Chapter 3

HIV and AIDS, Disability and Education in Kenya

3.0 Introduction

The chapter presents theoretical literature on the development of special education, and HIV and AIDS education within the backdrop of the general Kenyan system of education. Theoretical literature is mainly reviewed from authored books and other secondary sources.

3.1 Conceptualization and Prevalence of Disability

Disability is a cross cutting, heterogeneous issue. It refers to restricted activities due to societal obstacles, regardless of the handicapping condition(s). The most common disabilities among children in Kenya include deafness herein referred to as hearing impairments (HI), visual impairments (VI), mental challenges (MH), attention deficit and hyperactive disorder (ADHD), learning disabilities (LD), and emotional and behavioral disorders (EBD) among others. People with disabilities (PWDs) are found across all levels of society the world over, and constitute at least 10% of the world population. There is an approximated 650 million people in the world who are disabled and majority of them live in developing countries. PWDs include people who manifest long-term physical, mental, intellectual or sensory impairments which may hinder full and effective participation in society on an equal basis with others due to the barriers they present.

3.2 Categories of Disabilities

Based on international categorization, predominant categories of disabilities in Kenya include auditory (hearing), mental, physical, and visual disabilities (Ngaruiya, 2002), but like in other African nations, there lacks proper categorization of CWDs. This is a result of various factors that range from cultural beliefs, socio-economic problems, high rate of illiteracy, undertrained personnel, and lack of policy and funding. It is common practice for students with special needs to be indiscriminately categorized. For instance, it is common for overrepresentation of certain ethnic groups under the emotional and behavioral category of disabilities because of lack of consensus on what
constitutes an emotional or behavioral problem and the assessors' language and cultural bias. Accordingly, although not all are academically or otherwise catered for, some recognized categories of disabilities in Kenya include:-

3.2.1 Learning Disabilities

Learning disabilities (LD) is manifested in conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia according to the Public Law (PL) 101-476. LD ranges from mild to moderate or severe, and affects 1-30% of the general population. It manifests through a significant difference in a child’s performance and achievement in some areas compared to their overall intelligence, difficulties in reading comprehension, spoken language, writing, or reasoning ability, uneven test performance, perceptual impairments, motor disorders, impulsivity, low tolerance for frustration, hyperactivity, and inattention. Children with LDs need carefully designed Individualized Educational Programme (IEP), team approach and close collaboration among stakeholders for maximum development.

3.2.2 Mental Disabilities

Mental disability is also referred to as mental retardation (MR). It manifests with substantial limitations in an individual’s present level of intellectual functioning, below a score of 70 on IQ test, and it exists concurrently with limitations in social adjustment during developmental age (before 18 years). In other words, the mental age of an individual is lower than their chronological age. It ranges from mild to moderate, severe and profound levels (NICHCY, 2001). MR is not a mental illness and it affects at least 1% of the general population. Children with MR need early intervention, modification of curriculum and team work among service providers. They acquire concepts through task analysis and over-learning of content.

3.2.3 Hearing Impairments

Hearing impairments (HI) is a generic term that describes a wide range of fluctuating or permanent hearing losses. In its severity, HI can make a child unable to process linguistic information through hearing either with or without amplification. HI
may be acquired pre-lingually or post-lingually and it affects 1.3% of all CWDs. It is measured by loudness or intensity in decibels (dB) and frequency or pitch in hertz (Hz). It can be conductive, sensori-neural, mixed or central hearing loss, and has no effect on a person’s IQ or ability to learn. Special education services aid meaningful learning (Turker, 1997), and communication is enabled through sign language, finger spelling, lip-reading, written (pad and pencil) and oral methods.

3.2.4 Visual Impairments

Visual impairments (VI) are caused by a functional loss of vision. VI in education includes the partial sightedness, low vision, legal and total blindness. A person is legally blind when they are unable to see beyond 20 feet with the better eye, a deviation from a ‘normal’ vision of 200 feet. Intervention of VI depends on the degree and time of sight loss assessment. Early assessment enables early intervention but unfortunately this does not always happen as was evidenced in an article titled ‘Lack of awareness among doctors and patients alike’ carried in the ‘The Times of India’ daily of 8th March 2011:9. This scenario is for the normal population, and it gets worse for new born babies whose parents expect them to have good functioning organs. VI affects about 12.2 of every 1000 persons of 18 years and below.

Educational interventions for persons with VI include use of large print, talking books, Braille and other non-visual media, and adjustment of lighting depending on the extent of sight loss (NICHCY, 2001). Technological advancement such as computers and low vision optical and video aids enable learners with low vision to participate in class more actively. Modification and interdisciplinary approach in the regular curriculum is also important for maximized learning of children with VI (Lewis and Allman, 2000).

3.2.5 Autism and Pervasive Developmental Disorder

Autism and Pervasive Developmental Disorder (PDD-NOS) are developmental disabilities that manifest by the age of three years. Autism is neurological, and affects a child’s ability to communicate, understand language, play and relate to others. Autism is characterized by repetitive activities and stereo-typed movements, echolalia, resistance to environmental change(s) or routines and unusual responses to sensory experiences (Powers, 2000). Abilities, intelligence and behaviors of children with autism vary.
Autism and PDD occur in approximately 5-15 of every 10,000 births, and it is a condition which is more common in boys than in girls.

Like CWDs in all other disability areas, learners with autism and PDD-NOS require early diagnosis and appropriate programmes to acquire meaningful learning. Effective educational programmes should focus on improvement of communication, social, academic, behavioural and activities of daily living (ADL). Classroom environment should be structured to enable consistence, routine and predictability programmes. There should also be concern on the children’s diet since some foods are known to trigger or hinder acute changes in these children. The students should interact with their non-disabled peers for acquisition of language, social and behavior skills. Parents should be involved in designing the programmes for their autistic children (PL 105-17), and should provide continuity for activities introduced to the children at school.

3.2.6 Attention Deficit Hyperactivity Disorder

Attention Deficit Hyperactivity Disorder (ADHD) is a neurobiological anomaly that causes developmentally inappropriate behavior which manifests in poor attention skills, impulsivity and hyperactivity. It begins in early childhood and affects the child’s social skills and self esteem. Children with ADHD do not show close attention to details, are forgetful in daily activities, often lose necessary things and face difficulties in organizing tasks. They are distracted by extraneous stimuli, fidget or squirm in seats, move around even when under instructions not to, have difficulties playing or engaging in leisure activities quietly, and talk excessively. The incidence of ADHD is 3-5% among school-going age children. Treatment plans for ADHD include behavioural, educational and medical interventions and exposure to a structured, predictable environment both at home and school (NICHCY 2001).

3.2.7 Giftedness

Learners with giftedness are endowed with aptitude for outstanding performance. They have a remarkably high level of interaction, achievement and creativity with the environment. Consequently they require differentiated educational programmes and/or services beyond the normal regular school (Marland, 1972). They exhibit ability in
general intellectual, psychomotor and leadership abilities, and specific academic aptitude, creative or productive thinking, visual or performing arts.

3.2.8 Emotional and Behavioural Disorders

Learners with emotional disorders (EDs) display unexplainable inability to learn as a result of intellectual, sensory or health factors. They have marked challenges in their ability to build or maintain satisfactory interpersonal relationships with their peers or teachers. They express inappropriate types of behaviour and general pervasive mood, unhappiness or depression and/ or a tendency to develop physical symptoms of fears associated with school or personal problems (U.S Department of Education, 2000). Their educational programmes should be designed with particular focus on attention to master academics, develop social skills, and increase self awareness, esteem and control. Their IEPs should include career education, behaviour modification, and life space intervention and conflict resolution skills. They should be offered psychological or counseling services, and their families should give support, respite care, intensive care management services and multi-agency treatment plan to their children as recommended by Jordan 1996 and Wilen, 1998.

3.2.9 Speech and language disorders

These are communication problems which range from simple sound substitutions to inability to understand or use language or oral motor mechanisms for functional speech and feeding, and are related to oral motor function. They may be caused by hearing loss, neurological disorders, brain injury, mental retardation, autism, cerebral palsy, drug abuse, cleft lip or palate and vocal abuse or misuse. Speech and language therapists offer interventions by assisting the students through therapy. They collaborate with the teachers in decision-making on the best intervention methods for the learners. Technology and electronic communication help children with severe disorders to effectively share their thoughts (Eisenson, 1997).
3.2.10 Cerebral Palsy

Cerebral Palsy (CP) includes a group of chronic conditions that affect a person’s body movements and muscle coordination. It is not a progressive condition although it can concurrently exist with secondary conditions that may change over time. The condition occurs in three basic forms namely spastic which presents stiff and jerky motions, athetoid which is characterized by random, involuntary, uncontrolled and constant movement of arms, legs, face, and tongue, and ataxic which presents with inability to maintain normal balance. Other less common forms of CP are tremor which occurs with rhythmic shaking movement in one part of the body, rigid which manifests through extreme spasticity and mixed CP which includes two or more forms.

3.2.11 Epilepsy

This is a seizure disorder that involves malfunctioning of the central nervous system. It is characterized by sudden seizures and contractions, and partial or total loss of consciousness.

3.2.12 Severe and/or multiple disabilities

These disabilities make a person require support in more than one major area of activity in order to have a fairly successful integrated community quality life (Downing, 1996).

3.2.13 The Otherwise Health Impaired (OHI)

This includes a variety of health problems which dictate the need for special medical or educational services. These are impairments which include convulsive disorders, cystic fibrosis, heart disease, hemophilia, asthma, rheumatic fever, cancer, AIDS, or any other chronic health problem that limits strength, vitality or alertness, and adversely affects a learner’s educational development among other dimensions. In sum, it is unfortunate to note that categorization of disabilities in Kenya is not inclusive of most of these types which merely exist in records but not in practice. Except for the more obvious disabilities like physical and visual impairments, there exists a mix-up and incorrect identification and classification of most of the other disabilities (Onyango, 2009). For instance, it is common to find a child with hearing impairments, learning
disabilities, autism or Down syndrome placed in a class of children with mentally handicaps. Causes and consequences of disability vary throughout the world due to different socio-economic circumstances and provisions. Social factors such as ignorance, discrimination, stigmatization, neglect, superstition and the presence of HIV negatively impacted on the lives and socio-economic conditions of PWDs.

3.3 Legal Aspects in Issues of Disability

Special education across the world gained legal impetus quite recently, but special educators’ efforts to respond to the needs of PWDs date back more than a century. Global, regional and particular governments’ legal provisions have over the years formed major landmark laws that have naturally evolved from events in both special education and the larger society. For example in the US, the history of legal framework in issues of disability dates back to the 1870s when the American Association of Instructors of the Blind and the American Association on Mental Deficiency were formed. However, specific laws by the government came into being in 1975 (NICHCY, 2001), under the Kennedy and Johnson administrations which resulted in EAHCA which was signed into law by President Gerald Ford. EAHCA enactment in 1977 required all school districts to provide free and appropriate education to all of CWDs along with non-discriminatory testing, evaluation, and placement. They also had the right to due process, and a free and appropriate education in the least restrictive environment.

This was later followed by the Individuals with Disabilities Education Act (IDEA) which set forth to ensure free and appropriate public education (FAPE), whereby each student had to receive special education through an Individualized Education Program (IEP). The IEP was specific to the unique needs of each CWD, and included relevant instructional goals and objectives, specifications as to length of school year, determination of the most appropriate educational placement, and descriptions of criteria to be used in evaluation and measurement. A 1990 amendment in EAHCA included adoption of a person’s first language and subsequently replaced the term ‘handicapped student’ with ‘student with disabilities’. It added new classification categories for students with autism and traumatic brain injury and transition plans within IEPs for students age fourteen or older. In 1997, IDEA was reauthorized to amend
special education programs for inclusion of students with disabilities in state-wide and district-wide assessments. Programs were to focus on measurable IEP goals and objectives, and functional behavioral assessment and behavior intervention plans for students with emotional or behavioral needs. There are amendments every so often depending on the need, and to some extent, the politics of the day. This was important to highlight here because the US forms the benchmark in development of special education which Kenya closely follows. Unfortunately, legal framework issues in disability are quite recent in Kenya, markedly with the passing of Persons with Disabilities Act of 2003 which has not been fully implemented to date.

3.4 Evolution of Educational Services for Children with Disabilities

Special education is a specialized branch of education whose global benchmark developments are based on experiences in the West, mainly the United States of America, and are founded on Jean Itard’s work with the Wild Boy of Aveyron. Although he failed in his efforts to normalize the boy, Itard achieved dramatic changes in Victor's behavior through education. His work marked the foundation for widespread attempts to instruct students with disabilities, among them the 1817 establishment of the first special education school in Hartford, Connecticut in the United States by Gallaudet. The American Asylum for the Education and Instruction of the Deaf and Dumb, the present day American School for the Deaf. Itard's description of the wild boy of Aveyron presents a continuum of behaviors consistent with mental retardation and behavioral disorders or severe mental retardation, autism, or schizophrenia. However, milder forms of disability have apparently come up with observation of inability to perform specific to particular tasks and settings following the introduction of the universal public education which made literacy a goal for all children.

Other phenomenal pioneer works that have shaped special education include those of teacher Anne Sullivan Macy (1866 - 1936) who was a colleague of Helen Keller, Seguin (1812 - 1880), Samuel Gridley Howe (1801 - 1876), and Thomas Hopkins Gallaudet (1787 - 1851). The efforts of these scholars were towards alleviation of suffering from the abusive treatment then given to PWDs. Special education caters for students with physical, cognitive, language, learning, sensory, and/or emotional abilities.
that significantly deviate from those of the general population. It provides tailored instructions to meet individualized educational needs of each CWD, students who would otherwise have limited or no access to education. Kotwal (2008) defines special education as modified or particularized instruction for students with special needs. A similar trend across all the systems of education in the world is that governments’ provision of special education followed services of voluntary groups.

Through decades of continued research and legislation, specialized educational provisions for students with a wide range of disabilities have been developed. Such disabilities include mental retardation, emotional and behavioral disorders, learning disabilities, speech-language (communication) disabilities, impaired hearing and deafness, low vision and blindness, autism, traumatic brain injury, other health impairments, and severe and multiple disabilities (Kotwal, 2008). This effort started with the tradition of discovery, development, experimentation and verification of the early 19th Century whereby physicians offered services to PWDs. This therefore gave a medical approach to special education. Later, academic recognition of other fields such as psychology, sociology and anthropology increased the scope of methodological tools for research in special education.

The methodological approaches have evolved from experimental and quasi-experimental group designs popularly used in psychology and sociological approaches that subsequently led to deinstitutionalization, single-subject design methodology, family sociological approaches and correlational methodologies among a rich array of other approaches (Kotwal, 2008). Scientific approaches among them behaviorism brought a new realization that all children could learn no matter their diagnosis, and this challenged the eugenics movement of the mid 1960s that postulated that it was irresponsible to provide care for, and educate PWDs as this would weaken the society (Kotwal, 2008). In the 1800s, individuals with disabilities were neglected and often confined in jails and almshouses without decent food, clothing, personal hygiene, and exercise.

Most of the activities of the 19th and early 20th centuries show that professionals believed PWDs were best treated in residential facilities in rural environments. The argument here was that environmental conditions such as urban poverty and vices induced behavioral problems, and reformers like Dorothea Dix (1802 - 1887)
successfully convinced the state governments to provide funds for bigger and more specialized institutions referred to as ‘houses of refuge’ or reform schools. These facilities focused more on mental retardation then known as ‘feeble-mindedness’ or ‘idiocy’, mental illness then labeled as ‘insanity’ or ‘madness,’ sensory impairments such as deafness or blindness, and behavioral disorders among them criminality and juvenile delinquency. However, delinquent or aggressive but not insane children and those labeled as ‘mad’ were admitted to psychiatric hospitals. The major aim of institutionalization of PWDs was to end their abuse through confinement in jails and to provide effective treatment.

In the early 19th century, moral treatment approach in psychiatric hospitals whose dominant practice was to provide cure. It used methods similar to the present day occupational therapy, systematic instruction, and positive reinforcement. Although this was a humane and effective approach, moral therapy practitioners disbanded moral treatment by the end of the 19th century as their efforts to effectively train PWDs seemed unsuccessful. The belief that mental illness was as a result of brain disease also presented a pessimistic view about cure, and it contributed to a shift in emphasis onto physiological causes. This led to the ‘warehouse-like’ institutions characterized by abuse and neglect of society's most vulnerable members.

The end of the 19th century saw a dramatic increase of the warehouse-like institutions to the extent that it became impossible to offer rehabilitation but instead transformed to instruments for permanent segregation. Serious criticisms about them by special education professionals led to a shift in approach whereby residents were placed out into families despite logistical and pragmatic problems.

Juvenile courts and social welfare programs including foster homes for children and adolescents at the close of the 19th century as the Child Study Movement gained prominence into the 20th century. This was pioneered by G. Stanley Hall (1844 – 1924), the founder of child psychology as his works formed the basis for scientific study of child development in relation to education. Hospitals started to offer psychodynamic treatment and this laid the framework for diagnosis and classification of disabilities.

The history development of special education is marked with differing conceptualizations among them focus on changes in instructional interventions and
importance of interventions. In this respect, Samuel Howe’s assertion of the 19th century on instructional settings formed the foundation for effective interventions while the belief in essential curative powers of the environment in the late 19th century ushered in the development of bigger and better institutions which were later challenged by the mid-twentieth-century movement for deinstitutionalization.

Environmentalism was replaced by Social Darwinism in the late 19th century which opened doors to the Eugenics Movement of the early 20th century, and led to the segregation and sterilization of individuals with mental retardation. Debate suddenly shifted from whether to help the disadvantaged to where they should be served and this stepped up institutionalization versus deinstitutionalization controversy which has not abated almost a century after it began. Kenya still offers institutionalization to various categories of disabilities to the present date. Re-conceptualization of special education as a case of access to the educational privileges of the majority by the minority ushered in mainstreaming. This was characterized by the return of students with disabilities to the regular classroom whenever and wherever possible. The Regular Education Initiative (REI) enabled enrolment of students with disabilities to neighborhood schools and regular classroom in the 1980s, and in the 1990s, there was a shift for full inclusion for all students with disabilities to receive education in a regular classroom which adjusted to suit their needs.

By the mid 19th century, special educational programs were being provided in many asylums and by the end of the 19th century, special classes within regular public schools were launched in major cities. The classes initially catered for immigrant students who were not proficient in English and those who had mild mental retardation or behavioral disorders who were labeled as unsuitable for regular classes and referred to as ‘steamer children, backward, truant, and incorrigible’. These special classes spiraled with introduction of compulsory schooling and growing campaigns against institutionalization and many children with disabilities were moved out of institutional settings and into public schools. However, CWDs were still often excluded from public schools and kept at home if not institutionalized, a practice that has not changed much to date.
The World War II had a multiplier effect on the growth of special education as the number of special classes and complementary support services increased. There was an increased attention to mental health and a consequent interest in establishing child guidance clinics and by 1930, child guidance clinics and counseling services were common features. Major expansion in special education was evident in the 1950s. By 1960, special educators offered instructions to CWDs in a continuum of settings such as hospital schools for CWDs with the most severe disabilities, specialized day schools for students with severe disabilities but who were able to live at home, and special classes in regular public schools for students whose disabilities could be managed in small groups.

Assistance to teachers in instructing CWDs was boosted by consultancy services and by 1970, the field of special education was offered a variety of educational placements to students with varying disabilities and needs. Nevertheless, public schools had no obligation to educate all students regardless of their disabilities. By mid 20th century, instruction of CWDs centered on process training, an approach that attempted to improve children's academic performance by teaching them cognitive or motor processes through perceptual motor skills, visual memory, auditory memory, or auditory-vocal processing. Although over the years this training has proved ineffective in improving academic skills, the same ideas have been ironically recycled in the late 20th century as learning styles and multiple intelligences with focus on gender, ethnicity and other physiological differences.

3.5 The Kenyan System of Education

Both special education and HIV education are branches of the general system of education in Kenya, and it is therefore imperative to briefly present how the general system of education works in order to understand the place of special education. Kenya’s education system dates back to 1728 as historically recorded travels of Johann Ludwig Krapf and Johannes Rebmann in a Swahili manuscript called *Utendi wa Tambuka*, (the book of Heraclius). It presents one of the leading literacy rates in Africa. The Kenya system of education was greatly shaped by the CMS missionaries through establishment of one of their earliest mission schools at Rabai along the Kenyan coast in 1846.
Following the expansion of the railway from Mombasa to Uganda, the Missionaries expanded their work into Kenya's interior where they set up more schools and missions. The colonialism era gave many Kenyans an exposure to education which steadily increased as some members went abroad for further education.

Kenya’s education system has undergone two major transformations since independence. Although campaigns for free Primary Education began after independence in 1963, they were only realized recently, in 2003. The pre-independence elementary education was based on the colonial system of education with a major emphasis on the 3Rs i.e. Reading, Writing and Arithmetic. The formation of the East African Community in 1967 gave birth to a single system of education, the 7-4-2-3, which consisted of 7 years of primary education, 4 years of secondary education, 2 years of high school and 3-5 years of university education in the then three member countries namely Kenya, Uganda and Tanzania.

The system was similar to the British system of education and children began their elementary (primary) education at the age of 7 and completed it at the age of 13 with a regional examination known as the East African Certificate of Primary Education (EACPE). After passing this examination, one to proceed to secondary school for four years upon which they sat for the East African Certificate of Education examination (EACE). On passing EACE, one proceeded to two years of high school which was evaluated through East African Advanced Certificate of Education (EAACE) examination, and then university education after one passed the same (MoE, 2003).

After the collapse of the East African Community in 1977, Kenya continued with the 7.4.2.3 system of Education but changed the examination to give them a national identity. Subsequently, the East African Certificate of Primary Education changed to the Certificate of Primary education (CPE), the East African Certificate of Education became the Kenya Certificate of Education (KCE) and the East African Advanced Certificate of Education became Kenya Advanced Certificate of Education (KACE). While Uganda and Tanzania practice the 7.4.2.3 system todate, Kenya moved on to adopt the 8-4-4 system of education as an effort towards breaking dependency on white color employment to self-employment. It features eight years of primary education, 4 years of secondary education and 4 years of university education. The national examination
changed again whereby CPE became Kenya Certificate of Primary Education (KCPE) while KCE became the Kenya Certificate of Secondary Education (KCSE). The Kenya Advanced Certificate of Education (KACE) was dropped following the scrapping of the two year-high school. However, the future of 8.4.4 system of education hangs in the balance following orchestrated calls for its scrapping on accusations that it academically burdens the learners at the expense of other perspectives of growth and development alongside massive cheating in national examinations (Daily Nation dated April 21st 2012).

The formal education system in Kenya is structured on a four-tier framework that encompasses pre-primary, primary, secondary and tertiary levels as explained hereunder.

3.5.1 Pre-primary Education

Pre-primary or early childhood care and development has grown steadily following the government’s involvement in its management structure and training programmes through establishment of District Centres for Early Childhood Education (DICECE). The demand for this level of education has been influenced by the head-start advantage exhibited by learners upon entry in primary school and the demands of the 8.4.4 system of education. However, the 50% participation rate as recommended by the Jomtien and Dakar conferences of 1994 and 2000 respectively have not yet been met. Access to early childhood education has been discouraged by the high fees charged since the government has not yet to extend free education services to cover the level, and the proprietors charge the fees as they will.

3.5.2 Primary Education

This level has an eight-year structure and it has recorded fluctuating participation rates over the years. For instance, between 1989 and 1993, participation rates declined by 6.6% down from an increase of 1.1% between 1980 and 1989. This was a gross enrolment decline from 90.6% in 1989 to 84.6% in 1993, and it was as a result of the introduction of ‘the cost-sharing’ policy in education following the structural adjustment programmes (SAPs). The enrolment again rose tremendously in 2003 with the introduction of free primary education, although stakeholders know that it was not free
per se since children were required to but uniform, more books and stationery to replenish the few ones they received from the government. Commonly cited factors by guardians and parents for this decline in participation in primary school over the years is poverty, combined with the increased burden arising from cost-sharing measures (MoEST, 2003).

The youthful structure of Kenya's population and pressure on available resources poses another challenge since communities are unable to build, furnish and maintain schools to cater for the growing school-age population. Parents and households have a dilemma on whether to invest in primary education or on short-term survival goals such as provision of food, security and income generation.

### 3.5.3 Secondary Education

This is a four-year cycle characterized by low participation rates manifested through low transition rate, low gross enrolment rate and low net enrolment rate. The number of secondary schools has also not grown to match that of primary schools, and this presents another challenge to participation rates in this level of education. For instance, in 2008, there were 26,104 primary schools compared to 6,485 secondary schools. However, transition from primary to secondary school improved from 47% in 2003 to 70% in 2008, up from a gross enrolment of 30.2% and 24% in 1990 and 1998 respectively following introduction of free secondary education (FSE) in 2008. However, this effort faces a myriad of challenges ranging from delayed reimbursement of funds and lack of or embezzlement of the same. The students pay some of the mandatory fees including boarding expenses although about 58 percent students are enrolled in day schools and/or mixed day and boarding secondary schools. The absolute enrolment grew from 851,836 students in 2002 (451,362 boys and 400,474 girls) to 1,382,211 (746,513 boys and 638,698 girls) students in 2008. Unfortunately, out of every 100 secondary school-age children, about 57 are not enrolled in any secondary school (MoE, 2009).

An important percentage of eligible children aged mainly 15-18 years old who form a vital part of human resources in the country are annually locked out of secondary school education. This leads to high wastage of both human and financial resources,
especially when primary education is financed by the government using both public and donor resources.

3.5.4 Tertiary Education

This level of education enables skilled manpower development for the diverse needs of Kenya's economy. Technical and vocational (TEC-VOC) institutions provide parallel opportunities to general primary, secondary and higher education. Students can opt for technical training during or after primary and secondary school education. Although the government has pumped in considerable efforts to boost this sub-sector in the interest of national development and individual choice, enrolment levels are disappointingly low. This is partly due to the negative perception that TEC-VOC is for drop-outs and those who cannot cope with academics. Likewise, the existing capacity is not fully utilized due to lack of personnel, equipment and materials. However, adoption of attractive progressive strategies in the development of TEC-VOC programmes and institutions and the unemployment crisis have turned young people to TEC-VOC for employment prospects.

University education has expanded from only one university in early 1980s to seven public universities presently and 15 university colleges which are projected to be 45 by the end of this year. There are 23 private universities although the fees charged for study in them are prohibitive. All the public universities operate on independent charters and rules and regulations that are enacted by the Parliament. Curriculum packages in the universities are approved by the Commission for Higher Education (CHE). However, tertiary and higher education needs to expand to accommodate the enrolment in the lower levels of education following the introduction of FPE and FSE. A significant percentage of students proceed for higher education in foreign universities in India, UK, US, Canada and China among others largely because of inflexibility in Kenyan public universities among other shortcomings. Notably, some prestigious private schools still offer the discarded 7.4.2.3 type of education similar to the British system of education usually for children of affluent members of the society (Onyango, 2009).

Recently, there has been a lot of attention on the quality of education crowned by a 2009 study carried out by Uwezo Kenya in collaboration with the NAC to assess the
basic literacy and numeracy skills of children ages 6–16 at a Standard 2 level. The study found that 85% of 2nd graders were non-readers at a level where students were supposed to have achieved basic competency in reading English and Kiswahili and 79% were unable to complete simple arithmetic problems, with marked differences in certain regions, and in public schools.

As accounted by Onyango (2009), the Kenyan education system has faced many challenges among them failure to deliver free primary education to learners as promised in 1963, brief scrapping of primary school fees in the early 70s and followed by re-introduction of the same in the mid 80s following introduction of the cost sharing policy as a result of the infamous structural adjustment programmes (SAPS). Parents and guardians were required to pay fees for parents’ teachers’ Association (PTA), harambee, textbooks, uniforms, caution, exam and extra-curricular activity fees. Most parents became overburdened and were unable to raise such fees, hence poor enrolment and high drop out for most learners.

Frequent teachers’ strikes due to irregular payment of wages and salaries have affected children's quality performance in schools. The re-introduction of free primary education in 2003 led to an increase in school attendance accompanied by an acute shortage of teachers and classrooms. Overcrowding of students in classrooms and lack of basic facilities and amenities have affected the quality of education greatly, and heightened criticisms against the 8-4-4 system of education. Extra tuition classes in the evenings, over the weekends and holidays has been introduced by the schools in order to cover the broad syllabus albeit the government’s ban on the same. The system has put immense pressure on students and has been blamed for high drop out rate of learners and drugs abuse among other vices. The Kenya system of education is presented in the following diagrams 3.3 (a) and 3.3 (b):-
Figure 3.3 (a) The Current Structure and Organization of Education in Kenya

(Higher Education)

University education (4 years)

Tertiary-Diploma in Education/Special Education

Tertiary-tivet diploma education (2 years)

Secondary education-in regular and special schools (4 years)

Village polytechnic craft & artisan certificate education (2-4 years)

(Basic Education)

Primary education (8 years)-in regular and special

ECDE/ Pre-primary education (1-2 years)

(Basic Education)

Source: Author’s intuition and construction
Figure 3.3 (b) Hierarchy of the 8.4.4 Education System in Kenya

Source: Author’s construction

3.6 Development of Special Education in Kenya

The Kenya government committed itself to provide education for all (EFA) to its citizens from January, 2003 (MOEST, 2004 & Oriëdo, 2003), and it supports this through allocation of grants for students enrolled in primary and special schools and units in the country. This measure presented CWDs with an opportunity to benefit from a full and decent education in conditions that ensure dignity, enhance self-reliance, and facilitate active participation in society as advanced by the constitution of Kenya. However, development of education for CWDs has been slow and limited. According to Mutua and Dimitrov (2001b), while students with mild mental retardation can be educated in regular schools, those with moderate to severe disabilities are served in settings which limit or hinder achievement of their highest potential. Lack of an active policy that advocates the rights of individuals with special needs in Kenya leaves the CWD population vulnerable
to neglect and physical abuse, and most schools and services are still operated by religious, private, or philanthropic organizations (Ndurumo, 1993).

On the total number of CWDs in Kenya, the MoE offers conflicting figures of 207,761 CWDs by 2007, up from 46,000 in 2003. Out of these, 93,215 were boys up from 15,129 in 2003, and 114,546 were females, a huge jump from 11,756 enrolled in 2003 (MoE, 2008). These numbers are still not a true reflection of the number of PWDs in Kenya because international trends approximate ten percent of any population to be disabled. On the other hand, different organizations present much higher figures for the different categories of CWDs that they serve, a case being the Kenya Society for the Mentally Handicapped which reportedly has about 3 million CWDs under its banner.

According to MoE (2008) statistics, there were 107 special schools in Kenya out of which 31 served CWDs with auditory impairments, 46 were for the mentally challenged, 13 for CWDs with physical handicaps, 16 for students with visual impairments and only one for the deaf-blind population by the late 1990s. There were also 1100 special units within regular primary schools, and only 11 secondary schools whereby only one served the VI, 3 for PH and 7 for HI. The country boasts of 4 technical and vocational training institutes, one resource centre for the VI, 73 district educational assessment and resource centres, 7 provincial assessment and resource centres, 34 district integrated education programmes, 2 teacher training colleges, one special education training college and 2 universities. However, more than a decade later, there lacks significant growth in services and educational programmes for CWDs, conceding with Mukuria and Korir’s observation in 2006 that the rights of CWDs to special care, assistance and educational opportunities were still largely unavailable. About 1.75 million CWDs were feared not to be receiving any special education programme, introduction of free primary education (FPE) notwithstanding (MOEST, 2003 and MoE, 2007).

Kenya's policy on special education promises provision of skills and attitudes for PWDs for rehabilitation and adjustment to the environment and to be provided with adequate specially trained teachers. It also promises increase in inclusion of exceptional children in regular schools, related services, and community-based programs and parental participation, and early identification of gifted and talented children for timely
intervention through special programs to increase the development of their special gifts and talents. However despite all these promises, the government is yet to provide adequate formal and informal educational opportunities to the CWDs as observed by Kiarie, 2004 and Oriedo, 2003. This has been partly attributed to a lack of an explicit special education policy (Muuya, 2002). The government’s allocation for financial investment for provision of special education has remained minimal over the years (Gichura, 1999).

There is marked inequity toward PWDs arising from the family, community, and society according to the UDPK (2003). PWDs have been denied justice through lack of interpreters in courts of law, access to social amenities like wheelchairs, specially designed bathrooms and hearing aids, and accessibility to buildings and transportation. Many more are still unable to access education and related services like health, employment, and rehabilitation. In addition, PWDs have been marginalized in distribution of resources because of the perception that they more of liability than contributors.

Important benchmarks in education of CWDs include development of special education curriculum at the Kenya Institute of Education in 1977 and initiation of educational assessment (EARCS) for PWDs for early identification of disabilities in 1984 through collaboration with the Danish International Development Association (DANIDA). Provision of professional help to parents and guardians for the children's rehabilitation and integration and the provision of educational assessment and related services across the country were also introduced. The Kenya Institute of Special Education (KISE) was founded in 1986 to train teachers for special education at certificate and diploma levels. Integration programs that assist children with visual, mental, physical, and auditory impairments were also started. Universities, pioneered by Kenyatta and Maseno, have also introduced undergraduate and postgraduate degree programmes for training teachers in special education since the mid-1990s. There are limited vocational training centers and special recreational programs for youths with disabilities, and lack of adequate funding still prevents participation of many CWDs in relevant programs and services.
3.7 Landmark Efforts to offer Special Education Services in Kenya

The effectiveness of any educational programme depends on correct identification and placement of CWDs. Wrong identification means wrong placement in educational and intervention programs hence failure to address the learners’ needs. A common practice of wrong identification and placement is whereby learners with learning disabilities and emotional and behavioral problems are placed in a classroom for students with mental retardation (Mutua & Dimitrov, 2001b). Oftentimes, students in Kenya are placed in classes without parental consent, and sometimes as punitive measures to indiscipline, especially in units within regular schools.

Significant efforts towards integration of students with disabilities in regular schools according to Gichura (1999) and Kiarie (2004) in Kenya include an increase of integrated programs from 184 in 1990 to 655 in 1998. An aggressive integration campaign of students with VI in the regular schools by Sight Savers International and the Low Vision Project by Christofel Blinden Mission has seen a decrease in the number of schools for these students, and integration of students with physical disabilities is done at all levels. It is estimated that more than 11,000 children with physical disabilities are integrated into regular schools. Due to lack of trained sign language interpreters, integration of students with HI, although not common, occurs only at the secondary school level. Teacher training opportunities include post and undergraduate courses, two-year residential and three-year distance learning diploma courses, and a three-month residential and one-year distance learning certificate courses.

The annual unit cost of educating a CWD was about Kshs. 17,000 for day school and Kshs 32,000 for boarding school. The government allocated funds through the Ministry of Education’s budget for grants-in-Aid to Special institutions for support staff salaries in institutes for CWDs, and Kshs 2,020 Free Primary Education per child in public regular and special primary schools. However, the meager allocation did not reach every school and child regularly. The MOEST (2003) admitted that CWDs who were integrated did not benefit from such funds. To make it even more dismal, some head teachers who were not specially trained in special needs education diverted the already inadequate funds to other purposes unrelated to special education.
Key partners in the area of disabilities in Kenya include Sight Savers International (SSI), Christoffel Blinden Mission (CBM), Braille Kenya, DANIDA, and Swedish Organization of the Handicapped International Aid Foundation (SHIA), Voluntary Services Overseas (VSO), Handicap International and church organizations. Others include organizations for and of the disabled such as Kenya Society for the Deaf Children (KSDC), Kenya National Association of the Deaf (KNAD), Kenya Society for the Mentally Handicapped (KSMH), Kenya Society for the Blind (KSB), Kenya Union of the Blind (KUB), Association of the Physically Disabled of Kenya (APDK) and Union of Persons with Disabilities of Kenya (UPDK).

3.8 Challenges in Provision of Special Education Services in Kenya

Persons with disabilities in Kenya face many difficulties as a result of built-in social, cultural, and economic prejudices, stigma, ostracism, and neglect (Oriedo, 2003). Further, the absence of mandatory legislation that supports the implementation of programs and services for CWDs results in the provision of inadequate services as observed by Eleweke (1999), Mutua and Dimitrov (2001a), and Peresuh and Barcham (1998). This exposes many CWDs to the risk of neglect, abandonment, mistreatment and exclusion from general education.

Specific challenges include the negative attitudes towards individuals with disabilities which is a major constraint in the provision of appropriate education for children with disabilities (Muchiri & Robertson, 2000; Mutua & Dimitrov, 2001a; Oriedo, 2003). Secondly, the Kenyan school system is highly examination oriented and results to unhealthy competition through ranking. Although recently abolished, ranking of students and schools according to performance is still a common practice. This consequently leads to sidelining of special schools as examination centers especially at the district level as they are perceived to bring down the overall mean grade.

Other challenges include large class size and high teacher-student ratios. In some instances, teachers in special units are allotted lessons in regular classes making CWDs stay unattended. This makes individualized instruction difficult or impossible as stated by
Kemble-Sure (2003) and Muchiri & Robertson (2000). The school curriculum also fails to focus on life skills and CWDs especially in special units are not supervised, making them engage in activities of their choice, some of which are highly destructive.

Some school buildings are inaccessible for students with physical disabilities and this inhibits access to educational facilities and to education in general (Gichura, 1999; Kochung, 2003; Muchiri & Robertson, 2000 and Oriedo, 2003). Existing facilities lack basic technical training devices such as Braille, typewriters, hearing aids and specialized play materials among others. The CWDs are therefore an enriched learning environment which is a necessity for them owing to their disabilities.

There has been an increased effort to train teachers in special education but the number of specially trained teachers still remains minimal. Brain-drain is very high among the specially trained teachers, some of whom have taken special training as a means to promotion following the government’s freeze and control on promotions. Other teachers lack competence in their ability to instruct students with exceptional needs as asserted by Muchiri & Robertson (2000), which is mainly because teaching was not the option for them alongside many demotivating factors such as poor remuneration, low allowances and heavy workload among others.

Other challenges include lack of significant attention on research in special education, and of specialized technical personnel since special education is a recent phenomenon introduced in the mid 1980s, and therefore it is still not open to many people. Training of teachers in special education at post-graduate level in Kenya started in 2002 at Kenyatta University, and it is still experiencing teething problems among them stringent admission and study requirements that do turn away many scholars. The exorbitant tuition and fees charged by the special institutions leads to high rate of nonstarters and dropouts (Oriedo, 2003).

The government's policy on education of CWDs is implicit and contradictory according to Muuya (2002), and it fails to provide the mandated free education for all, resulting to a compromised state of special education (Gethin, 2003). Lack of adequate government funding and acute poverty levels of parents of CWDs have resulted in inequitable educational opportunities within the population (Gichura, 1999 & Kochung, 2003). Like in many developing countries, the gap between the rich and the poor in
Kenya is very wide and unfortunately, many CWDs come from such poverty-stricken homes, made worse by inadequate or total lack of medical referral and transport systems (Weil, 2005). The unspoken societal consensus seems to denote that the available meager resources be allotted to the able-bodied individuals first.

Beliefs, cultures, superstitions and traditions greatly hamper provision of educational services for CWDs leading to general apathy and disregard of children with exceptional needs (Abosi (2003), Ihunnah and Maja-Pearce, 1998). These consign the blame on etiology of disability on curse from the gods, breaking of laws and familial sins, offences against the gods, witches and wizards, adultery, misfortunes, ancestors, god's representatives, misdeed in a previous life, and illegal or unapproved marriage. Others include evil spirits, killing of certain forbidden animals, a warning from god and fighting elders during harvest and planting seasons.

In a 2003 task force on challenges faced by PWDs, it was found that CWDs, for instance those with behavioral and emotional disorders were usually educated in rehabilitation facilities because they were treated like juvenile delinquents. Unfortunately, rehabilitation centers limit someone’s maximized learning as observed by Kolchung (2003). Abosi (2003) concludes that most of the negative feelings towards disabilities and PWDs are misconceptions founded on a lack of proper understanding of disabilities and their effect on functioning. Fortunately, new attitudes can be boosted through knowledge about disabilities, hence the need for provision of information through lectures, symposia, seminars, and mass media.

Educational Assessment and Resource Centres (EARCs) offer assessment and placement of CWDs for educational needs. However, many of the EARC s reportedly remain closed due to lack of resources and/ or staff, yet assessment is a critical ingredient in the entire process of education. It involves collection of information related to decisions making on the appropriateness of educational goals and objectives, instructional strategies, and program placement according to McLoughlin & Lewis, 2005 and Obiakor & Bragg, 1998. It is unfortunate that assessments administered to special education students and particularly those with behavioral and emotional disorders are inadequate and fragmented.
Kenya is a stratified society ethnicity-wise and socio-economically (Mwabu, Kimenyi, Kimalu, Nafula, & Kalundu, 2003). Depending on where these schools are located, some regions have good schools, hospitals, and roads while others do not, hence an imbalance and lack of equitability of special education services. Observably, the more educated and exposed someone is, the better they can handle disability. Literate and exposed parents seek early assessment and intervention for their children once they notice anything wrong unlike the poor and less educated ones.

3.9 HIV and AIDS in Kenya

3.9.1 Overview

Kenya ranks among countries with the largest HIV infected population in the world with nearly about 7% of its population living with HIV. Since the first case of AIDS was discovered in the country in 1984, HIV and AIDS present as some of the most serious, deadly diseases in human history (Onyango, 2009). HIV refers to human immunodeficiency virus, an infection that afflicts approximately 40 million people in the world and caused an estimated 25 million deaths. HIV pandemic has devastated nations, particularly those in sub-Saharan Africa. While globally 85% of HIV transmission is heterosexual, male-to-male sexual contact still accounts for approximately half of all new diagnoses particularly in the U.S. followed by intravenous drug use. Disturbingly, HIV infections in women are increasing and constitute about 42% of people living with HIV (GoK, 2008). However, new HIV infections in children are falling maybe as a result of testing and treating of infected mothers and screening of blood and its products before transfusion. It is also understood more, and people take necessary steps to avoid new infections.

HIV, which is a kind of retrovirus kills or damages the body's immune system. After it has eventually damaged the body's ability to fight infections and specific cancers, AIDS, which is ‘acquired immunodeficiency syndrome occurs. At this point, the body's defenses are damaged to the extent that immune-cell counts fall to critical levels to usher in life-threatening infections or cancers. The medical fraternity has made concerted efforts to develop drugs that interfere with growth of HIV, and the drugs have successfully managed to slow the progression of the disease, giving people with the
disease a longer lifespan. However, there is still no cure for HIV and AIDS (NASCOP, 2002).

3.9.2 Transmission of HIV

There are various ways through which HIV is transmitted from an infected person to another person, the most common being contact with contaminated blood, semen, vaginal fluids, and mother-to-child and breast milk. After initial infection, the virus is spread through high-risk behaviors including unprotected oral, vaginal, or anal sexual activities. Others include sharing of needles for example to inject drugs like steroids and those used for tattooing. The presence of another sexually transmitted disease like syphilis, genital herpes, chlamydia, gonorrhea, or bacterial vaginosis increases the risk of HIV infection (Onyango, 2009).

HIV attaches to CD4 cells, infects them, and uses them as a shield under which they multiply. In so doing, the virus destroys the ability of the infected cells to offer immunity to the body, leading to frequent infections. The weakened immune systems consequently make HIV infected people who have AIDS unable to fight off infections, particularly tuberculosis and other kinds of otherwise rare infections of the lung like ‘Pneumocystis carinii pneumonia’, the surface covering of the brain (meningitis), or the brain itself (encephalitis). People who have AIDS tend to keep falling sick and weaker, especially if they are not taking antiviral medications properly.

USAID (2000) describes AIDS as having the ability to affect every body system. The immune defect also permits some cancers that are stimulated by viral illness to occur. Such forms include lymphoma and a rare tumor of blood vessels in the skin called Kaposi's sarcoma. Because AIDS is fatal, it is critical that doctors detect HIV infection as early as possible so a person can take medication to delay the onset of AIDS. Severe symptoms of HIV infection and AIDS may not appear for 10 years although the period varies from person to person. This period is very significant in HIV since this is when transmission of the disease occurs as the infected person exhibits no symptoms.

According to Onyango (2009) and NACC (2002), many people with HIV do not know they are infected with HIV until the disease has damaged their body systems. While some people may not show ant symptoms of HIV infection at the earlier stages,
others have a flu-like illness within days after exposure to the virus. They may complain of fever, headache, tiredness, and enlarged lymph nodes in the neck, symptoms which may disappear within a few weeks. The person feels normal after this, and enters into the asymptomatic phase which lasts for years as the disease progresses, killing the CD4 cells which are primary infection fighters of the immune system.

Infections that occur with AIDS are called opportunistic infections because they take advantage of the opportunity to infect a weakened host. Some of the most common infections are pneumonia caused, brain infection with toxoplasmosis which can cause upset thinking processes or symptoms that imitate a stroke, widespread infection with the MAC (mycobacterium avium complex) bacteria which causes fever and weight loss, yeast infection of the esophagus and widespread diseases with certain fungi like histoplasmosis, which cause fever, cough, anemia, and other problems. Others are lymphoma, a form of cancer of the lymphoid tissue in the brain, which presents through fever and troubled thinking and a cancer of the soft tissues called Kaposi's sarcoma which causes brownish, reddish, or purple spots that develop on the skin or in the mouth. After the immune system is overwhelmed by AIDS, the symptoms can include extreme weakness or fatigue, rapid weight loss, frequent unexplained fevers, heavy sweating at night, swollen lymph glands, minor infections that cause skin rashes and mouth, genital, and anal sores, white spots in the mouth or throat, chronic diarrhea, persistent, recurring cough, and loss of memory. Women may also experience severe vaginal yeast infections that do not respond to usual treatment and pelvic inflammatory disease (PID).

3.9.3 Methods of HIV Prevention, Testing and Management and Treatment

HIV transmission can be prevented by abstaining from sex, having protected sex, avoiding contact with the body fluids, and avoiding sharing of needles and other personal items. Testing for HIV may be done through blood tests or a swab of the inside of the cheek. Results take varying periods of time ranging from a few minutes, hours to several days, depending on the test. People can also get tested for HIV/AIDS at special HIV/AIDS clinics around which offer both anonymous and confidential testing. Most HIV/AIDS testing centers request a follow up for counseling before receiving results, whether negative or positive. Lack of cure for HIV and AIDS makes prevention very important.
Antiviral and immune system boosting drugs enable people with HIV to keep free from infections, and to stay healthy and prolong their lives.

HIV infection is commonly diagnosed by blood tests under three commonly used ways namely antibody tests, RNA tests, and lastly a combination test that detects both antibodies and a piece of the virus called the p24 protein. In addition, a blood test known as a Western blot is used to confirm the diagnosis. Unfortunately, there is no perfect test since some tests may be falsely positive or falsely negative especially where it takes some time for the immune system to produce enough antibodies during the window period which may last six weeks to three months after infection. Where the initial antibody test is negative, a repeat test should be performed after three months. Early testing helps people avoid or minimize complications and also high-risk behaviors, thus keep the spread of the virus in check.

The most commonly used treatment for HIV is a combination of drugs called highly active antiretroviral therapy (HAART), and which have substantially reduced HIV-related complications and deaths. Therapy is initiated and individualized under a physician’s supervision with knowledge and skills in the care of HIV-infected patients. The drugs suppress the virus from replicating and boost the immune system. The different classifications of these medications include:

- Reverse transcriptase inhibitors which inhibit the ability of the virus to replicate such as the nucleoside or nucleotide reverse transcriptase inhibitors (NRTIs)
- Non-nucleoside reverse transcriptase inhibitors (NNRTIS) for use in combination with NRTIs
- Integrase inhibitors which help to stop HIV genes from getting incorporated into the human cell's DNA.

These drugs are associated with very severe side effects which include decreased levels of red or white blood cells, inflammation of the pancreas, liver toxicity, rash, gastrointestinal problems, elevated cholesterol level, diabetes, abnormal body-fat distribution, and painful nerve damage. However, the brighter side is that the medications have helped to extend the average life expectancy if combined with careful adherence to their regimens. However, there is no evidence that CWDs infected with HIV have not access to these anti-retroviral drugs.
3.9.4 Effects of HIV and AIDS

Other than the socio-economic and physical effects of HIV and AIDS, there are a spectrum of other delimiting factors that come with the disease which include strong psychological reactions such as fear, anger, and a sense of being overwhelmed. The American Psychiatric Association identifies numerous reactions which include suicidal thoughts for some people, feelings of helplessness and fear of illnesses, disability and death. This can be accompanied by denial of the results. Although the reaction can help someone to adjust to the idea of infection, it can cause problems especially if the infected person engages in risky behavior during the period. Prolonged denial can delay timely access to required assistance and medical attention.

Guilt is another reaction that comes with HIV diagnosis, and it can be worsened by the society's prejudice and ignorance about HIV and AIDS. After one is diagnosed HIV positive, they should seek the company and help of accepting and supportive people. Sadness is another reaction that accompanies HIV diagnosis as someone experiences loss of one kind or another. However, this should ease slowly as someone adjusts to their condition before it causes more serious health problems.

Other psychiatric reactions possible with HIV infection include depression that manifests with prolonged periods of sadness and crying, hopelessness, feelings of guilt and lowered self-esteem, and a general negativity to life. Other reactions include fatigue, decreased ability to concentrate, loss of pleasure in activities, changes in appetite and weight, troubled sleep, and suicidal thoughts. Anxiety disorders manifest with excessive worry, edgy feelings, muscle tension, restlessness, and physical symptoms such as shortness of breath, sweating, rapid heart rate, nausea and diarrhea, and sudden attacks of intense anxiety.

Mania is another reaction characterized by an abnormally and persistently elevated mood or great mood swings often marked with irritability, decreased desire for sleep, over-activity, rapid talking, poor concentration, and racing thoughts. People with this disorder may also have big and sometimes bizarre ideas about themselves and impossible schemes for making money and fame. They may engage in spending sprees
and other impulsive behaviors and disorganized thoughts and behavior and inability to take care for themselves.

Psychotic symptoms may present with hallucinations whereby the person becomes delusional and develops strange, unrealistic, and irrational ideas such as thoughts that their closest friends are plotting to harm them, bugging their telephone or sending messages by television or radio, or spying on them. Brain dysfunctions may manifest with difficulties in memory and thinking processes as a result of infections, malignancies, and nutritional deficiencies caused by AIDS. HIV can cause AIDS Dementia Complex in the brain which presents with forgetfulness, confusion, difficulty paying attention, slurred or changed speech and sudden changes in mood or behavior. Others are clumsiness or difficulty in walking, muscle weakness, numbness or tingling, slowed thinking and difficult self expression (The Body, 1993).

Children, especially CWDs face special challenges. This is as a result of their often exclusion from accessing health care and education facilities. Furthermore, loss of parents, adult relatives, teachers, health care workers and other caregivers undermine the development and protection of these children. Living in communities that are weakened by HIV/AIDS affects the children’s education, health care systems, households and social support networks (UNICEF, 2004). Inopportune, no study seems to have been conducted in Kenya to find out the effects of HIV and AIDS specifically to CWDs.

3.10 Disability and HIV and AIDS

HIV/AIDS epidemic has progressed at a rapid pace among young people especially in Sub-Saharan Africa. Statistics indicate that young people form a significant segment of those attending sexually transmitted infection (STI) clinics and those infected by HIV. Disability cases are also on the rise, with an approximation of 10 percent of the population living with them (disabilities). However, there is no reliable information around the world and particularly in Kenya about the nature and prevalence of disability, and the quality of life of PWDs. Estimating the number of PWDs in developing countries is very difficult, partly because of the varying definitions of disability, and also the difficult task of collecting such data as best captured by World Bank (2007) that disability prevalence rates vary widely. In many developed countries, the rates are quite
The prevalence rates in the United States and Canada are 19.4 percent and 18.5 percent, respectively. Conversely, developing countries often report very low rates. In countries such as Kenya, the reported rates of disability are under one percent and they vary for a number of reasons among them differing definitions of disability, different measurement methodologies, and variance in the quality of these measurements.

The number of PWDs is rising due to conflicts, malnutrition, accidents, violence, communicable and non-communicable diseases including HIV/AIDS, aging and natural disasters. PWDs are often subject to stigmatization, exclusion from schools or workplaces, and dependency on others in the family and community for physical, social and economic support. Although a third of the PWDs population consists of children faced with higher threats than any other person in the face of HIV and AIDS pandemic according to the World Bank (2007), high levels of discrimination towards PWDs has excluded them from HIV and AIDS programmes.

PWDs continue to be excluded or marginalized from mainstream socio-economic life and experience difficulties in accessing their fundamental social, political, economic, human and natural rights including HIV and AIDS education and services. In addition to this exclusion, PWDs are disproportionately poor, and therefore disproportionately disabled. Living in impoverished conditions leads to mental and emotional abuse, and the absence of adequate public support systems and community safety ultimately increases vulnerability of PWDs and pushes them further into perpetual poverty, and more prone to HIV infection.

PWDs and their families do not have means of advancing in the development process. For example, the Millennium Development Goals (MDGs) which represent key global policy directions for targeting income, poverty reduction, health and environment among other sectors do not specifically reference the needs of PWDs, a common phenomenon in most key policies and documents in Kenya. However, disability policies have evolved from focus on elementary medical care at institutions to provision of education for CWDs and rehabilitation for persons who become disabled during adult life. This has helped people with disabilities to actively participate in further development of policies within the socio-economic context.
Literature on HIV/AIDS and disability in developing nations, specifically in Kenya cuts across different fields and genres of research. While most research on incidence, prevention and treatment of HIV/AIDS is found in medical journals and related fields, information on disability and special education is oftentimes found in social science and rehabilitation journals. However, literature on HIV and AIDS and disability in the Kenyan context is minimal. There lacks acknowledgement of CWDs as a target group that has high vulnerability to HIV/AIDS as commonly listed target populations include women, children, sex workers, homosexuals and drug users. Although HIV and AIDS strategic plans have been launched in response to national and international proclamations, most of them have not consulted, included nor recognized PWDs’ special needs and the impact of HIV and AIDS.

PWDs are neither recognized as users nor providers of essential services to combat HIV and AIDS. For instance, superstition in Africa remains a challenge as most people believe that there is no need to include PWDs in HIV and AIDS programmes. There are numerous practices associated with superstition in issues of disability and HIV and AIDS which include assumptions that PWDs are asexual and therefore not vulnerable to HIV infection, the belief that disability is punishment from God, and virgin cleansing. While some programmes recognize PWDs as a vulnerable group, they fail to respond to the challenges that the specific groups of PWDs face.

Only a few studies have attempted to link disability and HIV, with a landmark study conducted by Groce (2004) and funded by the Bank and Yale University. By the time of this study, there was no evidence on studies on the impact of HIV and AIDS on PWDs with a focus on prevention, treatment, voluntary counseling and testing (VCT), care and support, education and information, research and monitoring and evaluation.

3.11 HIV Education in Kenya

Education is recognized as a major factor in the development of human resources through the teaching of literacy and numeracy, transmission of basic knowledge and skills for survival and for delivery of vocational, tertiary and professional training (Shaeffer, 1994). The school is a center point for dissemination of information and education on HIV/AIDS and provides a ‘social vaccine’ for prevention of HIV
transmission (Chege et al. 2009). However, there is a wide gap between the inputs in the HIV/AIDS curriculum for schools and actual education especially for CWDs in Kenya, a country which ranks 10th in the world with 7% of its population living with HIV. CWDs, like all other children represent a ‘window of hope’ to an AIDS-free society and are a valuable resource for the future, and this makes it imperative that they be equipped with ample information that empowers them to protect themselves and their counterparts from preventable HIV infection. Paradoxically, the education system bears both a special burden in terms of being affected by AIDS and special responsibilities for responding to its impact. There is therefore need to focus on the changes needed in the education system for effective delivery of messages about HIV and to find ways of dealing with the immediate impact of AIDS on the education system itself. This requires that the longer-term response of the education system to the HIV impact is attended to as well.

Schools play a pivotal role in providing AIDS education for young people because they have both the capacity to reach a large number of young people, and to equip students with new information in an environment that enables receptive learning. This therefore qualifies schools as well-established points of contact through which young people can receive AIDS education. At the same time, HIV and AIDS are significantly weakening the capacity of the education sector across the world, and greater investment in education comes in handy for the provision of effective HIV prevention for young people.

It is however elevating that there has been a declining HIV prevalence at an estimated 10 percent and the education sector has played an active role in the country’s response to the AIDS epidemic. This has led to a particularly positive effect on HIV and AIDS awareness and a reduction of risk behaviour among young people. HIV and AIDS has been incorporated into all subjects at school, and a weekly compulsory HIV and AIDS lesson was introduced into all primary and secondary curricula. It covers topics like information on routes of HIV transmission and prevention strategies, skill-building for resisting social, cultural and interpersonal pressures to engage in sexual intercourse, adolescent health and sexuality and issues related to HIV stigma and discrimination. It also focuses on the care of people living with AIDS, and integration of HIV education within classroom subjects.
Incorporation of HIV education into the curricula was developed as an urgent measure to deter the spread of HIV and AIDS which was declared a national disaster in 1999. Being a real threat to the education sector and by extension to the human resource-based development, HIV and AIDS pandemic evolves constantly, and it therefore needs close monitoring in order to provide an essential base for information to guide policy and programme development. Provision of accurate information, identification of appropriate response actions and development of strategies and interventions aimed at keeping children alive and free from HIV both in and outside school are essential components of HIV education. There is therefore an urgent need to get more AIDS-affected children into school or into alternative, supportive basic education programmes. Schools and communities should be assisted to establish mechanisms to trace and track out-of-school children back to school.

Parents, teachers and ministry personnel need sensitization about the ‘safeness’ of AIDS affected children. UNICEF and its partners have contributed immensely to promotion of rights-based, child friendly schools provide a sanctuary for safety and secure environment to the children. This effort needs to be strengthened with health-promoting school programmes that are physically and psycho-socially embracing and also cost-effective and sustainable over the long term. However, there is a discrepancy between the large amounts of effort invested in HIV/AIDS curricula and training packages on a national level, and lack of actual education in the schools in Kenya. For instance, officials and key social and religious figures have been reluctant to encourage AIDS education supposedly not to predispose students to risky try-outs practices. However, learning about AIDS will enable youngsters to make informed decisions and choices that kept prevalence on check. However, it is depressing that many young people including those with disabilities across Kenya are still not receiving information about HIV / AIDS and in instances where any sessions on the same occur within the school, they are reportedly sketchy.

3.12 Approaches used in HIV and AIDS Education in Schools in Kenya

Although there is a divided opinion between education providers on abstinence-only and comprehensive approaches to HIV education, it is important that HIV education
be all-embracing. This underscores the importance of protection and promotes delayed initiation of sexual activities and how young people are educated about HIV and AIDS. Proponents of abstinence approach base their position on the belief that encouraging young people to delay sex until marriage is the best way to protect oneself against HIV infection. Regrettably, this approach fails to provide information about protection from HIV infection for those who choose not to abstain.

Life skills approach has been introduced as means to imparting HIV education in schools. Life skills programmes aim at ensuring that the education system responded to the challenges of the negative impacts of HIV and AIDS based on the assumption that they play an essential role in reversing the very pandemic that threatens it. Young people, especially between the ages of 5 and 14 years within and out of school are perceived to offer a window of hope in fighting the spread of HIV and AIDS through life skills which enable development and/or change of behaviour and values in the absence of cure.

As they mature and become sexually active, young people face serious health risks which are complicated by too little factual information, little guidance about sexual responsibility, and few skills on protection from coercive adults and limited access to youth friendly health services. The youth need a continuum of skills from HIV education to address their needs at the various stages of their sexuality. Those who were not yet sexually active need support and skills to delay initial sexual engagement and to protect and to remain safe against the risk of sexual abuse, HIV infection and death from AIDS. Those who engage in pre-marital sexual activities and have multiple sexual partners need help to either abstain from sex or use protection to avoid HIV infection, pregnancy and other STIs.

Life skills programmes incorporate five key psycho-social aspects that influence health and social behaviour. They enhance self-awareness, self-esteem and empathy, private communication and interpersonal relationships, decision making and problem solving skills, creative and critical thinking and emotional and stress coping techniques. These programmes aim to foster positive behaviours, and to change unacceptable behaviours that could translate into inappropriate and risky behaviour later in life. They help learners and their teachers to effectively respond to situations which may affect their lives. Such skills are best learned through experiential activities. They are learner
centered and designed to equip learners with information, evaluative attitudes and practical healthy behaviours that promote positive health choices, informed decision making, and aptitude to recognize and avoid risky situations and behaviours.

However, the life skills programmes initiative has not gained full support of the GoK, and it faces opposition from family life education, and/ or reproductive health programmes for children and young people and from parents, religious and community leaders and from some youth themselves. Nonetheless, life skills programmes provide a platform on which to address social issues like sexual abuse and violence which transcend racial, economic, social, ethnic and regional boundaries. Violence is frequently directed towards females and youth since majority of them lack the socio-economic status to resist or avoid it. Adolescents, children and young women and girls in particular experience increased abuse in form of domestic violence, rape and sexual assault, sexual exploitation and/ or female genital mutilation. Violence significantly impacts on health and life expectancy of women and youth, and can have long term psychological effects.

The social stigma that accompanies incidences of sexual violence prevents victims from speaking against rape and abuse. The few reported rape cases are largely settled out of court whereby the perpetrator either compensates them or pays a bride price to marry the girl as a way of avoiding public attention to all the affected parties. Forced or early marriage of young girls to older males denies them socio-economic power and opportunity to return to school or to acquire some vocational training. Poverty coerces many young people into early sexual activity for money and usually leaves them with little or no bargaining power or negotiation skills for protection against HIV, pregnancy and STIs.

An important ingredient in HIV education is teacher education since teacher training is fundamental for successful delivery of AIDS education in schools, and yet efforts towards the relevant teacher education on HIV are often inadequate, or totally lacking. Although there are seminars on HIV at different levels, their impact is yet to register. Without any training on HIV and AIDS, many teachers opt to skip teaching on the same. Most of the teachers also struggle like the rest of the people to understand the HIV and AIDS pandemic against numerous myths and misinformation that surround it,
and this makes passing of any information on HIV to students a voluntary undertaking by teachers, but not a duty.

Another approach encompasses taking HIV education outside school to about 75 million out-of-school children around the world, and who lack basic HIV education. Notably, the out-of-school children may not access basic information although they sometimes were more at risk of HIV infection. The media is a powerful way of reaching these large numbers of young people with HIV and AIDS information and prevention messages. Many countries have tried some form of AIDS education advertisements, films, or announcements such as LoveLife, a prominent campaign in South Africa that uses a variety of media to educate young people about HIV and AIDS through eye-catching posters and billboards. It also educates through TV soaps that are popular with young people like rap music to pass HIV message across. Kenya has also tried this model too, but it is difficult to measure the extent to which media-based AIDS education reaches young people, and the effect that it has.

Some HIV and AIDS prevention messages are unclear and others seem to encourage the learners to try out what they are supposedly been warned to avoid. For example in a past campaign on use of condoms, celebrity figures were presented flashing condoms, and the message was like everyone should use condoms not to prevent HIV infection, but as a fashionable practice. Another recent campaign has wrongly presented women as cheap and easy to get as they are referred to as ‘chips funga’, in other words, ‘take away French fries’ among other such demeaning references as expressed in the works of Onyango (2009) and Waitiki (2010). This arouses feelings of anger and unworthiness in the womenfolk who are made fun of and degraded, and it saps up energy that could be expended in HIV education and prevention. Others have aroused suspicions and bad faith between couples as they present the couples as going out for sexual escapades as opposed to the reasons they genuinely go out for. Some children who watch these adverts on TV see their parents as going out to acquire HIV infection and will shun any advice or warning from the parents on the need to avoid or stop involvement in risky behaviours.

Peer education is another approach that involves the process of passing information to a group by a member of the same group or community, and who has
already been trained in the subject. Peer education programmes are important for HIV prevention, as they are a cost-effective means of influencing the knowledge and attitudes of young people. Notably, most young people are strongly influenced by the attitudes and actions of their age mates in form of peer pressure. Many young people basically acquire much of their existing knowledge of sex and HIV from their friends, and much of the information can often be distorted. Peer education can be an effective approach to harness this method of knowledge sharing to convey accurate information about HIV and AIDS to young people.

This approach is particularly effective as it targets difficult-to-reach and marginalized groups like the out-of-school youth with vital AIDS education, many of whom may distrust or reject information given to them by any authority figure. The same information is more likely to be effective if it is provided by someone that young people identify with and see as credible. However, it requires that the peer educator should be a role model in as far as their behaviour is concerned. Some have been dismissed as a result of their past or present behaviours and attitudes even when very covertly exhibited.

There is no set age at which AIDS education is more effective, and this leads to young people often be denied life-saving HIV education. This is because adults usually consider HIV information too ‘adult’ for young people, attitudes which hinder HIV prevention among the young people who should know about HIV and its transmission before they get exposed to risky situations for HIV infection. HIV education should begin as early as possible with adapted and age-appropriate information to enable early acquisition of awareness of HIV and AIDS following UNESCO’s guidelines that advise that basic education on human reproduction begin as early as age five. This information lays the foundation upon which children can build HIV and AIDS specific knowledge and skills as they grow and develop.

Active learning is another vital approach in HIV education. It provides means to absorb and retain that HIV information, since its provision is meaningless without its internalization. Application of information acquired through different activities and situations makes HIV education effective and gives it permanency for easy recall and use whenever necessary. Particularly important methods that enhance active learning include group-work and role-play, which enable students to discover practical aspects of the
presented information. The methods also empower pupils to practice and build skills like meaningfully saying “No” to sex.

This approach is widely accepted as the most effective way for young people to learn health-related and social-skills, and offers an opportunity to make HIV education lessons simple and meaningful to grasp. For example, HIV and AIDS education lessons can utilize quizzes, games and/or drama which make them very effective learning sessions.

Another effective approach is making HIV education cross-curricular since effective AIDS education encompasses both scientific and social aspects of HIV and AIDS. For example, basic scientific knowledge of HIV and AIDS enables understanding on how the virus is passed on and its effects on the body. HIV and AIDS education that deals only with medical and biological facts as opposed to that which includes real-life situations denies young people adequate and practical AIDS awareness. They need to develop life skills and discuss basic matters like relationships, sexuality and drug use which are fundamental to AIDS education.

3.12.1 Planning for Effective HIV and AIDS Education

Planning an HIV and AIDS education lesson or curriculum requires awareness of local guidelines since different regional factors dictate what sex or HIV and AIDS education should constitute. Socio-cultural and religious factors need to be taken into account because views between cultures differ on what issues are necessary in this type of education. This awareness enables HIV and AIDS education to be sensitively, yet effectively offered to address key issues in a way that does not conflict with the values considered as vital for the young learners.

There is also need to specially consider the learners’ personal circumstances. For example, some of them may have been personally affected by HIV or, particularly in high prevalence areas, may themselves be infected, so the curriculum should be sensitive to this. It is also important to the sexuality of students and their families, which is a key focus in HIV and AIDS education. It is important that the starting point when planning HIV and AIDS education for young people should be about the learners themselves. They should be allowed to ask questions and be encouraged to give their input so as to express
their needs and requirements from HIV and AIDS education. This also ensures that educators gain current knowledge of the students for a firm basis of HIV and AIDS education in order to more effectively target areas of informational need.

It is also important to include of gendered concerns around disability in HIV education programmes due to a number of factors. Women and girls with disabilities often belong to the most excluded groups of people in developing countries. They are subjected to discrimination based both on their gender and disability status, and are compelled to deal with greater extremes of poverty. Majority generally face intensified problems even in access of basic needs like shelter, food, safe water, sanitation, health services, education and employment opportunities and are often left out in decision-making processes even in decisions about them.

HIV education programmes should support and empower the most excluded and poorest people to be active beneficiaries or policy makers for themselves and the other women and girls with disabilities who are particularly under-represented. There is minimal or no inclusion of women with disabilities even in the most vital and relevant programmes like maternal health programmes. Accompanying statistics by the UN state that women report higher rates of disability than men, which practically implies that poor women with disabilities are at a greater risk of experiencing multiple forms of discrimination as well as poverty. The general estimated literacy rate for these women is 1 percent compared to about 3 percent for all PWDs as a whole. Further, only 25 percent of women with disabilities worldwide are employed compared to 50 of their male counterparts.

The UN Convention on the Rights of People with Disabilities (UNCRPD) states that women and girls with disabilities often face additional risk of violence. The UNFPA Report of 2003 reports that 20 million women a year experienced disability and long term complications due to lack of access to appropriate antenatal care. Women and girls with disabilities are multiply discriminated and less likely to access services, education, and employment and to participate in decision-making processes, a situation which served to increase their poverty and dependence upon others.

HIV education programs that enabled an improved access to resources and services would not only strengthen the independence and dignity of women with
disabilities but also relieve individuals who are charged with their care. Improved maternal healthcare for women will reduce the number of women becoming disabled as a result of childbirth and decrease the economic consequences of disability both in the women giving birth and the decreased number of children experiencing disability through abnormal pre or peri-natal events (UNICEF 2001). An important forum that brought this need to the fore was the 4th UN World Conference on Women in Beijing in 1995, which saw the establishment of a Platform of Action to address concerns of women with disability and urged governments and civil society actors to integrate women with disabilities in policy decisions and in programs.

Efforts to mainstream gender should be undertaken in an effort to abolish the existence of multiple forms of discrimination for women and girls with disabilities. It is unfortunate that even the United Nations failed to mention women and girls with disabilities explicitly in their MDG target 3 on Gender Equality, a population that needs extra efforts to reach and attend to since they often belong to the poorest parts of the population and are particularly likely to be subjected to violence and abuse.