language activities. It may take the blind infant long to learn to speak: a blind person may not use color words or phrases with the same kind or degree of reality, but essentially he is not handicapped in his ability to establish and keep contact by spoken word. But besides language there are a great variety of expensive movements which have significance in social situations. They include facial expression and all kinds of gestural behavior Best (1998).

The blind child's inability to visually observe facial expression puts him at no particular disadvantage because to him the voice may be just as expressive as facial expressions or bodily gestures are to others. According to Warren in (<http://www/education/2010>), it is only natural that individuals who must rely largely upon interpretation of changes in the voice develop greater skill in using their observations for determining the emotional status of the speaker. Thus they learn to detect meanings which are not verbally expressed or may even be in contradiction to spoken word. In addition, blind people are greatly influenced by pleasant or unpleasant quality of a voice just as seeing people are by pleasant or unpleasant appearance. The facial expression and the paucity of gestures by blind child are often not understood or even misinterpreted as unconcern, lack of interest or apathy by seeing companions. This calls for a necessity to cultivate expressive movements in blind children and to encourage in newly blinded persons conscious efforts to retain them, (Tores & Corn 1990).

In social situations people react either according to acquired behavior patterns, or by limiting what others are doing, or by acting according to their own best judgment. The blind person is at a disadvantage in all three respects. Behavior patterns are acquired on the basis of visual imitation. Without visual imitation it not only takes longer to establish them, but the variety of acquired pattern is of necessity reduced, Lowenfield (1991). In social situation where it is always desirable to follow the behavior of others, the blind person is unable to do so unless he resorts to verbal inquiry which at times may be convenient or embarrassing. The blind person can, of course, make his own decision but may feel more insecure about this than seeing persons because he lacks self confidence that comes with experience. These observations lead to conclusions that the problem of conforming to generally accepted behavior patterns is a major one in education and life of the blind.

The inability of blind persons to control their environment by sight has still another effect. They are frequently disturbed by fear of being observed by others. (<http://www/atechpak/2011>) states that a blind child, who cannot determine whether he is being observed, or when the observation begins or ends, feels that he must control his movement and his behavior, which produces a state of tension and self consciousness. Keefe (1999) asserts that the fear of being watched is already present in children and question arises as to how they understand what it means to be watched. They learn at an early age by the experience that people around them can tell what they are doing without having direct body contact with them. For example, the blind young child who hears his mother saying from a distance that he should not do one or the other thing notices early that something is being done to him who he cannot do to others - that he is being watched. This further confirms that the auditory sense of children born blind compensates the lost vision sense. This experience is often one of the first to make blind children conscious of being different and they may occur long before they are able to verbalize their condition by knowing or saying that they are blind.

Blindness creates in learners the general psychology mechanism which produces the behavior and reaction forms exhibited by the blind children. The emotional effect-such as insecurity and frustration-although same as in other people have got different reasons. Since the only difference between the blind learners and the sighted ones is the perceptual field, the cognitive activities are the ones which require basic changes and adaptations. (<http://www/unco/2010>) states that education must aid in giving the blind child knowledge of realities around him, the confidence to cope with these realities, and the feeling that he is recognized as an individual in his own right.

As stated earlier, children with Visual impairments experience limitations in the range and variety of experiences, the ability to get about and the control of the environment in relation to self (<http://www/unco/2010>). These restrictions bar learners with visual impairments in normal development; they experience developmental delays and as a result concepts are building slowly in addition to other milestones, Guild and Graham (1992). Learners with visual impairments experience difficulties in acquisition of the object permanence concept; ability to use and respond to non-verbal communication acts. Gilford, R and Graham (1992) also confirm that apart from lacking independence and sometimes motivation especially when overprotected by parents and caregivers',

learning is also hindered. They also observed that classroom management, lighting, seating arrangement, printing materials, writing, materials, class safety, teaching and learning aids as well as additional curriculum area such as Braille, independent living skills, orientation and mobility and socialization among others where essential.

Learners with visual impairments who are totally blind have difficulty in making lasting friendship due to lack of non-verbal communication. This strongly affects learners' functioning. The attitude of others has significant impact on the learners' psychological and social adjustment. Restricted visual input limits the amount of information received by students about their environment and people within their environment and can limit the type and quality of experiences available to them (Murugami, 2004). A learner with visual impairment experiences difficult in access to educational experiences example reading words without extra help to make him or her understand what those words mean. Names of animals and objects can be easily read by a blind learner but without the real object or embraced diagram/ models, the learner may not make sense of vocabulary read.

Best (1998) asserts that a blind child understands very little of what a wave is how it forms, moves, breaks-just by reading the word or even listening to the sound of the wave; a common object like chimney will not be really understood unless the object is directly experienced through touch. In teaching learners with visual impairments, all the senses must be integrated. The haptic sense, the factual sense, olfactory sense must be integrated the lost sense of sight. In science subjects and mathematics, most learners without visual impairment spend time perusing through papers looking at different drawings and diagrams in order to solve given problems yet for learners who are blind or those with visual loss most of the work presented is in writing without supportive models or embossed diagrams makes it difficult for the learners to get the concept. Totally blind learners lack the real ideas and only acquire substitutive ideas because they live in the seeing world which makes constant use of experiences. Writing figures in Braille and intense concentration creates a lot of difficulty to the blind learner who uses Braille for reading and writing.

Ndururno (1993) asserts that learners with loss of sight in mainstream schools experience a number of difficulties. One, this learners find themselves in a strange world where they seem to be strangers among their sighted peers who in most cases are the majority and lack awareness on visual impairment. In most cases, the blind learners are largely obliged to learn by listening and occasionally by touch. Sometimes, they are ignored by their overburdened teachers who under teach them making imaginations take some trick. According to Barraga (1993), Learners with visual loss are also faced with a problem of reading suitable textbooks and writing in Braille which their media of reading and writing. These makes the curriculum look overcrowded. Subjects that involve a lot of movement for example games and physical education present special problems to individual learners, who have difficulty in free movement. A shy learner who is blind easily misses a great deal of incidental benefits that come from ordinary school life. Most special teachers available are few in regular school and already overburdened with the regular curriculum hence concentrating on learners with visual loss becomes a problem. In the classroom situation these makes learners with visual loss lag behind in academics, Scholl (1986).

Materials and Methods

The study used descriptive survey design to explore the challenges that face learners with visual impairment in the County. The target population included one hundred and eighty four learners with visual impairments, twenty classroom teachers and six itinerant teachers out of whom an accessible sample population of one hundred and ten was derived. Both qualitative and quantitative data collection procedures were employed through use of questionnaires, interviews and documentary analysis.

Results

Challenges experienced by learners with Visual Impairments in Inclusive Setting in Trans-Nzoia County.

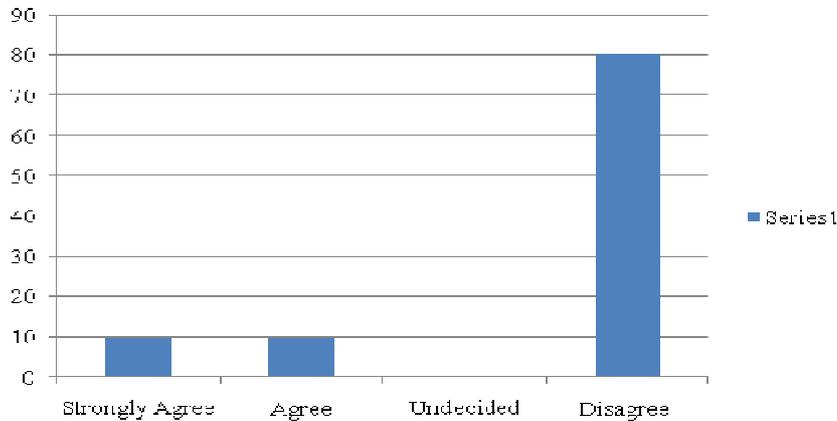


Figure 1: Learners with Visual Impairments could not perform academically

On inquiring whether visually impaired learners could not perform academically the response was as per the figure above.

From figure 1, it is evident that the majority of both itinerant teachers and contact teacher disagreed with the statement. 2.0 (10%) % strongly agreed, another 2 (10%) agreed while a larger percentage of 14 (80%) disagreed. They said that learners with visual impairments were cognitively sound and capable of performing academically.

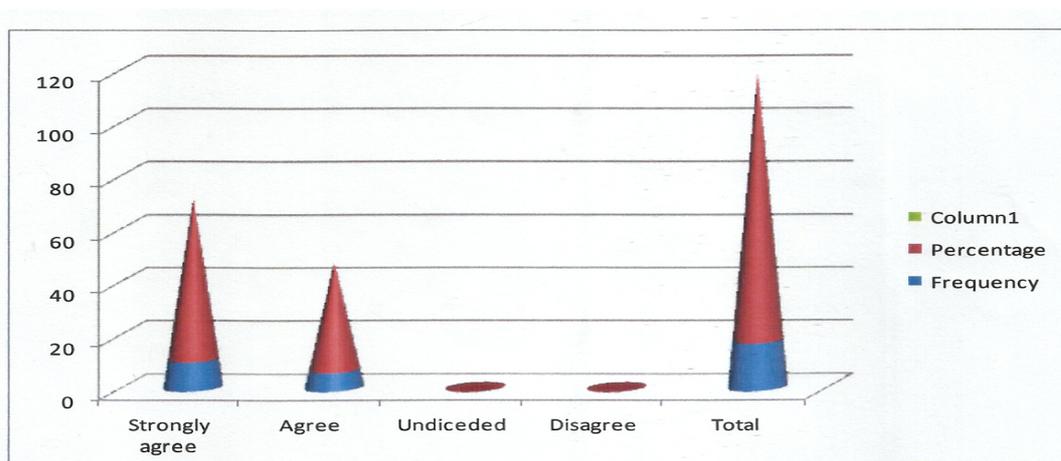


Figure 2: There should be free special needs education in all schools.

The study also investigated whether it was necessary to have free special needs education in all schools. The main aim of such an investigation was to find out the attitude of teachers towards learning of the children with visual impairments. The change in attitude in addition to adequate funding would help in proper planning, curriculum and environmental modification for the learners' easy access to education. The response to this question was as tabulated in figure 1 above.

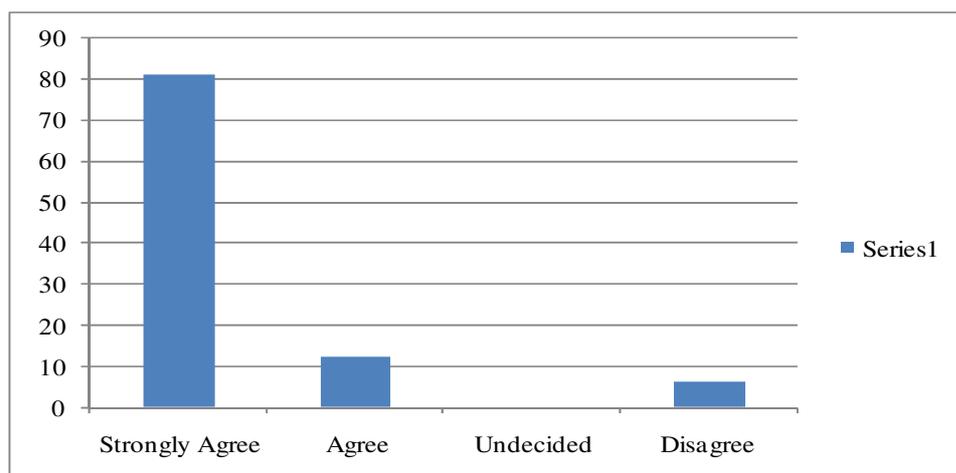


Figure 3: Only teachers trained in visual impairments can teach learners with visual impairments

In investigating whether learners with visual impairments could only be taught by specially trained teachers, respondents were as follows; 15 (81.25%) agreed to this fact claiming that visual impairments was an area that needed technical knowledge in order to effectively execute duties to this learners. Only 1 respondent 6.25% disagreed. This is represented by the figure 4.2.2 above. This shows that learners with visual impairments are neglected with view that only trained teachers can teach them.

Table 1: Inclusion of learners with Visual Impairments adversely affects class Performance (n=18)

Response	N	%
Agree	2.0	12.5
Undecided	0.0	0.0
Disagree	16.0	87.5
Total	18	100.0

Source: Author's Field Work

The study also investigated whether inclusion of learners with visual impairments in regular classes could adversely affect the class performance. This study was aimed at finding out the teachers views on inclusive education. To this, 16 (87.5%) of the respondents disagreed while 2(12.5%) acknowledged the fact. The data representing this is tabulated as follows in table 1 above.

Discussion

The respondents to this study were learners with visual loss who were either low vision or blind from the Trans-Nzoia integrated programme for the visually impaired learners, their contact and Itinerant teachers. On investigating challenges experienced by learners with visual impairments in regular classrooms, the study found out that 85% of the learners interviewed acknowledged that they were subjected to a lot of work with minimal support and time. This was attributed to large numbers of classroom enrolment. The respondents also acknowledged that in most cases, they were unattended to. According to the Trans-Nzoia integrated program quarter report, most head teachers and teachers reject including learners with visual impairments especially the blind for a number of reasons; they fear that their schools might drop in exam mean scores, the work involved, negative attitudes in general from the society and lack of financial and material support towards learners with visual impairments that in turn becomes a burden to the including schools. This confirms that most of the schools integrating learners with visual impairments in trans-Nzoia County were mainly public. This is attributed to the negative attitudes by parents to the children with visual impairments that make them feel it's not worth spending money on the visual impaired. They don't see the need of educating the disabled. This is in agreement with the findings of Ndurumo (1993) who asserts that VI learners are ignored by their overburdened teachers who under teach them making imaginations take some trick. 99% of the respondents further acknowledged that during exams, learners who were blind did not receive their exams on time. They confirmed that all county internal exams for the Braille and large print users were transcribed and prepared at Trans-Nzoia centre where only one

braille was allocated the duty for the whole county. 100% of the interviewees also confirmed that the classrooms were congested and there was inconsistency in classroom arrangements making concentration, orientation and mobility a problem to them. In some cases, the learners also acknowledged that they kept being shifted from one classroom to the other especially when there were other activities on the school. This was due to inadequate infrastructure.

On the issue of instructional materials, 92% of the interviewees acknowledged that they lacked Braille papers while 50% said they did not have access to low vision materials. This indicated that these learners' academic achievements were through struggle. 90% of the respondents acknowledged that they did not have specific teachers for all subjects and relied entirely on their sighted peers for assistance in reading hence a problem in perfecting Braille skills as it was hardly practical. The study further noted that 70% of the respondents acknowledged the assertion that learning in an inclusive classroom was advantageous as it made them stay with their siblings and also interact with their sighted peers. 30% of the respondents refuted this by claiming that their sighted peers looked down upon them, this, they said was evident through labeling and some refusing to read for them. Disability among the Luhya and Kalenjin communities who are the major occupants of the region under study is associated with many beliefs parents. The negative attitudes towards their ability may be the causes to their being neglected and even labeled in classrooms hence perform dismally. This causes stigma to the children with visual impairments.

Conclusion and recommendations

The study concluded that Learners with visual impairments encounter several challenges. Due to the heterogeneous nature of visual impairments, it was difficult for most teachers to plan for these learners according to their academic needs. Most learners with visual impairment are placed in inclusive schools without specially trained teachers to handle the technical areas for example Braille. Learners with visual impairments lack support from educational stake holders hence withdrew when placed in inclusive setting.

The Government should train more teachers in special needs education so that at least each regular school has one. Parents to learners with visual impairments and community should be sensitized on their education. The awareness could facilitate networking for better performance of the learners with visual impairments.

References

- Barraga, W. (1983). *visually handicaps and learning*. Austin.pro-ed Inc. Texas.
- Best, B. (1998). *The management of visual impairment in childhood*, Netherlands Garden, London.
- Gilford, R and Graham (1992) *Special education needs-London* Routledge
- Hatlen, F. (1996). *The core curriculum jar blind and visually impaired students, including those with additional disabilities*. Review, 28(10), 25-32
- Horton, J.K. (1999). *Community based rehabilitation of the rural blind. A training guide for field workers*. Ellen Keller international, Newyork: (INCO_coperated)
- <http://www.atechpak.org> Understanding low vision. Retrieved on 8th July2012
- <http://www.tsbv.edu/Education/instructionalresources> *Educating Young Handicapped children*. Retrieved on 2nd May 2011
- <http://www.tsbv.edu/Education/strategies.htm> *Classroom strategies of teaching learners with VI in regular classrooms*. Retrieved on 23rd May 2011
- <http://www.tsbvi.Edu/education/manual2.doc> *Special considerations when you have blind visually impaired student in the classroom*. Retrieved on 2nd June 2010
- <http://www.unco.edu> . *Lowenfield on blindness and the blind people*. Retrieved on 2nd May 2010
- Jose, R. T. (1983). *Understanding low vision*. New York. AFB press.
- Keefe, D. (1999). *Assessment of low vision in developing countries; assessment of functional vision*. Melbourne; World Health Organization
- Levck, N. (1994). *Low vision, a resource guide with adaptation for students with visual impairments*. Austin, Texas; Texas school for the Blind and Visually Impaired.
- Lowenfield D. (1983). *The visually handicapped child in school*. American foundation. New York.
- Lowenfield, (1981). *Berthold Lowenfield on blindness and the blind people*. American Foundation. New York.
- Mburu,P.(1999). *Learning processes for the visually handicapped children*. Nairobi: KISE Printing House.
- Murugami, (2004). *Curriculum adaptation for learners with visual impairments*. Lecture notes. Kenyatta University. Unpublished.
- Ndurumo, M. (1993). *Development Consequences and Intervention*. Nairobi. Longman.
- Norris, et. al. (1957). *Development Consequences and Intervention*. Nairobi: Longman
- Olmstead Dan, (2005). *The age of Autism*. UPI, Washington DC
- Scholl, (1986). *Foundation of education of the blind and visually handicapped children and youth theory and practice*. New York. American Foundation For The Blind.
- Skojoten, M. D. (1997). *Concepts in Special Needs Education*. Kampala Uganda National Institute of Special Education.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

