

**EDUCATION OF STUDENTS WITH VISUAL IMPAIRMENTS IN KENYA:
TRENDS AND ISSUES**

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Until the nineteen hundreds, people with disabilities did not receive formal educational services in Kenya. This paper discusses available educational services for individuals with visual impairments in terms of their forms, materials provided, and educational placements. Areas of most progress are discussed along with obstacles that stand in the way of efficient services for this population. This paper contributes to the rather scarce literature on educational services for students with disabilities in developing countries.

Individuals with *visual impairments* have varying degrees of vision-use for tasks that typically require vision. While some individuals have to use other channels (e.g., auditory and tactile ones) to acquire information, others use vision but only to supplement information acquired through other channels. Another group of individuals with visual impairments includes persons who mainly use eyes to acquire input that is typically acquired through vision but supplement this with input from tactile, auditory, and other senses (Gargiulo, 2003).

Legal blindness is a term used in some countries (e.g., the United States) to refer to individuals who must use tactile and auditory senses as their primary channel for acquiring information. Using the Snellen Chart, a legally blind person has a visual acuity of 20/200 or less in the better eye with correction and a visual field that is no greater than 20. In other words, with a 20/200 visual acuity, an individual would have to stand a distance of 20 feet to see what a person with normal vision would see at 200 feet on the Snellen Chart. Field of vision refers to the area that one is able to see left, right, up, and down while gazing straight ahead. A field of vision of 20 or less indicates ability to see objects within a range of at most 20 degrees while a normal eye is able to see objects within a range of approximately 160 to 170 degrees (Heward, 2003 & Gargiulo, 2003).

While accurate measurements of visual acuity and visual field serve to determine eligibility for certain entitlements for the legally blind in some countries (e.g., the United States), classifications based on the extent to which students with visual impairments use their visual and other channels for learning are more useful to providers of educational services. Thus, educators speak in terms of *totally blind* to refer to students who receive no useful information through the sense of vision and must use tactile and auditory senses for all learning. While they may be able to use their limited vision to supplement information received from the other senses and to perform certain

tasks such as mobility in the classroom, *functionally blind* students learn primarily through the auditory and tactile senses. A student with low vision, on the other hand, primarily uses vision to learn but may supplement visual information with tactile and auditory input.

The Low Vision Project, a project established and operated by the German-based Christoffel Blinden Mission, groups students with visual impairments into five categories. The first four of these are based on the working definition of the World Health Organization and the fifth is based on the need to create a category for children attending special schools and programs who are not visually impaired but are mono eyed or wear heavy power glasses. The first category of students with visual impairments under the Low Vision Project of Kenya consists of totally blind. These are described as those who *have no perception of light, who need training in orientation and mobility and who should be educated in Braille* (Verweyen p. 1). The second category consists of those described as *children with low vision which is not enough to read print, who need visual stimulation, functional vision training and/or training in visual orientation and who should be educated in Braille* (Verweyen p.1). Children in the third category are described as those with *low vision who can be trained to use their sight for reading and writing print with the aid of optical low vision devices, meaning that these children require magnification to cope with regular print* (Verweyen p.1). The fourth category consists of children described as those with *with low vision who can be educated in print using special techniques and methods without optical low vision devices to read and write regular print efficiently and fluently* (Verweyen p.1) Under the fifth category are *children who are not low vision because their sight is above 6/18 and they do not have a severe visual field defect. These children can almost function like normally sighted students and they do not really need special education as long as their sight is constant* (Verweyen, p.1).

These five categories are used to determine the appropriate placement and services for students with visual impairments in Kenya.

Changing Perspectives of Visual Impairments and other Disabilities

A review of related literature indicates that individuals with disabilities were, for along time, viewed as helpless and hopeless. The earliest reactions to those with disabilities in various world communities have included complete intolerance and effort to do away with infants with disabilities (Scheerenberger, 1982 & Devlieger,1989). Among the Greeks, for example, literature indicates that defective infants were killed by dropping them from a cliff. In Kenya, Edgerton (1970) tells of how a father of an infant girl with disabilities so profound that she scored zero on scales of strength and prospects for acquiring any life skills admitted to having gone to the river to fulfill his social duty by drowning the infant. At the river, smiles and laughter of the baby girl had so affected the father that he had completely abandoned his scheme (Edgerton, 1970). The man reported that *she looked up at me and smiled and laughed. I couldn't do it then* (Edgerton, 1970 p. 530). Another story in Zimbabwe involves a mother, who, faced with the possibility of having to drown her blind baby boy whose condition was thought to be such an affront to the ancestral spirits that it was the cause of the prevailing drought (Addison, 1992) escaped to a missionary center to save her son's life.

I must mention here that infanticide occurred in very isolated cases and that it occurred with the very early communities. Since then, along with other reactions, many Africans assume a custodial role towards those with disabilities. Hiding children with disabilities is a practice people in Kenya and other African countries engage in since the birth of a child with disabilities is sometimes viewed as a cause for embarrassment or a result of a curse (Abosi, 2003; Desta, 1995; & Mba, 1989). Due to lack of opportunities to develop skills to be self-sufficient, many people with disabilities resort to begging in the streets. There are reports of families setting up their

disadvantaged at street corners to appeal to public sympathy and provision for their very survival. In Kenya, for example, people with visual impairments especially those who are totally blind belonged in the category of people referred to for a long time as *wasiojiweza* meaning *those unable to take care of themselves*.

It is this attitude towards people with disabilities including those who are blind that lead to the concern for their ability to earn a living. In 1794, *shocked at seeing people who were blind performing as jesters or begging on the streets of Paris*, Victor Haüy resolved to teach them more dignified ways of earning a living (Heward, 2004, P.413). Haüy started the first school for children who were blind where he used embossed print to teach the children reading and writing, music, and vocational skills. Heward notes that the competence of these students led to the establishment of other residential schools in Europe and Russia in the 19th century.

Since Haüy's school, positive attitudes and services for students with visual impairments have expanded through out the world. Kenyans have abandoned the terms *wasiojiweza* and the rather stigmatizing term *vipofu* in favor of *wasioona* meaning *people who do not see* to refer to people who are blind. The prevailing attitude now is for relatives to take care of their relatives with disabilities.

In Kenya, formal educational services for individuals with visual impairments date back to 1946 when the first school, a rehabilitation center established by the Salvation Army and meant to assist blind veterans of the second world war, was turned into a school for children with visual impairments (Cherono, 2003). In the years that followed, a few more schools for children with visual impairments were established with the assistance of the Kenya Society for the Blind. Since 1946, the number of special schools and units for students with visual impairments has greatly increased (Ministry of Education, 1987 & 1992).

With the advent of formal educational services, most children who have disabilities have to leave their families at least for some time to be educated either at schools for students with disabilities, separate classrooms for students with disabilities in regular education schools, or alongside students without disabilities in the same classrooms. The number of programs for students with visual impairments continues to grow. Currently, Kenya has one special secondary school and six special primary schools serving a total of 1500 students. Along with this, the country has 19 (nineteen) units for students with visual impairments in regular education schools.

Prevalence of visual impairments in Kenya

The 1989 (Okumu, 1993) government census indicated that 251, 713 people have disabilities in Kenya and that 24% (about 0.2% of the general population) of those with disabilities have visual impairments. Of the population with visual impairments, 3% are between the ages of 0 and 4 years, 19% are in the age range of 5 to 19, 35% are between the ages of 20 and 54, and 43% are 55 and above. Majority of those with visual impairments in Kenya are above 65 years.

Identification and Assessment of Visual Impairments in Kenya

Initial detection of visual problems is done by a doctor or by parents and other care givers. Hospitals carry an eye unit where severe problems with vision are easily detected. Vision problems are also detected by teachers in general education classrooms using behavioral characteristics that may indicate visual function problems. Students with visual problems may (a) unusually turn their head, body or eye, (b) hold reading material extremely close to the face, (c) rub their eyes excessively, (d) have watery eyes and experience eye pain and fatigue, (e) squint or shade the eye to view objects, (f) constantly have difficulty in keeping up when reading and writing, (g) use markers such as pencils and fingers when reading, (g) have difficulty copying from the board or transparency, (h) have difficulty writing letters and numbers, (i) clumsily move from one environment to another, (j) have poor posture in both standing and sitting, (k) have poor

grades and be reluctant to participate in social and physical activities, (l) have difficulty with color coordination and identification, (m) have problems with sensory perceptual coordination, (n) misalign columns when writing math problems, (o) require additional time to complete tasks, (p) fail to make eye contact when talking to people, and (q) exhibit behavior problems (Optometric Extension Program Foundation, 1985). If children have eye problems, they are referred first, to a doctor, and, finally, to one of the 58 educational assessment and resource centers for determination of appropriate services and educational placement.

Placements and Services for Students with Visual Impairments

Educational placements for students with visual impairments in Kenya include special schools, separate classrooms in regular education schools, and regular education classrooms alongside students without visual impairments. Currently, six special schools serve students in the primary grades while one school serves those at the middle school level. Both the primary and the secondary special schools have a total enrolment of 1500 students. Students with visual impairments are also served in 19 integrated programs in the country.

The Low Vision Project working hand in hand with the Ministry of Education, Science, and Technology (MOEST), has played a major role in improving the overall standard of education of children with visual impairments in Kenya. Services provided to students with visual impairments depend on the category of visual impairment for each student. Students who are totally blind and those who have so little usable vision that they can not rely entirely on their visual sense to acquire visual information are trained in orientation and mobility skills and learn academic skills through the use of Braille. These services are in keeping with the guidelines of the Ministry of Education (1995) which recommends that orientation and mobility skills are necessary to familiarize students with visual impairments with their environment and enable them to interact and move about in that environment. The guidelines also recommend instruction in skills for activities of daily living to enhance independence and self-reliance. Students in category three are trained to use their sight to read and write print using optical low vision devices such as magnifiers, special eye glasses, and telescopes. These devices are locally produced and provided to students. The CBM provides such materials as special print exercise books (to children who have contrast problems and accompanying difficulty seeing the print lines in regular exercise or notebooks), special desks, reading stands, felt pens, tape recorders and electric lights. The CBM also ensures that teachers train the students in the use of any devices provided. While students in category four are those whose educational services can be met using print but with the help of special techniques and methods, students in category five are those who are determined to not really need special services but rather function like the normally sighted students as long as their vision stays constant.

The Ministry of Education (1995) has established guidelines for teachers of students with visual problems especially students who are integrated in regular education classrooms. Teachers of these students are encouraged to (a) expose students to many activities to stimulate and maximize their potential, (b) not move about when teaching to enable students to focus and hear instruction, (c) have a classroom seating arrangement that enables visually impaired students to avoid glare, too much or too little lighting directed at them, and to seat at an appropriate distance to view materials on the board, (d) use contrasting colors to help low vision students to identify features, and to (e) use large clear, and grammatically correct print on the board. Teachers are also encouraged to give large and easy to manipulate learning aids to students with visual impairments and to use extensively students' auditory and tactile senses.

Progress in the Field

The increase in the number of students with visual impairments receiving services in schools is worthy of notice. This increased enrolment results from the efforts of many Kenya Society for the Blind which has organized a program to oversee the enrolment of children with disabilities in special and public schools (Karama, 2003). The Kenya Society for individuals with Intellectual Handicaps (KMSH) has popularized the theme *Hide me no More* to encourage parents to not hide but enroll their children with disabilities in schools. Other efforts include workshops and seminars at the Kenya Institute of Special Education to sensitize the public to the needs of students with disabilities.

The quality of teacher training and quantity of teachers trained along with plans for accommodating students with visual impairments in national examinations are areas which have witnessed improvement. Training of teachers for students with visual impairments began in 1980 (UNESCO, 1985) and was first conducted at Highridge Teachers' College and later at the Kenya Institute of Special Education. Training has usually taken two years after which students earn a diploma. The low vision project also has trained low vision therapists and some teachers to provide support services to students with low vision in schools. A four year degree program was initiated at Kenyatta University in 1995 for teachers of students with disabilities.

Accommodations and Adaptations for Students with Visual Impairments

In Kenya, students who are blind are required to take the same examinations as the general population of students with regard to the cognitive skill areas. They are provided with some accommodations and adaptations regarding the time. These students have an additional 30 minutes within which to complete national examinations and discussions are underway to assess the adequacy of that time accommodation and to recommend additional time if necessary. Also underway are plans to improve interactions between examination officers in charge of various test subjects and experts in special education to ensure that necessary adaptations are made as appropriate (Waihenya, 2000).

Barriers to efficient servicing of students with visual impairments

Certain factors present problems in the efficient servicing of students with visual impairments, most significant of which is lack of funds (Waihenya, 2000). Lack of funds makes it impossible to provide required grade level text books and leisure reading materials and to maintain Braille machines. It also makes it impossible to buy basic specialized equipments along with learning and teaching materials for curriculum areas that are adapted to meet the needs of students with visual impairments.

Kenya also lacks professionals in the area of special education in general (Karugu, 1994). Lack of an adequate number of trained personnel for students with visual impairments presents obstacles to efficient servicing of the population. A survey conducted by the Kenya Institute of Special Education in 1989 revealed that up to 50% of teachers working with students with disabilities were untrained in the field. Although it has been about twenty years since this study was conducted, the field continues to experience a dire need for trained professionals.

Obstacles also exist in the area of adaptations of materials for students with visual impairments. Although some subjects such as biological sciences, homescience, geography, and mathematics, studied in the secondary schools have syllabi adapted for students with visual impairments in which complex psychomotor activities are replaced by more manageable ones (Waihenya, 2000), most syllabi used in general education classes do not have accommodations in terms of adapted

activities for students with visual impairments. This makes it extremely hard for students with visual impairments to access the general education curriculum.

Although the educational assessment and resource centers are involved with the identification of students with disabilities, there is need to develop intensive early intervention services for infants and children with visual impairments. The benefits of early intervention cannot be overemphasized.

Conclusion

Educational services for individuals with visual impairments in Kenya continue to expand and to improve. From their early beginnings as charitable acts these services are now considered as a right for every individual who demonstrates need. Unfortunately, due to lack of human and material resources, only a small percentage (about 5) of this population can receive services. Provision of services results from the concerted efforts of the government along with societies for individuals with disabilities such as the Kenya Society for the Blind and other international organizations such as the CBM, and the UK-based Sight Savers International. A review of the extent of services currently provided indicates that a lot more needs to be done.

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