**EDUCATIONAL PSYCHOLOGY (Ms. Luciana Ngalonsa)**

**COURSE CODE : DPEP 2401**

**COURSE TITLE : TEACHING CHILDREN WITH LEARNING DIFFICULTIES**

**PURPOSE OF THE COURSE : TO INTRODUCE STUDENTS TO SPECIAL NEEDS EDUCATION,**

**DEFINATION OF CONCEPTS AND TERMS IN SPECIAL NEEDS EDUCATION AND INCLUSIVE EDUCATION**

**Concepts and terms used include the following**

* Inclusion, Inclusive setting, Learners Diversity, Special needs, Special educational needs, Special needs education, Differentiated curriculum Resource rooms, Itinerant or peripatetic teacher, Integration mainstream, Special school, Special unit, Regular school, Impairment, Disability, Handicap, Disorders, Challenged

**INCLUSION**

This is a philosophy that focused on the process of adjusting the home, school and the larger society to accommodate persons with special needs including disabilities. All individual regardless of their differences are accorded the opportunity to interact, play, learn, work and experience the feeling of belonging. They are also allowed to develop in accordance with their potentials and abilities

The full and equal participation of each individual is assured in an inclusive society in which differences are respected and valued. Discrimination and bias against those who are different is eliminated through appropriate practices and polices

Inclusion therefore calls for persons with special needs to be fully involved in all aspects of life which includes education, employment consumer services, community and Domestic activities, recreation and social activities, Decision making process and access to information

**INCLUSIVE SETTING**

This term describes a situation where all learners including those with special needs **participate in all activities** in a community that recognizes and addresses the needs of each learner as much as possible

**INCLUSIVE EDUCATION**

This refers to the philosophy of ensuring that schools centers of learning and educational systems are **open to all** children. This will enable the learners to be included in all aspects of school-life. It also means identifying, reducing or removing barriers within and around the school that may hinder learning for this to happen, teachers schools and systems need to **modify the physical** and **social** environment

So that they can fully accommodate the diversity of learning needs that pupil may have.

**LEARNER’S DIVERSITY**

This term refers to the variations of abilities and difference found among any group of learners in any give setting. This variations and differences give rise to different learner characteristics. You may have noted that some leaners are active while others are not very active, some are fast but others are slow.

**SPECIAL NEED (SN)**

These are conditions or factors that hinder normal learning and development for individuals. They may be temporary or life –long. The condition that may hinder proper progress of an individual may include disabilities, social, emotional health, or political difficulties. These conditions are referred to as barriers to learning and development. The barriers can be within the child or in the environment or a combination of both some of the special needs that a learner may be having included not seeing well, Arms or legs not functioning well, not following or understanding instructions not hearing well, not speaking well and not interacting well.

**SPECIAL EDUCATIONAL NEEDS (SEN**)

Individuals have different abilities and potentials in performing tasks. In education there are individuals who do not perform like others, but could improve with appropriate support. These learners have learning or educational needs which vary from one child to another. These are then referred to as special educational needs which include difficulties in reading, writing, and understanding concepts, carrying out tasks in the learning process and communicating with peers and teachers

**SPECIAL NEEDS EDUCATION (SNE)**

This is education, which provides appropriate modifications in curricula, teaching methods, educational resources, medium of communications are meant to meet the special educational needs of individuals as described above. Special needs education is learner-Centre, flexible, and adjustable to individual needs and potential.

Special education had focused mainly on disability rather than the child’s learning needs. When working with learners with special needs, education is not special rather their needs

**DIFFERENTIATED CURRICULUM**

This is an approach that you can use identify the subjects in the curriculum that learners should cover and plan for each learner according to his or her needs and ability It may require you to break down the subject into small teaching/learning steps of instructions for benefit of the learner with special needs in education .

**RESOURCE ROOM**

This is a room in a regular or special school, which is equipped for enriching learning for learners with special education needs. It is usually learn by a resource teacher who is a member of staff with appropriate experience or training in special needs education is available to advise and support other teachers and learners to deal with special education needs in the class room setting. It should have special various learning materials that may stimulate and facilitate learning. This may include specialized equipment such as braille and other braille writing materials low vision devices and hearing aids and speech training kits for learner with hearing difficulties

**ITINERANT OR PERIPATETIC TEACHER**

This refers to teacher who is trained in special needs education and moves from school to school where children with special needs are included. The roles of this teacher is to advice the regular teachers and give technical support where arises. This teacher is assigned to assist particular learners with special needs. The teacher follows a program which is drawn up in consultation with the regular teachers to meet individual learner’s needs

**INTEGRATION / MAIN STREAMING**

Different profession sometimes uses the term “integration” and “mainstreaming” synonymously. this term indicates the participation of learners with special needs in regular education without demanding changes in the curricular provision such children follow the school system as it is with some or support to cater for those with special needs. Such children are expected to adapt to regular school arrangement.

**SPECIAL SCHOOLS**

This refers to a school that is build and organized to provide educational services to learners with one type of disability. The physical environment and educational recourses are modified to suit the needs of the particular group of learners. Teachers are also trained in specialized approaches to deal with the learning needs of the special leaners. In Kenya there are special schools for children with:

* Hearing problems ,Visual problems, Physical problem, Intellectual difficult

**SPECIAL UNIT**

The team describes a classroom that is located in a regular school but is set as side for educating learners with specific type of disability. It is usually manned by specialized teachers who are responsible for most of the learner’s activities. Most of the special units in Kenya where established by the ministry of education, science and technology as more towards integration

**REGULAR SCHOOL**

This refers to the main stream which follows the curriculum that is prepared for the average ability learners.

**IMPAIRMENT**

Impairment refers to any loss or damage to a part of the body either through accident, disease genetic factors or other causes. This leads to the loss or weakening of that part affected

**DISABILITY**

This refers to any loss or reduction of functional ability (resulting from any impairment) to perform an activity in any manner or within the range generally considered normal for a human being within the cultural context.

It is also a limitation of opportunities that can prevent people who have impairment from taking part from normal life of the community on an equal level within others. There may be physical or social barriers to full participation for example a person whose legs are paralyzed cannot walk independently in this case the disability is the difficult in working

**HANDICAP**

A handicap is disadvantage or a restriction of activity, which result from a disability or from society’s attitude towards a disability. Handicaps prevents the fulfillment of roles that are appropriate according to the age, gender, social and cultural features of an individual

An individual who is not given an opportunity to become independent by the society is handicapped. A handicapped can therefore be lessened if the society provides support to enable a person with disability to be independent.

**DISORDERS**

A disorder is a reduction of function of a disability or disturbance of the normal working body or mind. For example a disorder of the digestive system or suffering from mental disorder

**CHALLENGED**

This concept is used to describe persons with disability who are unable to perform activities in the manner or within the range considered normal for human beings. For example “intellectually challenged” refers to a person with sub-average general intellectual functioning

How are these children with special needs in education classified?

Children with special needs in education are markedly different from average children in developmental characteristics. The special needs of children may be as a result of:

* Sensory differences, Cognitive differences, Communication difficult, Emotional and behavioral problems, Physical and multiple difficulties, Health problem, Communication difficulties

1. Children with sensory differences

* Children with hearing impairment, Children with visual impairment, Children who are deaf blind

1. Children with cognitive differences

* Children with developmental disability, Children with specific learning difficulties, Children who are gifted and talented

1. Children with communication difficulties

* Children with speech and language problems

1. Children with emotional and behavioral problems
2. Children with physical difficulties

* Children with orthopedic difficulties, Children with neurological difficulties

1. Children with multiple difficulties
2. Children with health problems

* Children with chronic health problem

1. Children living under difficult circumstances.

* Children who are traumatized, Children who are abused and neglected, Street children, Child laborers (working children), Refugees and displaced children, Children who are homeless and un accompanied, Children who are orphaned, Parenting children (child mothers), Child affected and infected by HIV/ AIDS, Children from deprived and rich families, Children heading families, Child soldiers, Children from pastoralist communities

**CHILDREN WITH HEARING IMPAIRMENT (H.I)**

Hearing impairment is term generally indicating a hearing disability that many vary in severity from mild to profound. In the past the term “deaf” was used to refer to all persons with such impairment. This was wrong because the term deaf described a person who cannot hear any sound.

**TYPES OF HEARING IMPAIRMENT**

Hearing impairment can be classified according to three main criteria:-

* The part of the hear affected, According to degree of the hearing loss, According to age of onset

They are three main types of hearing impairment according to the part of ear affected

* Conductive hearing impairment, Sensori-neural hearing impairment, Mixed hearing impairment
* **CONDUCTIVE HEARING IMPAIRMENT**

This is where the damage or infections is either in the damage or infection is either in the outer of the middle parts of the ear. These results in mild and moderate hearing loss, those with this type of hearing loss have residual hearing left and can hear and understand spoken language with the help of suitable hearing aid.

* **SENSORI- NEURAL IMPAIRMENT**

This is when the damage is inner ear. This result in severe and profound hearing loss with little residual hearing left. Children with this type of hearing impairment usually do not acquire and use spoken language. They can whoever use hearing aids to be aware of the environment sounds.

* **MIXED HEARING IMPAIRMENT**

This refers to a combination of conductive of conductive and sensori- neural hearing impairment. This means both the middle ear and inner ear are affected at the same time

* **CATEGORIES OF HEARING IMPAIRMENT**

Hearing impairment can be grouped into four major categories depending on how slight or severe the hearing problem is:

* Children with mild hearing loss, Children with moderate hearing loss, Children with severe hearing loss, Children with profound hearing loss

**a.Children with mild hearing loss**

Children with mild hearing loss can follow normal conversation if there is no noise in the room but will need to sit near to and face the speaker weak voices are also difficult to understand for those with mild hearing loss.

**b.Children with moderate hearing loss**

A child with moderate hearing loss understand conversation only if it is very loud. Such learner will only be able to follow the conversation if the room is very quiet. This means that among other things, the learner should face the speaker. As the learner only hears sound that are very close

**c.Children with severe hearing loss**

A child with severe hearing loss may have difficulty hearing in all situations. He/ she may be unable to follow normal conversation, however quiet the room is. The learner is unable to develop language and speech in a natural way.

**d.Children with profound hearing loss**

Profound loss is the most extreme loss. A child with this type of hearing loss may not hear very loud or any speech at all. Such learner relies mainly on visual cues instead of hearing as the main method of communication

**TYPES OF HEARING IMPAIRMENT**

These are two main types of hearing impairment

* Pre- lingual deafness. This if deafness present at birth or occurring before the child develops speech or language
* Post- lingual deafness. This is deafness which occurs after the child has developed speech or language, mainly after the age of three years.

Functionally there are two main types of children with hearing impairment:

* Children who are hard of hearing , Children who are deaf

**Children who are hard of hearing**

This are children who, despite the hearing loss have enough useful hearing left (residual hearing) This hearing ability can enable them to hear speech and acquire spoken language normally. However for them to hear speech well, sound must be made loud for them. This can be done by:

* Speaking to him a bit louder than normal to them, Placing them near the front in the class or near the speaker, Ensuring their sounding are quiet, Making sure that they look at the speaker face, Weaving a suitable hearing aid.

These children who are hard of hearing usually suffer from conductive hearing impairment.

**Children who are deaf**

Children who are deaf are those whose hearing loss is so severe that they cannot hear and understand speech even if the sound is made louder for them through a hearing aid. A hearing aid may only assist him to be aware of some environmental sounds such as made by the moving vehicles and bird singing. Children who are deaf usually suffer from either sensori- neural or mixed hearing impairment

**CAUSE OF HEARING IMPAIRMENT**

Hearing impairment may occur at different times in life. Generally, we consider three stages these are:

* Pre-natal stage (before birth),Peri-natal stage ( during birth), Post-natal stage (after birth)

**PRE-NATAL STAGE (BEFORE BIRTH)**

Some child may have a hearing impairment caused before birth. This child is said to have congenital hearing impairment. Some of this factors that may contribute to the unborn child’s hearing impairment are:

* Heredity, Poor nutritional ( due to unbalanced deity and lack of vitamin during pregnancy, Venereal diseases such as syphilis and gonorrhea, HIV AIDS, Infection of the mother during pregnancy such as Rubella (German measles) and those involving very high fever, Exposure to X-rays, especially during the first three months of pregnancy expose to radiation, Misuse of narcotic drugs, cigarettes and alcohol by the mother during pregnancy, Incompatibility of mother- child blood type (the rhesus factor incompatibility)Congenital malformation of the ear and the ear canal, for example atresia. Accidents affecting the expectant mother

**PERI- NATAL STAGE (DURING BIRTH)**

Hearing impairment may occur just before birth, during or these stages are:

* Prolonged delivery/ labour resulting to oxygen deficiency to the baby is brain and head injuries, Pre- mature birth, Low birth weight, Lack of oxygen to the baby during birth, Neo- natal jaundice, Mis-use of delivery instruments such as forceps delivery, Venereal diseases in mother, such as syphilis and gonorrhea, Accidents affecting the baby

**POST- NATAL STAGE (AFTER BIRTH)**

Hearing impairment may occur any time after birth some of the cause is

* Diseases, such as meningitis, malaria, measles, otitis media, and other severe recurring ear infections, Mis- use of drugs( medicine), Accidents, such as head injuries and brain damage, Brain tumor, Trauma, Accidents, Long and frequent exposure to loud noise, Exposure to poisonous agents and chemicals such as pesticides food and medicine poisoning, Excessive noise, Blockage of external auditory canal, Old age

**INDICATORS OF HEARING IMPAIRMENT**

These are some of the indicators of child who is deaf

* Usually fails to acquire spoken language, Must be taught how to listen and speak, Has speech flow problem ( speech lacks the normal rhythm, stress, and intonation herself understand

**CHARACTERISTICS OF A CHILD WHO IS HARD OF HEARING**

* Ask for pardon or repeating what has been said, Has frequent ear infections, Has poor articulation of sounds, particularly the omission of consonants sounds, Has difficulties in group discussion especially in noisy surrounding, Having difficulties in hearing and saying high frequency speech sounds such as as/s/sh/t//k/c/, Misunderstands others since he/she cannot comprehend all that said to him/her, Not able to monitor his/her voice and hence speaking loudly or softly, Have difficulties in understanding directions , Avoids to participate in oral activities, Cups the ear in the direction of sound has frequent substitutions and omissions of sounds of speech, Stares at speaker’s face, Appears confused or not understanding to instructions, Has poor vocabulary in relation to age, and culture, Withdraws from the rest of the learners

**PROBLEMS FACED BY CHILDREN WITH HEARING IMPAIRMENT IN AN INCLUSIVE SETTING**

* Inability to hear well in a classroom with noisy surrounding
* Poor verbal communication skills between the child and the teacher and peers
* Lack of acceptance and social isolation because of lack of communication
* Ineffective communication between the child family especially the parents and siblings. This may limit the child’s opportunity to acquire knowledge and skills usually acquire by children through interaction with parents, siblings and community
* Inability to follow school routine since he/she May not hear the bell

**INTERVENTION STRATEGIES**

**How to help children who are hard of hearing**

* Advise on suitable school placement, Advise parents to seek medical help
* Utilize peer to assist the child with class routine such as sharing notes
* Advise the parents to have the child fitted with suitable and effective hearing aid
* Give the child preferential seating in the classroom. This allows him/her to sit near the teacher and where there is a good source of light
* Face the child when taking to him/her. Talk slowly and clearly in a good tone without mouthing words
* Counseling the school community to accept the child
* Appropriate referrals to the health centers for medical checkups and treatment
* Encourage the child to observe general basic ear hygiene
* Provide the child with all details of the lesson in written form. The child’s academic performance can be improved with proper classroom management and use of technical and teaching aids is a must for teaching children with hearing impairment

**How to help children who are deaf**

Majority of children who are deaf may need special need education where total communication philosophy is the main communication strategy. In addition to communication you can also assist a child who is deaf as follows:-

* Advising on school placement, Encouraging the child to observe general ear hygiene, Encouraging the family and the communication to learn the communication techniques used by the child for effective communication

***CHILDREN WITH VISUAL IMPAIRMENT (V.I)***

These are children with problems in the structure and of functioning of the eye. Visual problems range from total blindness to only slight visual impairment children who are visually impaired can be classified into two main categories

* Children who are blind Children with low vision

***CHILDREN WHO ARE BLIND***

Children who are blind have either totally lost their sense of vision or those who are only able to perceive light

Educationally children who are blind are those who learn through Braille without the use of vision, although they perceive light, which is an advantage and can be used for orientation and mobility

**CHILDREN WITH LOW VISION**

The world health organization (WHO) defines low vision as having as ‘’ having a significant visual handicap but also significant vision that be used”

Educators give an educational definition and say “anybody with low vision is still severely visually impaired after correction, but may increase visual functioning through the use of optical aids, non-optical aids, environmental modifications or low vision techniques. Children with low vision can use their vision for many school learning activities. Under varying conditions, depending on the amount of light contrast and individual differences, such children can be trained to look and become visual learners

**CAUSES OF VISUAL IMPAIRMENT**

Visual impairment may be caused

* Before birth ( pre-natal stage),During birth(peri-natal stage), After birth (post-natal stage)

**Causes at pre-natal stage**

* Hereditary, Poor nutrition( unbalanced diet and lack of vitamins during pregnancy), Venereal diseases such as syphilis and gonorrhea, HIV AIDS
* Diseases such as rubella (German measles) and those involving very high fever
* Use of certain drugs such as Quinine, aspirin and antibiotics
* Exposures to X-ray, especially during the first three months of pregnancy
* Misuse of narcotic drugs, cigarettes and alcohol, Incompatibility of mother child blood type ( the Rhesus factors incompatibility), Accidents

**CAUSES OF VISUAL IMPAIRMENT DURING BIRTH (PERI- NATAL STAGE)**

* Prolonged delivery/labour resulting to oxygen deficiency and head injuries
* Cord strangulation, Trauma, Pre-mature birth, Low birth weight
* Breech birth ( this is where baby’s legs come out first during delivery), Lack of oxygen during birth, Neon-natal jaundice, Head injuries caused by misuse of delivery instruments, such as forceps delivery,
* Age of mother where she is either too young or too old, Venereal diseases in mother, such as syphilis and gonorrhea and Poor hygiene

**CAUSES OF VISUAL IMPAIRMENT AFTER BIRTH (POST-NATAL STAGE)**

* Poor nutrition, such as unbalanced diet and deficiency of iodine and vitamins in children
* Accidents, such as head injuries, brain damage or causing loss of limbs
* Childhood diseases such as meningitis and measles
* Eye diseases such as, like cataracts, trachoma and glaucoma
* Misuse of drugs (medicines)
* Under stimulation, such as when the child is too little touched, cuddled, hugged, talked to, or when a child is hidden in a dark room over a long time
* Poor hygiene brought about by flies , polluted or infected drinking water and hygiene of the face, eyes and ears
* Exposure to poisonous agents and chemicals such as pesticides, food and medicine poisoning
* Accents (traffic, industrial and domestic)

**INDICATORS OF VISUAL IMPAIRMENT**

* These are some of the indicators that may point to a child with visual impairment, Has problems reading and copying from the chalkboard, Reads and writes with their head titled to one side, Reads book held very close to or very far from the eyes, Complains about too much or too little light in the classroom, Regularly makes quick eye movements from side to side, Trips over things on the ground which you would expect them to see, Has difficulty in grasping objects that are already in front of them, Complains of double vision, Has watery or reddish painful eyes, Complains of not seeing well, Has an omission while reading or writing, Keeps a place on a page using a finger, Has eyes that do not fixate ( voluntary eye movement), Withdraws from the rest of the learners, Is unable to watch something moving near the face, Has clumsy movements and poor balance when walking, Has white patches in the center of the eyes, moves the head instead of the eye while reading, has difficulty in reading some or all letters, write using very small letters

**PROBLEMS FACED BY VISUALLY IMPAIRED LEARNERS IN AN INCLUSIVE SETTING**

* Difficulty in reading and copying from chalkboard and therefore may lay behind others in academic activities
* Difficulty in reading books written on ordinary prints
* Difficulty in finding their way within the class and school
* Difficulty in identifying objects and posters and other learning materials within the class
* Difficulty in learning concepts that have to be perceived through sight such as colour and sky

**HOW TO HELP CHILDREN WITH VISUAL IMPAIRMENT**

There are three levels of interventions

* Medical intervention, Educational intervention, Psychological intervention

**Medical intervention**

Most eye diseases and defects can be prevented or treated. Children therefore be referred to hospitals that have eye units to undertake

* Cataracts extractions, Trachoma and other eye treatment, Provision of eye glasses to improve vision

**Educational intervention**

* Move the child nearer to the chalkboard in the classroom or in position which allow him/her to participate well in learning activities, Provide large print materials, Advise parents to provide optical low-vision devices, Advise them to participate in as many that school activities as possible, Arrange the classroom in such a way that there is enough lighting in them remember, some may not tolerate bright lights

Children who are blind and those whose vision is severely impaired can be helped through

* Orientation and mobility training, Training in typing, braille reading and writing, Training on activities of daily living, Training on listening skills, Provision of tactile diagrams

**CHILDREN WHO ARE DEAF BLIND**

What is deaf blindness?

This is a condition where person have impairment of both vision and hearing some maybe totally blind while others have useful vision. At the same time they can be deaf or hard of hearing

**WHO ARE CHILDREN WITH DEAF BLINDNESS?**

There are children who have severe degree of visual and auditory problems. This makes it difficult for them to utilize the two senses of seeing and hearing properly. some children who are totally deaf and blind while others have residual hearing and residual vision

**CHARACTERISTICS OF LEARNERS WHO ARE DEAF AND BLIND**

* It may be difficult for him/her to, Look at you, Respond to your smile, Follow a moving object with the eyes, Walk, and dress himself/herself, Grasp objects in front of him/him or handed to him/her, Look out pictures and read a text in books , Turn their heads towards sound, Respond where you call them, Understand what you may say to them, Develop spoken language

**HOW CAN YOU ASSIST LEARNERS WHO ARE DEAF BLIND IN A LEARNING ENVIRONMENT?**

You may use some of the following ways:-

* Showing positive attitude – this will greatly encourage the learner to be active and explore his/ her surrounding, Adapting the curriculum, Having personal contact with the learner to help him develop security and personal relationship which is necessary for further development, Provide them with hearing aids/eye glasses to enable them see properly.

**LEARNERS WITH COGNITIVE DIFFERENCES**

***What are cognitive differences?***

Learners with cognitive differences are classified into the following categories.

* Mental disabilities
* Giftedness and talentedness
* Specific learning difficulties
* Autism

Let us now look at each of these groups briefly.

**LEARNERS WITH MENTAL DISABILITIES**

***Who are learners with mental disabilities?***

You might be already aware that these are learners with substantial limitations in present functioning. They are characterized by significant sub-average intellectual functioning, existing concurrently with related limitations in two or more of the following applicable adaptive skill areas:

* Communication, self-care, home living ,social skills, community use, self-direction, health and safety, functional academics, leisure time and work

**Functionally, learner with mental disabilities will experience serious setbacks in learning, adapting and adjusting in various environments including home and school.**

Characteristics of learners with mental disabilities

Some of the possible characteristics you may find in learners with mental disabilities may include:

* being slow in acquiring and developing skills such as speaking and walking
* being unnecessarily slow in carrying out tasks
* not able to transfer the same activities into different situations
* not able to understand what is said or follow instructions
* failing to acquire, understand and use language to express need
* failing to develop social and emotional relationships
* having retarded motor development
* having difficulty in remembering experiences or things learnt
* lacking the ability to connect a picture or object with an activity or word or name
* having excessive purposeless movements in class, home or play field
  + having difficulty in paying attention or focusing on an activity to its completion
  + lacking rhythm of movement
  + having attention problems
  + memory and thinking difficulties

Educational implications for learners with mental disabilities

During school years, they show extreme difficulties in academic subjects and usually are able to progress beyond class two. They may however:

* + Learn self-help skills like feeding, bathing, dressing, selecting daily clothing, preparing some foods, washing and ironing clothes for themselves.
  + Attain social adjustment in the family and the neighborhood. For example, they may learn to share items and ideas with others and especially family members as well as cooperate in a family unit and in the neighborhood. They may learn the need to respect other people and property, and have the ability to protect themselves from common dangers in the home and the neighborhood.
  + Attain economic usefulness in the home, in a workshop or in the neighborhood. For example, they may assist in chores around the house and may do routine jobs under supervision
* **Intervention strategies for learners with mental disabilities**
* Intervention strategies are methods and techniques you may use to teach learners with mental disabilities.
* **Children with mild mental disability**
* Ensure that you teach skills that will enable them to be:
* • Socially competent, Personally adequate, Academically functional
* When you are teaching, arrange tasks in small sequential steps, where each step is taught and checked to ensure that the child finds it interesting and successful. The emphasis should be on developing the child's:
* • Self-confidence, Language skills, Good habits of health, safety, work and play, Vocational skills
* **Children with moderate mental disability**
* These children should be supported to develop habits of activities of daily living, such as, self-care, cleanliness, health, eating behavior. They need also to be helped in developing:
* • Communication skills, Ability to follow directions, Social skills
* **Children with severe and profound mental disability**
* Home or hospital visitation programmers may be required for these children who often cannot go to school. You may therefore provide the following training:
* • Communication skills, Motor skills, Social skills

**Characteristics of giftedness and talentedness**

The following are some of the possible characteristics of giftedness and talentedness:

* + Leading in academic and other activities
  + Learning rapidly, easily and with less repetition
  + Showing a lot of creativity and always generating a variety of new ideas
  + Enjoying reading books meant for older readers
  + Having unusually advanced vocabulary and using terms in meaningful ways
  + Displaying a great deal of curiosity about many things and constantly asking questions about anything and everything
  + Appearing to have behavior difficulties due to their autonomy and sensitiveness in an environments where non-conformity is not tolerated
  + Evaluating facts and arguments critically
  + Studying difficulty subjects because they enjoy the challenge of learning
  + Having diverse, spontaneous and frequently self-directed interests
  + Showing special and superior ability in manipulating materials from the environment in making unique models
  + Displaying keen sense of humor even in situations where others may not see
  + Having high reasoning abilities and passing judgment about people, events and things
  + Having self-confidence with peers as well as adults
  + Incorporating a large number of elements such as art work, good role playing, dramatizing and music
  + Showing exceptional leadership abilities
  + Being very articulate or verbally fluent for their age.

**Educational Implications of learners who are gifted and talented**

Some learners who have high intelligence are creative and have special talents. As they are different from others in the class, they will have their own unique challenges. Due to their high intelligence, these learners do not fit well with their peers. They may be unable to develop positive interpersonal relationships and become withdrawn or loners. Some teachers find them too challenging and often misinterpret their behavior.

• engage in some disruptive behavior in class. This may be because the learner finds class work and other activities meant for their age group too easy. The learner will therefore finish the assigned task within a short time and due to boredom may engage in disrupting classroom activities.

• find themselves too dominate in group or class discussions to an extent the others will give little or no contribution at all. This does not augur well with the other learners.

***Unless you find outlets, these learners who are gifted and Talented may channel their energies and intelligence into unfavorable social habits such as making unnecessary noise in class or even taking drugs.***

**Intervention strategies for learners, who are gifted and talented,**

***What are the qualities of a good teacher of children who are gifted and talented?***

For you to help the learner who is gifted and talented, you need to:

* + Recognize and accept the learner's special abilities
  + Encourage the learner to explore his fields of interests
  + Help the learner to develop or enrich his social confidence
  + Avoid imposing expectations and demands that are beyond the learner's level of ability
  + Avoid having negative attitudes towards the learner reinforce the learner positively.

***Learners who are gifted and talented are just like any other. They have basic needs like other learners. You also need not be gifted to deal with them. However, you need to be, tolerant, loving, understanding, flexible and competent, have broad range of interests and skills, creative and ready to learn.***

***How can you assist a learner who is gifted and talented in a classroom environment?***

There are several possible ways in which a learner that is gifted and talented can be educated. As a teacher, much will depend on your creativity and classroom organization. Each learner should be considered and treated as an individual. There are three main ways in which a teacher may assist a learner who is gifted and talented. These are by providing the learner with:

• Ability grouping, enriching experiences, Acceleration programmers.

***What is ability grouping?***

Ability grouping includes the following approaches:

* regular classroom with cluster, regular classroom with pullout, individualized classroom, special class with some integrated classes, special class, special school.

**Enriching experiences**

Enrichment is the addition of disciplines or areas of learning not normally found in the regular curriculum.

Enrichment experiences allow each learner to investigate topics of interest in depth. Some of these may be completed during classroom time. **For example**, if you are teaching Geography in standard five, you can ask the learner who is gifted and talented to make a model using the knowledge learned.

**Acceleration programmers.**

Acceleration is any process that leads to the learner's more rapid movement through the regular programmer of a regular school. It may include:

* + early school entrance/admission, grade (class) skipping, planned completion, for example of three grades in two years, early advanced placement in college or any other arrangement that leads to the learners completion of the regular programmers in less than the normally required time.

Other approaches that you may use to help a learner who is gifted and talented are:

* analyzing your instructional programmer to avoid them becoming bored
* providing special materials and or activities beyond the regular curriculum
* designing enrichment activities which should support the child in learning to relate and evaluate facts and ideas to think originally, to work through complex problems and issues and apply understanding to new situations
* giving the child more responsibilities that are challenging
* being a good role model
* increasing individual attention
* promoting creativity by stimulating the child's awareness of the environment
* exposing the child to a wide range of experiences on a personal level
* acknowledging the child's work or efforts

***A learner who is gifted and talented usually does much better than learners of same age group and hence requires services or activities not ordinarily provided to the average learners. The gifted and talented learners may be good in one or more areas that give promise of future high-level achievement.***

**Learners with specific learning difficulties**

These refer to conditions that affect academic performance in learners. Learners with specific learning difficulties look absolutely normal but it is quite difficult to pick them out amongst learners. They seem to have the ability to perform learning activities, yet they do not perform as expected. They develop slowly intellectually than other learners of the same age. This is due to their difficulty with the basic processes that are applied in understanding or using spoken language.

Learners with specific learning difficulties may have difficulties in one or more of the following areas.

* oral expression, written expression, reading and comprehension, basic reading, mathematical reasoning (calculation), listening, spelling

**Characteristics of learners experiencing specific learning difficulties**

Learners with specific learning difficulties may have one or more of the following:

* basic reading difficulties, basic writing difficulties, spelling difficulties, number concepts (arithmetic calculations) difficulties, comprehension difficulties, difficulties in self-expression, listening difficulties

**Other characteristics are:**

* being distracted most of the time and continuously moving around, being hyperactive or hypoactive, frequent changing of moods one time the learner is happy, and the next time he/she could be beating others, not paying attention in class, especially for longer periods of time, clumsy in activities involving fine motor, speech and hearing difficulties that have nothing to do with hearing impairment, memory and thinking difficulties'.

***You can only suspect that learners have specific learning difficulties when the difficulties have been observed over a long period of time. For example a learner may write 6 for 9 or b for d***

**Educational implications of learners with specific learning difficulties**

Difficulties associated with specific learning difficulties are easy to detect in a classroom situation. However, in order to detect these difficulties you need to know what to look for. In the classroom, these learners may be:

* having letter reversal problem. They may see "d" as "b" or "e" in the reverse, unable to write on a straight line, unable to copy from a given object, unable to perform simple arithmetic, have verbal expression problem, having reading problems, such as repeating words, confusing similar words and letters, having spelling problems, such as incorrect order of letters, having difficulties associating the correct sound with appropriate letters

**Intervention strategies for helping learners with specific difficulties**

There are several strategies that you can use to assist and support learners with specific learning difficulties. You can assist them by doing the following:

* + setting reasonable goals, providing clear instructions to the learners, making special physical arrangements for the highly destructive and hyperactive learners, Setting guidelines for appropriate classroom behavior and help the learners, to work towards them, Giving learning activities that are equivalent and suitable to their abilities and interest, Modifying the activities into smaller simple units, Planning the activities from the simplest to the most complex, Using visual aids in the classroom, Developing and implement individual programmers

**Learners with autism**

"Autism" is a developmental disability significantly affecting verbal and non-verbal communication, social interaction, awareness, and imaginative play-(valuable interest and behavior) generally evident before age three that adversely affects educational performance.

**Learners with autism may exhibit the following characteristics**

insistence on sameness; (resistance to change), difficulty in expressing needs; use gestures or pointing instead of talking, repeat words or phrases in place of normal or responsive language, laugh, cry, or show distress for no apparent reason, prefer to be isolated, have temper tantrums, difficulty interacting with others, resist being held or cuddled, have little or no eye contact, unresponsive to normal teaching methods, sustained inappropriate play, spin or line up objects, inappropriate attachments' to objects, apparent over-sensitivity or under-sensitivity to pain no real fears of danger, noticeable physical over-activity or extreme under-activity uneven gross/fine motor skills, not responsive to verbal cues; act as if they have hearing impairment although hearing is normal, pronoun reversal problems, unusual sleep patterns, food selectivity tendencies

**Education implication of learners with Autism**

Learners with autism display problems in cognition and behavior which have got underlining problems in perception and understanding. They have varied abilities, intelligence and behavior. Some do not speak; others have limited language that often includes repeated phrases or conversations while others have repetitive play skills which may have serious implications on education. From the age of three, children with autism are eligible for an educational program appropriate to their individual needs. Educational programs for students with autism focus on improving communication, social, academic, behavioral, and daily living skills. Behavior and communication problems that interfere with learning sometimes require the assistance of a knowledgeable professional in the autism field who develops and helps to implement a plan which can be carried out at home and school.

***Autism interferes with learning process in communication, social participation, cognition and sensory processing.***

Learners with autism are first and foremost, learners. They have more similarities to other learners than differences. Although some learners with autism encounter genuine instructional challenges, they learn well with appropriate, systematic, and individualized teaching practices.

To provide effective instructions for learners with autism, you should address the following:

* Ensure that the learners are in good health, free from pain and irritation, and in a safe, stimulating and pleasurable setting.
* Provide structure in the environment, with clear guidelines regarding expectations for appropriate and inappropriate behavior.
* Provide tools, such as written or picture schedules, to empire that the flow of activities is understandable and predictable,
* Adapt the curriculum to suit individual's characteristics but not on the label of autism.
* Focus on developing skills that will be of use in the learner's current and future life in school, home, and coin munity.
* Carefully plan transitions to new placements and new school experiences which usually require careful planning and assistance.
* Encourage parents and other family members to participate in the process of assessment, curriculum planning, instruction, and monitoring. They often have the most useful information about the student's case history and learning characteristics, so effective instructions should take advantage of this vital resource.

**Learners with communication difficulties**

Communication is the process of exchanging ideas, information and experiences between two or more people. It is a two-way process through which one sends a message and the other is expected to understand it and give a feedback.

***What is a communication difficulty?***

Communication difficulty is a condition, which either interferes with the smooth flow of one's speech and language or hinders the acquisition and development of such a language. This condition, in turn, interferes with the process of communication. This may affect the learner's learning and development.

The following are some of the possible indicators, which may help you, identify learners with communication difficulties. These may include, learners who:

• stammer or stutter, speak abnormally too fast, have disorganized sentence structure, substitute, omit, distort or add speech sounds, may have too high or too low tone, may have hoarse or nasal voice under normal conditions, do not engage in activities that involve talking, such as asking questions in class, tend to speak in isolated words or short sentences, have tendencies to breathe through the mouth, have difficulties in controlling saliva, have phonological awareness problems, produce sounds through the nose instead of through the mouth, produce sounds through the mouth instead of through the nose.

**Learners with emotional and behavioral difficulties**

Emotional and Behavioral difficulties (EBD) are emotions and behaviors that are not appropriate in relation to age and socio-cultural expectations. EBD significantly interferes with one's learning and development and the lives of others.

EBD's are classified into:

* attention deficit and hyperactive disorders, aggression, social problems, conduct disorders, personality disorders, juvenile delinquency

***What then do you understand by the word “behavior”?***

Behavior is anything that a person does or says. Some commonly used synonyms include activity, action, performance, response and reaction. Since everyone acts, performs and reacts at some particular time, it means everyone has behavior......?

***What then does "emotional and behavior difficulty" mean?***

Emotional and behavior difficulty are a deviation from appropriate behavior for a certain age, which significantly interferes with the learner's learning and development or the lives of others.

Practically, all learners display age-appropriate behavior at one time or another. As a teacher you may have come across learners who seem to be unhappy or distressed. You may have also met some who are aggressive. It is therefore not right for you to conclude that such learners have emotional and behavior difficulties.

We can thus summarize emotional and behavior difficulties as behaviors which:

• go to the extreme and are intensely inappropriate, are chronic and persistent, are unacceptable because of social or cultural expectations.

***Who are learners with emotional and behavioral difficulties?***

These include learners who:

* have learning difficulties which cannot be explained through intellectual, sensory and health difficulties
* Are unable to build or maintain satisfactory interpersonal relationships with family members, peers and teachers
* Have tendencies to develop physical symptoms or fears associated with personal or school difficulties
* Show general pervasive mood of unhappiness or depression,
* Have inappropriate types of behavior or feelings under normal conditions

**Characteristics of emotional and behavior difficulties**

Some kinds of behavior that can make you are sensitive to the possibility of emotional and behavior difficulties are, learners who:

• are most of the time lonely and have no friends

• have inappropriate types of behaviors or feelings under normal circumstances, such as:

* + verbally and physically aggressive and threatens others, disruptive, destructive, dominating and hyperactive, inattentive, blames others and seeks attention, disobedient and rude, depressed, cries easily and extremely shy, bored and untidy, do not take criticism positively
* are unable to build or maintain satisfactory interpersonal relationships with peers and teachers
* are unable to learn that cannot be explained by intellectual, sensory, motor or health factors
* are absent from school for no apparent reason
* steal from other learners
* have temper tantrums at late childhood and adolescence
* have tendencies to develop physical symptoms of pain or fears associated with personal or school difficulties
* may have temper tantrums at late learners hood and adolescence
* may consistently consider themselves as stupid and incapable with words such as "I don't know", " I can’t’ do it" and "I don't understand

***Since most learners will show emotional and behavior problems at one time or another, the criteria for determining whether learners have an emotional and behavior difficulties should be based on:***

***• How often the behavior is repeated, how intense the behavior is, how inappropriate the behavior is***

**Educational intervention strategies of learners with emotional and behavior difficulties**

In order for you to help learners with emotional and behavior difficulties, you need to use various approaches. These approaches include:

* behavior modification, individual and group counseling, creating good school climate, explaining to the learners that you expect a reasonable standard of behavior to be maintained, telling the learners what you expect of them in a firm and clear way, rewarding the learners' appropriate behavior and ignoring inappropriate behavior as stipulated by the school rules, structuring the learning environments so that the leaners/have no room for displaying the inappropriate behavior, guiding and counseling play as a major role in improving the behaviors

**Learners with physical and multiple disabilities**

Physical disabilities include conditions that may make it difficult for learners to move or to manipulate the physical environment, interact freely and communicate easily. These may be put into two major groups, namely:

* Orthopedic disabilities, Neurological disabilities.

**Learners with orthopedic disabilities**

These are learners with motor impairment resulting from difficulties related bones and muscle systems. Muscles and bones act in a coordinated way to effect the movements of body parts. Bones and muscles suffering deformities will display I movement which is also uncoordinated. Examples of learners with orthopedic difficulties who may be found in our schools are those with.

Amputation, scoliosis, muscle cramps, brittle bone, disease -ontogenesis imperfect

**Learners with amputation**

Amputation refers to a condition where limbs are greatly reduced in size or missing at birth or to limbs that have been lost or severed in the course of one's life. Amputation may be either acquired or congenital. A person with one or more of the limbs missing is called an amputee. The diagram bellow illustrates an amputated leg.

Amputees may encounter various difficulties. These may include difficulties in:

* Walking, writing, turning pages of books if all limbs are amputated, feeding, dressing, playing

**Educational implications faced by learners with amputated limb or limbs**

Learners with amputated limbs may be faced with numerous difficulties in an inclusive setting. Some of these difficulties will include the following:

* + inability to walk properly, inability to hold pens if upper limbs are missing, mobility to turn pages in a book to read, inability to feed and dress himself/herself

**Intervention strategies to support learners with amputated limbs**

Learners with amputated limbs have normal intelligence and can therefore integrate and learn well in a regular school but with some modifications and adaptations of the classroom and environment. Some of the intervention measures include:

* rehabilitation and provision of facilities that will facilitate performance of learning tasks, such as:
* mobility and adaptive devices, for example prosthesis (artificial limbs) for those with lower limb amputation, crutches, and walking sticks
* typewriters, pencil holders, book holders, head pointers, page turners
* Training in the proper use of mobility and other adaptive devices
* Adapting suitable materials for the learners
* Adapting physical education activities to ensure maximum fitness and exercise
* Allowing them extra time to complete their tasks, if need be>.
* General nursing care
* Encouraging the learner to learn to live with and accept his/her condition
* Advising the parents/guardians to take learner to health centers for checkups in case of sores due to prosthesis.'

**Learners with brittle bone disease**

Brittle bone disease is an inherited bone disease characterized by a defective development in the quantity and quality of bones (i.e. the bones fail to grow into normal length and width). They are weak, soft and fragile.

**Characteristics of learners with brittle bone disease**

You will observe the following in learners with brittle bones:-

* Keep on getting fractures from time to time in school and at home,
* mobility problems or difficulties to walk around
* may have writing problem
* stunted growth]

**Educational implication encountered by learners with brittle bone disease**

Due to the delicate skeletal framework of bones, learners with this problem may experience some of the following problems:

* keeping on getting fractures from time to time
* missing class regularly due to fractures and hospitalization
* having mobility difficulties
* having writing difficulties
* not able to participate in strenuous learning exercises such as physical education, games and athletics

***Teachers should be aware of the difficulties facing a learner with brittle bone disease, whereby physical education and other related strenuous activities may not be possible.***

**Intervention strategies to support the children**

Learners with brittle bone disease have normal intelligence. They can therefore learn in a regular school but with some adaptations such as:

* ensuring safety in the classroom and the environment to minimize accidents
* avoiding vigorous exercise that may affect the bones
* availing mobility and adaptation devices for those who may require them
* providing alternative passive activities, such as board games and cards
* making them to understand their weak bone conditions in order to take care of themselves
* training those who may be using adaptive and mobility aids on how to use them properly

**Learners with muscular dystrophy?**

Muscular dystrophy refers to a genetic disease characterized by a gradual atrophy (wearing and weakening) of muscle tissues. The muscles of the body become progressively weaker and wasted without presence of a disease in the central nervous s> stem. The causes are not very clear but are assumed to be hereditary, where the. Who is usually the carrier although unaffected, transmits the disorder more frequently to the male children.

***The wearing and weakening of muscles begin in the shoulders and then lips and thereafter spreads to all other voluntary muscles.***

We can summaries muscular dystrophy as a condition which:

* + affects mainly boys, with mothers as carriers
  + does not show apparent disability at birth, but sometimes walking may be delayed for a few months
  + is usually first observed at about 2-3 years of life
  + renders learners incapable of walking by 10-11 years of age
  + is progressive and continues getting worse until premature death, which usually occurs between 15-30 years of age
  + has no known cure

**Characteristics of learners with muscular dystrophy**

You may identify a learner with muscular dystrophy by observing the following:

* difficulty in running, climbing and sometimes in lifting
* progressively becoming weak and wasted
* supporting himself/herself against the floor on his knees, walking or climbing using his legs when getting up
* distortion of posture with a tendency for the chest to curve forward
* awkwardness and difficulty in walking or running, with frequent falls
* difficulty in rising from a fall

**Educational implications faced by learners with muscular dystrophy**

Learner with muscular dystrophy may experience the following further compilations:

* hip and knee flexing contractions which may hinder the ability to stand straight and walk. The child may need devices such as long or short leg braces or a .d chair depending on the condition. Weakness of the arms and shoulders may not allow the use of crutches
* foot deformities may interfere with the ability to stand and may require therapeutic exercises to help strengthen joints and muscles

**Intervention strategies to support learners with muscular dystrophy**

There are various intervention procedures, which can minimize the effects of muscular dystrophy and help the child lead as normal life as possible. These include:

* providing therapeutic exercises which can help delay the onset of contractures
* counseling to prepare the child for the eventual outcome and also to develop positive image of himself/herself
* providing braces to prevent deformities and keep the chest upright to facilitate breathing
* giving drugs to ease some of the effects of the condition
* surgery to correct early deformities of lower limbs
* providing mobility and adaptive aids to facilitate their movement and learning
* avoiding vigorous exercises which may strain the muscles
* encouraging and stimulating them academically and socially
* guiding and counseling the parents to prepare them to cope with the deteriorating condition and eventualities of early death.

***Learners with muscular dystrophy have normal intelligence and can learn well in a regular school. However, provision has to be made for some adaptive aids and equipment because the learner may experience various complications as the disease progresses.***

**Learners with neurological disabilities**

It is good for you first to understand about neurological disabilities in neurological disabilities refers to paralysis or lack of function resulting from the dysfunction of the brain and the central nervous system.

The conditions associated with neurological disabilities include the following among others:

Epilepsy, cerebral palsy, spine bifida, hydrocephalus, poliomyelitis

Neurological disabilities refer to paralysis or lack of functions resulting from the dysfunction of the brain and the central nervous system.

**Learner with epilepsy**

Epilepsy is a brain disorder, which is characterized by a fit or sudden loss of consciousness, convulsions or seizures.

**Characteristics of learners with epilepsy**

Shouted once and collapsed, lost consciousness, the body became rigid with jerked movements, notice saliva drooling from mouth, observed loss of bladder and bowel control, experienced difficulties in breathing

After the convulsions you may also have noticed the following:

* The learner appeared confused, Performed purposeless activities such as rubbing arms or legs, experienced fear, anger and dizziness, Went to deep sleep after the seizure.

Some characteristics of epilepsy include having extreme convulsions and seizures during which the learners may:

* collapse and have sudden loss of consciousness and rigidity of the body followed, followed by jerking movements, may shout and emit, gurgling sounds, be unable to control saliva (may foam at the mouth), lose bladder and bowel control, experience difficult breathing, headache and vomiting
* suddenly stop what he/she is doing and briefly have a strange, empty, blank behavior, drop things, chew or smack hips
* appear to be confused and carry out purposeless activities such as rubbing, arms or legs, experience fear, anger, abdominal pains, dizziness or ringing in the ears, go to deep sleep after seizure

***Epilepsy is not a mental illness and cannot be passed from one person to another through contact.***

***What would you do if a learner has a seizure attack in your class?***

* Remain calm to avoid your learners from the same emotional reactions since seizure itself is painless to the learners.
* Never try to restrain the learners because nothing can be done to stop a seizure it has begun.
* Clear the area around the learner so that no injury from hard objects occurs. Do interfere with the movements in any way.
* After the attack you may talk to the learner to help him to overcome the etiological trauma.
* Talk to other teachers and learners-and assure them that the condition is not contagious
* Refer the learner to hospital if he was not on medication
* Do not to force anything between the teeth. If the mouth is already open, a soft object like a handkerchief may be placed between the side teeth.
* Move the learner into a horizontal position. Loosen his collar; turn his/her head D the side for release of saliva. Place something soft under the head
* Do not call doctor unless the attack is immediately followed by another seizure or if the seizure lasts more than ten minutes
* When the seizure is over and the learner has gained consciousness, let him/her rest
* Inform the learner's parents about the seizure
* Turn the experience into a learning experience for the entire class. Explain what a seizure is, that is not contagious and that it is nothing to be afraid of. Teach the class to understand the learners, not pity him, so that classmates will continue to accept the learner as "one of them".

**Educational implications for learners with epilepsy**

Learners with epilepsy may experience some difficulties, which may affect their learning. These may include:

* negative perception by the society and peers who think that epilepsy is contagious
* the learner becoming disoriented due to frequent attacks thus failing to cope with academic work

**Intervention strategies to support learners with epilepsy**

Epilepsy cannot be cured but its effects can be minimized through:

* Referring the learner to hospital for medical treatment with drugs to control the condition

Talking to other teachers, peers and the community that epilepsy is not contagious. This would ensure support for such learners in school

First aid skills and proper nursing care, especially during attack

* making efforts to reduce emotional and psychological stress by encouraging the child to lead as normal life as possible

**Learners with cerebral palsy**

***What is cerebral palsy?***

Cerebral palsy is a disorder of the brain, which occurs as a result of Bram damage, or lack of development in the part of the brain controlling movement and posture.

**Characteristics of learners with cerebral palsy**

* Slowness in acquiring skills and knowledge in some learners
* Facial abnormalities and or drooling in some cases
* Stiffness or rigidity of body parts especially the wrists, hips, knees and ankles
* Increased muscle tension when the learner is excited or upset
* Abnormal position of the body
* Lack of muscle co-ordination
* Slow, wriggly or sudden, quick movements of the feet, arms, hands or face in excitement or in an effort to grasp something /
* Difficulty drawing straight lines due to involuntary movements
* Speech difficulties due to difficulty in controlling the muscles required to produce speech
* Poor balance and posture
* Awkward gross and or fine motor movements
* May suffer from convulsions or fits
* Poor eye-hand coordination especially in writing activities and low intelligence

**Educational implications for learners with cerebral palsy**

A learners suffering from cerebral palsy may experience some of the following difficulties:

* Difficulties in performing functions requiring the use of their hands and legs
* Communication difficulties due to weakness of the speech organ muscles
* Low intelligence as result of delayed milestone, which may affect their academic work.
* Hearing and sight problems which may affect their learning activities
* May suffer from convulsions or fits
* Learning difficulties especially in areas such as reading and writing

**Intervention strategies to support learners with cerebral palsy**

The damage to the brain that leads to cerebral palsy cannot be repaired. However, affected individuals can be supported to become independent in life through:

* Providing suitable therapeutic exercises and mobility and functional or supportive aids and nursing care-
* Giving psychological counseling and guidance
* Referring the child to other professionals such as occupational therapists and physiotherapists
* Providing activities to develop eye-hand coordination
* Encouraging them to use speech and for those who cannot produce intelligible speech, devise for them other modes of communication such as communication boards, bliss symbols, sign language or gestures.
* Providing appropriate learning and technical aids and adapted physical education and sports equipment
  + - * Providing them with mobility devices such as crutches, walking sticks,
      * Standing/walking frames and wheel chairs and training them on how to use them.
      * Providing them with alternative communication aids and mobility aids or other services
      * Organizing and preparing activities which will stimulate growth and development especially to children with delayed milestone
      * Enriching the classroom with a variety of educational resources to raise interest in the learners
      * Modifying the curriculum for them to learn at their own pace.

I hope you have seen in some learners a growth protruding at the lower back that looks like a swelling. This is spinal tissues which were exposed during fetal development. This condition is called spine bifida.

**Characteristics of learners with spine bifida**

* I hope you mentioned the following characteristics:
* Dark bags or lumps which develop at any level of the spine but in most common at the level of the waists
* Lower limbs paralyzed and have little or no sensation, so burns or pressure sores may develop without the learners being aware of them
* One or both hips may be dislocated
* May develop club foot
* Poor urine and bowel control
* Water developing in the brain and in the head which may enlarge leading to hydrocephalus (unusually big head). This may lead to brain damage.
* Poor visual perception and lower intelligence as compared to an average learner in the class

**Educational implications faced by learners with spine bifida**

* May be absent from school to go to hospital frequently for neurological, urinary and orthopedic consultations and procedures.
* May have paralysis of the lower limbs and poor bladder and bowel control resulting in unpleasant odours which you and the rest of the class or school must learn to put up with.
* some learners especially those who develop hydrocephalus may have the following problems:
* lower intelligence, poor vision perception

***Many learners with spine bifida may have normal or near normal intelligence, so that in spite of absences from school, they can learn if proper adaptations and facilities arc provided according to their needs.***

Intervention strategies to support learners with spine bifida

Intervention measures can be taken to minimize the effects of spider bifida through:

* nursing care to prevent pressure sores, referring them to health centers for medical attention and surgery to:
* insert a shunt which drains the fluid from the head (for those with

hydrocephalus) > correct foot and spinal deformities; this is a condition acquired after birth due to head injuries , cerebral hemorrhage diseases such as meningitis and cerebral malaria.

**Education implications encountered by learners with hydrocephalus**

Low intelligence as compared to average learners**,** poor motor activities

* communication difficulties, poor visual perception, may be absent from school for many days since they have to go to hospital for medical checkups, may have poor body balance as a result of the big head which may result from falling from time to time

**Intervention strategies to support learners with hydrocephalus conditions**

For effective management of learners with hydrocephalus condition, you:

* should plan for activities which will improve:
* stimulation and development, communication skills, balance and coordination
  + be tolerant and encourage them in all possible ways
  + refer them for medical checkups
  + prepare individualized educational plan for the children
  + tram them on balance and coordination to prevent them from falling which may cause further injuries to the brain or fractures to the limbs

**Learners with Poliomyelitis (Polio)**

Polio is caused by a virus that destroys the nerve in the spinal cord. There is no cure for this condition but victims are advised to take long hours of bed rest to control the activation of the vims until they recover. Post-polio victims will have weak limbs and will require support for mobility.

**Characteristics of poliomyelitis (polio)**

* paralysis, degeneration (wasting away) of muscles and bones, stunted growth of the affected limb or limbs, non-progressive disorders of movements

**Education implication encountered by learner with poliomyelitis**

Learners with polio experience a variety of difficulties despite having normal intelligence. Some of these difficulties are:

* mobility problems which prevent them from moving about
* weaknesses in fine and gross motor muscles
* slowness in accomplishing academic tasks, such a writing notes and exercises
* frequent absenteeism from school due medical appointments for checkups, and surgical operations to correct deformities and physiotherapy

**Intervention strategies to support learners who suffered from poliomyelitis**

The following are measures that you can take to ensure full participation of learners with who suffered from poliomyelitis:

* Training them on how to use mobility devices and corrective appliances such as wheel chairs, crutches, special orthopedic boots, calipers and braces, modifying and adapting the classroom and school environment to facilitate free movements and use of other facilities in the school.
* Providing adaptive materials for those who require them such as head- pointers, page-turners, book-holders and pencil-grips.
* Ensuring that the chi**ld has good posture when writing at a desk or table.**

***Poliomyelitis can be controlled and even eradicated through immunization. It is therefore good for you to advise all parents in your school, and the community to take immunization seriously*.**

* **frequent inappropriate** behaviors, such as:
* rocking back and forth, self-stimulation e.g. by manual stimulation of their sex organs, self-injuring e.g. banging the head

**Characteristics of multiple disability learners ( research)**

**Educational difficulties faced by learners with multiple difficulties**

Some of the problems faced by these learners are:

* Communication difficulties. They cannot:
* express themselves or understand others
* gesture - meaningfully to pass messages to others
* Delayed motor and physical development. They generally experience the following difficulties:
* limited ability to move about independently
* inability to sit up or support themselves
* deformities of limbs and body posture
* bed ridden or home bound most of their lives or
* Frequent inappropriate behavior, such as:
* rocking back and forth, self-stimulation, for example by manual stimulation of sexual organs, self-injuring, for example, banging the head

Lack of self-help skills. They depend almost entirely on other people in self-help activities, such as:

* dressing themselves
* keeping themselves clean
* eating
* attending to their toilet needs

**Intervention strategies to support learners with multiple difficulties**

Most learners with multiple difficulties never fully outgrow their dependence on other people. The following are some measures that can be put in place to support these learners:

* Showing the learner love, patience and affection
* Assessing the learner to determine the skills the learner can perform and those required to be learnt. This is particularly the Activities of Daily Living, such as, eating, toileting and dressing
* Preparing individualized educational programmers using task analysis approach
* Providing special equipment and devices such as crutches and wheel chairs,
* Guiding and counseling the parents to accept and support the child.
* Referring the child to health centers for medical checkups and other services
* Designing and implementing individualized programmers
* Adapting the classroom/school environment to meet the needs of the learners
* Talking to other learners to develop positive attitudes towards these learners
* Designing toilets/latrines to accommodate the learner especially those using wheel chairs
* Make modification of the school environment for accessibility

**Learners with chronic health diseases**

This refers to learners with chronic diseases such as:

Asthma, burns, heart diseases hemophilia, tuberculosis, diabetes, sickle cell anemia

***What is asthma?***

Asthma is a chronic respiratory condition, which occasionally results to difficulties in breathing. It may be precipitated by allergy in the respiratory system. When in attach the victims produce a wheezing sound as they attempt to breathe in and out.

**Characteristics of asthmatic attacks**

* A clear running nose followed by dry, hacking and non- productive cough at the begging of an attack.
* Difficulty in breathing during attack
* Wheezing and excessive sweating
* Bluish coloration of nails, whitish coloration of the eyes, lips and ear lobes, if the attack is very severe
* Considerable reduced activity in case of a severe attack

**Intervention strategies to support learners with asthma**

Learners with asthma can always learn in regular schools, as long as teachers understand their difficulties. Below are some strategies that may be used to support learners with asthma:

* Eliminating any offending (allergic) substances as possible from the learner's environment
* Giving the learner water to drink to help ease the wheezing
* Encouraging the learner either to sit or stand but not he down, as he/she would be more relaxed while in a sitting position. While in a sitting position, the learner can be encouraged to sit forward m a chair with hands on knees, while breathing through the mouth
* Trying to ensure that the learner has taken any prescribed medication and be observant of any possible side effects or behavior changes.

**Learners with burns**

**B**urns as injuries to the skin and or underlying tissues as a result of being burnt by fire or chemicals.

***What are the possible effects of bums?***

• Psychological reactions on the affected part of the body, Ulcers, Withdrawal as a result of a feeling profoundly helplessness, Hypertension, Seizures, Unreasonable fear of fire, Scarred tissue leading to deformities, Shortened muscles and tendons at the joints, reduced function of the affected limbs, Low self-esteem

**Intervention strategies to support learners with burns**

Burns can leave very ugly scars and may reduce ones functional ability. These learners can be supported as follows:

• encouraging the learner to accept the deformity

• giving the learner a lot of psychological support

• talking to the learner's peers not to make fun of his/her deformity

• Providing supportive devices if necessary

• referring the learner to the health center for medical treatment and nursing care

• advising the parent/guardian to provide the learner with high-protein and vitamin diet during the healing period.

***Burns can leave very ugly scars and reduce ones functional ability. This may also affect the learners' self-esteem.***

**Learners with heart diseases**

Heart diseases as any abnormal condition of the heart. Heart diseases include irregular functioning of the heart, as well as diseases of the coronary arteries heart valves and heart muscular.

There are two main types of heart disease

* congenital heart disease, acquired cardiovascular disorders

***Congenital heart diseases are much more common than acquired heart disorders.***

**Characteristics of children with heart disease**

shortness of breath, for example panting during feeding or other activities, fatigue (weariness) or the learners being dull most of the time, chest deformity, poor growth and development result of tissues receiving insufficient blood and nutrients for growth, a blue appearance caused by the circulation of deoxygenated blood, fainting, chronic cough, chest pain, recurrent respiratory infections

**Intervention strategies to support learners with heart diseases**

**Medical intervention**

If a heart problem is confirmed, the following medical treatment can be carried out:

* drug therapy to cure and lessen the problem, surgery to correct heart valves and on genital defects such as hole in the heart, use of diet with reduced fat content, use of exercises as advised by the doctor

**Educational intervention**

Learners with congenital diseases attend regular schools. You should be aware that such a child may get exhausted easily, and lack stamina to carry out certain activities and may also be hospitalized frequently. There is need, therefore: avoiding giving the learner strenuous exercises which could exhaust him/her, understanding the medical history of the learner and reminding him/her on medical appointments and when to take prescribed drugs, monitoring the learner's academic performance and remediation on the work covered during his/her absence

**Learners with hemophilia**

You may define hemophilia as a condition marked inability of the blood to clot. In such cases blood clots very slowly or not at all. The causes are unknown but the condition is hereditary and is more common in boys than girls. It is transmitted genetically by mothers who are predominantly carriers.

**Characteristics of hemophilia**

* inability of the blood to clot, swollen joints and ankles for no apparent reason, under the skin and bruising easily

***All the above mentioned could weaken the body system resulting to disabilities.***

**Children living under difficult circumstances**

These are children who by reason of their circumstances exist in conditions that pose a serious risk to their lives for survival. They are not able to progress well in their learning like other learners. This is because they are affected by various factors including, political, socio-cultural, and economic and health difficulties. These factors hinder their physiological and psycho-emotional development. This in turn affects their learning and development.

**Children who are traumatized**

These are children who may have experienced torture or aggressiveness as a result of:

• War, Conflicts, Clashes.Such children may have also witnessed people being beaten, molested, raped, chased from their homes, killed or even forced to kill others.

**Characteristics of children who are abused and neglected**

**Physical abuse**

• Unexplained bruises in various stages, Human bite marks and bald spots, unexplained burns, Unexplained fractures

**Behavior indicators**

* withdrawal and aggressiveness, uncomfortability with physical contact
* early arrival at and late leaving school as if avoiding home, chronic runaway
* complaining of soreness or moving uncomfortably, clothing which is inappropriate for the weather

**Physical neglect**

**Physical indicators**

• Abandonment, Unattended medical needs, Consistent lack of supervision, Consistent hunger, inappropriate dress, poor hygiene

**Behavior indicators**

• Fatigue, restlessness, falling asleep in class,bstealing food, begging from classmates, Reports of no caretaker at home, Chronic absenteeism from school

**Sexual abuse**

**Physical indicators**

• Torn, stained or bloody underclothing, Pain or itching in genital areas, Difficulty walking or sitting, Bruises or bleeding in external genitalia, Venereal diseases, Frequent urinary or yeast infections

**Behavior indicators**

• Withdrawal and depression, Excessive seductiveness, Low self-esteem, self-devaluation and lack of confidence, peer relation difficulties and lack of involvement, Massive weight loss, Suicide attempts, Hysteria and lack of emotional control, Inappropriate sex play or premature understanding of sex, Feeling threatened by physical contact or closeness

**Psychological mistreatment**

**Physical indicators**

• Speech disorders, delayed physical development, Ulcers, asthma and severe allergies

**Behavior indicators**

• Habit disorders such as sucking and rocking, Antisocial and destructive manifestations, Passive and aggressive- behavior, Delinquent behavior, Developmental milestone

**Street Children**

"Street children” is a social term that refers to those children for whom the street has replaced the family and the home as the focal point of their existence and communal interaction. The children live in circumstances devoid of any protection, supervision or direction from responsible adults. The causes that bring children to the streets may be poverty and civil strife. Some parents are poor and are not capable of providing basic needs to their children.

Civil strife in most communities results in loss of moral attributes that include family breakage. These conditions may make children to go and live in the streets.

There are four primary groups of children whose existence revolves around streets. These are:

• Children on the street, Children of the street, Children who are completely detached from their families, Children of street families

**Children on the street**: These maintain good family ties while out there. They therefore return home in the evening after spending the day begging, working or engaging in petty offences on the streets.

**Children of the street**: These" have loose family contacts and spend some nights or days or part of the day on the streets and occasionally go back home

**Children who are completely detached from their families**: These children lead a gang life and live in makeshift shelters in the streets. In most cases they have completely no contacts with their families.

**Children of street families:** This is the most recent group of street children to emerge. It consists of children who are born and bred on the streets. They know no other home.

**Prevalence of street children**

**Child laborers (Working children)**

Child labor has been defined by International Labor Organization (ILO) to mean,"Any economic activity performed by a person under the age of 15 years and that is detrimental and exploitative”.Child labor is therefore any work that interferes with children's upbringing and education. The working children are spread across various economic sectors with the main concentration being in domestic service. They also work in agriculture, quarrying and mining, fishing, children prostitution, hawking, shoe shining, car washing, begging, and scrap metal and garbage collection. Those who go to school may find their responsibilities as a burden and end up dropping out. The others may have no time to be children

**Refugees and displaced children**

Many people get displaced as a result of political upheavals such as wars, tribal clashes and natural calamities. These conflicts resulted in great loss of property and disruption of settled community life. This loss as well as being torn away from their homes and sometimes separated from their parents and peers resulted to low self-esteem leading to difficulties in learning and participation in development activities.

**Children who are homeless and unaccompanied**

***Who are homeless and unaccompanied children?***

Children who are homeless and unaccompanied are those without homes and have nobody to take of them. Children may end up in this situation as result of turmoil caused by wars and/or natural calamities, like earthquakes killing their parents or relatives and destroying their slums

This can also be brought about by breakages in families. These children will be affected socially and psychologically resulting to difficulties in learning. Figure 24 shows a homeless child in the slums

**Orphaned children**

These are children who have lost both parents. Sorrow, guilt and or anger resulting from having lost both parents may overwhelm such learners. Parents might have died from illnesses and accidents. In 2001, the number of HIV and AIDS orphans under the age of 15 years was estimated to be more than 1 million in Kenya. Most of these children lack proper care and supervision they need at this critical stage of their development.

Orphaned children have to content with discriminatory practices that ostracize them as outcasts. They are denied the essential family care by reason of death or terminal illness of their parents. Many children end up in the streets from where they are likely to come into conflict with the law. These learners will have neither peace of mind nor motivation for learning.

**Children affected and or infected by HIV and AIDS**

Who are affected or infected children by HIV and AID&?"

Those who are infected are those who have acquired the syndrome which weakens their immunity system against diseases. It is estimated that, about 30-40% of babies born to infected mothers will also be infected with HIV and AIDS. Most of these babies succumb to AIDS and die within two years. Those children who survive often experience social and psychological difficulties such as being stigmatized by the society thus affecting their self-esteem.

**Child mothers**

These are young girls who become pregnant and give birth before maturity, that is, below the age of 18. Those who are at school are forced to drop out. i hose who are not at school become mothers before the rightful age the new responsibility of being a mother affects the children's ability to learn and participate in development activities.

**Children from deprived and or rich families**

***Who are children from deprived or rich families?***

In rich families, some learners may develop behavioral difficulties as a result of lack of proper attention, involvement and care. They may also lack the guidance in the use of resources. There may be rigidity in decisions made by parents. This results to low self-esteem as well as lack of independence, which may affect their learning.

On the other hand, learners from poor families may drop out of school as a result of poverty. Such learners may end up in the streets, as laborers or prostitutes. This therefore affects their learning.

**Children heading families**

As a result of wars, internal conflicts and tribal clashes, natural disasters, displacement and loss of parents, learners may be left on their own to fend for themselves. They take on adult responsibilities of looking after their young sisters and brothers. The new and demanding responsibilities may affect their abilities to learn and also develop.

**Child soldiers**

These are learners under the age of 18 years who are recruited in the armed forces. They carry and use guns and are confronted by vast experience that they do not need at that age of development. They have misled a stage in their lives of being learners. This greatly affects their learning and development.

**Children from pastoralist communities**

Some districts in Kenya and other countries within the region are under a predominantly pastoralist economy and nomadic lifestyle. These districts are classified as Arid and Semi-Arid Lands (ASAL). These areas are characterized by severe hardships, including:

* Hostile climate, Drought and famine, Livestock rustling and conflicts over pasture and water resources, Banditry and general insecurity.

The combination of natural factors and inadequacies in planning has severely limited pastoralist learner's enjoyment of their basic right to survival, human development and participation. The greatest challenge faced by these children is limited access to basic social services, particularly education and health.

**INCLUSION IN TEACHING**

**Inclusion** in education refers to all students being able to access and gain equal opportunities to education and learning.

It arose in the context of special education with an individualized education program .

It is built on the notion that it is more effective for students with special needs to have the said mixed experience for them to be more successful in social interactions leading to further success in life.

The philosophy behind the implementation of the inclusion model does not prioritize, but still provides for the utilization of special classrooms and special schools for the education of students with disabilities.

Inclusion has two sub-types: the first is sometimes called **regular inclusion** or **partial inclusion**, and the other is **full inclusion**. *Inclusive practice* is not always inclusive but is a form of integration.

For example, students with special needs are educated in regular classes for nearly all of the day, or at least for more than half of the day. Whenever possible, the students receive any additional help or special instruction in the general classroom, and the student is treated like a full member of the class. However, most specialized services are provided outside a regular classroom, particularly if these services require special equipment or might be disruptive to the rest of the class (such as speech therapy), and students are pulled out of the regular classroom for these services. In this case, the student occasionally leaves the regular classroom to attend smaller, more intensive instructional sessions in a separate classroom, or to receive other related services, such as speech and language therapy, occupational and/or physical therapy, psychological services, and social work. This approach can be very similar to many mainstreaming practices, and may differ in little more than the educational ideals behind it.

In the **"full inclusion"** setting, the students with special needs are always educated alongside students without special needs, as the first and desired option while maintaining appropriate supports and services. Some educators say this might be more effective for the students with special needs. At the extreme, full inclusion is the integration of all students, even those that require the most substantial educational and behavioral supports and services to be successful in regular classes and the elimination of special, segregated special education classes. Special education is considered a service, not a place and those services are integrated into the daily routines and classroom structure, environment, curriculum and strategies and brought to the student, instead of removing the student to meet his or her individual needs. However, this approach to full inclusion is somewhat controversial, and it is not widely understood or applied to date.

Inclusive education models are brought into force by educational administrators with the intention of moving away from seclusion models of special education to the fullest extent practical, the idea being that it is to the social benefit of general education students and special education students alike, with the more able students serving as peer models and those less able serving as motivation for general education students to learn empathy.

Implementation of these practices varies. Schools most frequently use the inclusion model for select students with mild to moderate special needs. Fully inclusive schools, which are rare, do not separate "general education" and "special education" programs; instead, the school is restructured so that all students learn together.

Inclusive education differs from the 'integration' or 'mainstreaming' model of education, which tended to be a concern.

**Mainstreaming**, in the context of education, is the practice of placing students with special education needs in a general education classroom during specific time periods based on their skills. This means students who are a part of the special education classroom will join the regular education classroom at certain times which are fitting for the special education student. These students may attend art or physical education in the regular education classrooms. Sometimes these students will attend math and science in a separate classroom, but attend English in a general education classroom. Schools that practice mainstreaming believe that students with special needs who cannot function in a general education classroom to a certain extent belong in the special education environment.

To avoid harm to the academic education of students with disabilities, full panoply of services and resources is required (of education for itself), including:

* Adequate supports and services for the student
* Well-designed [individualized education programs](https://en.wikipedia.org/wiki/Individualized_education_program)
* Professional development for all teachers involved, general and special educators alike
* Time for teachers to plan, meet, create, and evaluate the students together
* Reduced class size based on the severity of the student needs
* Professional skill development in the areas of cooperative learning, peer tutoring, adaptive curriculum
* Collaboration between parents or guardians, teachers or para- educators, specialists, administration, and outside agencies.
* Sufficient funding so that schools will be able to develop programs for students based on student need instead of the availability of funding.

**Factors that can determine the success of inclusive classrooms;**

* Family-school partnerships
* Collaboration between general and special educators
* Well-constructed plans that identify specific accommodations, modifications, and goals for each student
* Coordinated planning and communication between "general" and "special needs" staff
* Integrated service delivery
* Ongoing training and staff development
* Leadership of teachers and administrators

**COMMON PRACTICES IN INCLUSIVE CLASSROOMS**

Students in an inclusive classroom are generally placed with their chronological age-mates, regardless of whether the students are working above or below the typical academic level for their age. Also, to encourage a sense of belonging, emphasis is placed on the value of friendships. Teachers often nurture a relationship between a student with special needs and a same-age student without a special educational need. Another common practice is the assignment of a peer to accompany a student with special needs at all times (for example in the cafeteria, on the playground, on the bus and so on). This is used to show students that a diverse group of people make up a community, that no one type of student is better than another, and to remove any barriers to a friendship that may occur if a student is viewed as "helpless." Such practices reduce the chance for elitism among students in later grades and encourage cooperation among groups.

Teachers use a number of techniques to help build classroom communities:

* Using games designed to build community
* Involving students in solving problems
* Sharing songs and books that teach community
* Openly dealing with individual differences by discussion
* Assigning classroom jobs that build community
* Teaching students to look for ways to help each other
* Utilizing [physical therapy](https://en.wikipedia.org/wiki/Physical_therapy) equipment such as [standing frames](https://en.wikipedia.org/wiki/Standing_frames), so students who typically use wheelchairs can stand when the other students are standing and more actively participate in activities
* Encouraging students to take the role of teacher and deliver instruction (e.g. read a portion of a book to a student with severe disabilities)
* Focusing on the strength of a student with special needs
* Create classroom checklists
* Take breaks when necessary
* Create an area for children to calm down
* Organize student desk in groups
* Create a self and welcoming environment
* Set ground rules and stick with them
* Help establish short-term goals
* Design a multi-faceted curriculum
* Communicate regularly with parents and/or caregivers
* Seek support from other special education teachers

**Inclusionary practices are commonly utilized by using the following team-teaching models:**

* **One teach, one support:**

In this model, the content teacher will deliver the lesson and the special education teacher will assist student's individual needs and enforce classroom management as needed.

* **One teach, one observe:**

In this model, the teacher with the most experience in the content will deliver the lesson and the other teacher will float or observe. This model is commonly used for data retrieval during IEP observations or Functional Behavior Analysis.

* **Station teaching (rotational teaching):**

In this model, the room is divided into stations in which the students will visit with their small groups. Generally, the content teacher will deliver the lesson in his/her group, and the special education teacher will complete a review or an adapted version of the lesson with the students.

* **Parallel teaching:**

In this model, one half of the class is taught by the content teacher and one half is taught by the special education teacher. Both groups are being taught the same lesson, just in a smaller group.

* **Alternative teaching:**

In this method, the content teacher will teach the lesson to the class, while the special education teacher will teach a small group of students an alternative lesson.

* **Team teaching (content/support shared 50/50):**

Both teachers share the planning, teaching, and supporting equally. This is the traditional method, and often the most successful co-teaching model.

**RESEARCH-Universal Design for Learning (UDL) - pedagogical practice (method of teaching)**