
Module for Certificate in Education Programme

EIN052SW: INTRODUCTION TO SPECIAL NEEDS IN EDUCATION

PROF. EMMANUEL KOFI GYIMAH



REPUBLIC OF GHANA



INSTITUTE OF EDUCATION, UCC

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INTRODUCTION TO SPECIAL EDUCATION

Currently, the educational agenda of the country include addressing the needs of diverse learners in the classroom. This course is therefore mounted to introduce the student to the concept of special needs and why it is important to educate persons with special needs. Also, the laws and policies that support the education of the person with special needs will be examined including international and national legislations. The course will further equip the student teacher with the requisite knowledge and skills for meeting the diverse needs of learners using appropriate assistive devices. Moreover, the course will discuss methods used in screening and referring persons at-risk for more thorough assessment. The role of stakeholders will be examined and how they can together contribute to creating a congenial classroom environment that fosters teaching and learning of all learners.

Course Objectives

On successful completion of the course, the student will be able to:

1. Explain the concept of special needs.
2. Account for the history of persons with special needs.
3. Describe the laws and policies supporting the individuals with special needs and their ethical implications.
4. Describe the roles of stakeholders in the life of persons with special educational needs.
5. Describe the equipment and materials required to facilitate the teaching and training of persons with special educational needs
6. Outline the procedures used in screening and referring persons at-risk of developmental disability.

UNIT 1: THE CONCEPT OF SPECIAL EDUCATION

The Unit introduces users and practitioners to the concept of special education and how to distinguish between special education and regular education. Among others, the unit will provide definition to special needs. Also, discussed is the rationale for special education as well as terminologies used in special education.

Learning Outcomes

By the end of the unit, the participant will be able to:

1. Explain the concept of special education.
2. Discuss the rationale for special education.
3. Explain the terminologies used in special education.

The Concept of Special Education

It is the type of education that seeks to improve the wellbeing of persons with special educational needs and disabilities. Heward and Orlansky (1992), define special education as individually planned, systematically implemented and carefully evaluated instruction to help exceptional learners achieve the greatest possible personal and self-efficiency and success in present and the future. By implication, special education, is for individuals who need a form of modification in their curriculum in order to help them succeed academically.

There is a distinction between special education and regular education. In distinguishing between the two, we use the concepts of **Who, Where, What** and **How**. The **'Who'** refers to the persons involved. In special education, they are those who deviate from the norm in terms of intellectual characteristics and the capacity to communicate and use their motor and sensory abilities. They include the intellectually disabled; the hearing and visually impaired; persons with physical and health disorders; the gifted and talented; persons with speech and language disorders; those with emotional and behavioural difficulties including persons with Attention Deficits Hyperactivity Disorders (ADHD) and Attention Deficits Disorders (ADD); the Autistic and Learning Disabled as well as those with multiple disabilities. The **'Where'** means the place where services are provided. In special education, we often place the children in special schools and categorically train teachers and service providers to teach them. The **'What'** connotes the nature of their curriculum as well as the assistive devices that is the equipment and materials used for their instruction and learning. The severe to profound intellectually disabled, for example, need to be taught self-help or functional skills or daily living skills. Then the **'How'** represents the ways they are taught. For example, while the blind are taught to communicate in braille, the deaf population receive instruction in sign language and finger spelling and do lip reading.

Rationale for Special Education

Why is it important to educate persons with special educational needs? We can answer this question by looking at the benefits there are for the child, teachers, parents and the society.

Child/Learner

- i. The following are discussed:
- ii. Building the capacity of the child to acquire knowledge and skills to live independently;
- iii. Helping the to read, write and communicate;
- iv. Developing self-esteem and becoming intrinsically motivated;
- v. Equipping the child with self-help and social skills to facilitate interaction;
- vi. Equipping the child with employable skills
- vii. Enabling the child to contribute to the socio-economic development and not being seen as a liability but an asset.

Teachers

- i. Knowledge about disabilities. For example, having understanding of the causes and effects of disabilities on learners;
- ii. Valuing and celebrating differences;
- iii. Opportunity to learn various ways in meeting diverse needs;
- iv. Teachers becoming more caring;
- v. There can be reduction in the use of corporal punishment;
- vi. Finding ways to improve the school physical and classroom environment; and
- vii. Reduction and/or elimination of labelling and stereotyping.

Parents

- i. Reduction in conflict between parents and child;
- ii. Parents develop more interest in the education and training of their wards;
- iii. Parents interest in their wards' school sees improvement.
- iv. Formation of advocacy groups and associations to promote the rights of the disabled.

Society

- i. Acceptance of persons with disabilities;
- ii. Becoming more responsive to the needs of the disabled;
- iii. Building facilities and structures to help in the training of the disabled such as rehabilitation centres to promote the training and development of the disabled.

Terminologies Used in Special Education

In special education, there are various terminologies that are used and they include the following:

At-risk: It is a situation where persons are likely to have disabilities if there is no early intervention to prevent it.

Community-based rehabilitation: Intentionally setting up centres within communities to train persons with disabilities to speed up their integration.

Disability: It is the loss or limitation of opportunities to take part in the normal life of the community on an equal level with others due to physical and social barriers.

Exceptional: It has to do with what society regards as a deviation from the norm in terms of how a person thinks, acts or feels.

Exclusion: It denotes a situation where schools deliberately remove certain children from the school and classroom.

Handicap: It is a social or economic disadvantage due to lack of a resource. It can affect both the disabled and persons without any apparent disability.

Inclusion: It is a way of thinking and acting that allows every individual to feel accepted, valued and safe. It allows pupils to study together in the same regular school and/or classroom with structures in place to facilitate their achievement.

Integration: It is the practice of placing persons who have special educational needs and disabilities but are treated differently. Sometimes, it is only their physical presence that is noticed just to enable them to acquire social skills. There is no opportunity for them to participate in the instruction.

Mainstreaming: It is the selective placement of learners with special educational needs in one or more regular education classrooms.

Least Restrictive Environment (LRE). It is the practice of placing the children in an educational environment where their needs can be adequately met.

Segregation: It is the deliberate attempt by society to create a separate educational environment for the training of the disabled, for example, setting up of special schools for those with disabilities.

Key ideas

- Special education is the type of education given to learners with special educational needs and disabilities.
- Learners with special educational needs and disabilities include learning disabilities, intellectual disabilities, the gifted and talented, the autistic, the hearing and visually impaired, those with language and speech difficulties, the physically and health impaired, and emotionally and behaviourally disordered.
- The terms used in special education include impairment, disability, handicap,

Reflection

1. How has the knowledge that learners with special educational needs and disabilities need to be educated helped me to relate to them?
2. In what ways can I help persons with special educational needs and disabilities develop their potentialities?
3. How can I use appropriate terminologies to describe persons with special educational needs and disabilities?

Discussion

- Who are persons with special educational needs and disabilities?
- Why is it important to educate learners with special educational needs and disabilities?
- What are the terminologies used in special education?

UNIT 2: HISTORY OF PERSONS WITH SPECIAL NEEDS

In this unit, we shall be learning about the history of persons with special educational needs and disabilities. Among others, we shall know how societies treated them and the factors that contributed to the delay in their education. Finally, the unit will discuss what societies can do to develop and /or harness the potentiality of the disabled.

Learning outcomes

By the end of the unit, the participant should be able to:

1. Give a historical account of how societies treated the disabled.
2. Explain the factors that contributed to the delay in educating the disabled.
3. Explain what societies can do to develop the capacity of the disabled.

Historical account of how societies treated the disabled

Available records reveal that globally, persons with disabilities were generally negatively perceived and poorly treated by societies. It is said that most societies took the life of the disabled for granted. They were neglected, maltreated, killed and in fact, inhumanly treated. It is further reported that they were stereotyped, stigmatized, oppressed, discriminated against, misunderstood, marginalized, and excluded. In fact, the account has it that in some countries of the western world, the disabled were used as court jesters where they entertained guests. In most African countries such as Ghana and Nigeria, a person born disabled was often thrown into the bush or drowned in water bodies. They were seen as liabilities and meted with punishment and various forms of atrocities. Waljee, Gyimah and Acheampong (2022) in a Training Manual developed for the Ghana Education Service under the sponsorship of the World Bank, note that before the 19th century, being disabled meant being disadvantaged by laws preventing participation in some areas of a community's social, political, and/or economic life. Their human rights were therefore violated with impunity. Strangely, in the 21st century, some records show that some families hide the disabled and do not create opportunity for their development.

Factors that led to the delay in their education and training

Among the factors that contributed to the delay in their education and training include the following:

- Ignorance or lack of understanding in disability issues especially the cause of disability. Lots of myths surrounded disabilities. For example, there were issues about witchcraftcy, mental illness, infections, violations of prohibitions such as taboos, effects of past sins, curses and so on.
- Many societies felt disability was inability since they thought the disabled could not contribute anything to socio-economic growth.

- Lack of science and technology to facilitate teaching and learning. For example, there were no teaching and learning resources such as Braille and hearing aids for the blind and deaf, respectively, as we have it in modern times.
- Lack of personnel to teach the disabled.
- Lack of laws and policies to support the development of the disabled.
- The presence of some socio-cultural assumptions and economic factors. For example, in some societies the disabled could not be elevated to the position of a Chief.
- Conditions within the school do not meet the needs of *all* learners.
- Parents' reluctance in sending their disabled child to school.
- Hesitation of some parents without children with disabilities accepting the disabled learner in their children's classroom.
- Lack of transport to get children to and from school.
- Schools not having enough resources (lack of teaching aids and equipment).

Factors that have led to their education and training

Among the factors that have contributed to their education are:

- The influence of western civilization and culture. The idea that we are all equal before God and that there should be no discrimination has improved social attitudes.
- Enactment of laws and educational policies such as Inclusive Education Policies. This has promoted how persons with disabilities should be catered for and the roles stakeholders can play to make their academic success academic. The influence of the World Bank, United Nations Children Fund (UNICEF) and UNESCO and some non-governmental organisations in supporting their education through the funding of programmes and activities come into play here. For example, in June, 1994 in Salamanca, Spain, the United Nations Educational, Scientific and Cultural Organisations (UNESCO) sponsored a Conference that championed the education of the disabled in regular schools. There was a clarion call for State parties to develop educational systems and use pedagogies that supported the education of persons with disabilities.
- Development of science and technology that has facilitated the use of assistive devices such as braille, hearing aids, wheelchairs and other forms of mobility and communication devices.
- More scientific explanations given to the cause of disability. We now know how genetic and environmental factors interact to cause disabilities.
- Establishment of special schools and categorical training of personnel to teach them.

- Encouragement of active parental involvement in the education of the disabled. Parents are not left out but do what they can to assist schools and local governments to educate and train the children.
- Increase in government support in terms of building schools and funding the education of the deaf, intellectually disabled and the blind. In Ghana, there is District Assembly Common Fund that supports the development of persons with disabilities.
- The impact of Advocacy groups and activities to promote acceptance and support.
- The role played by the disabled themselves. They hold the view that societies create disabilities and that if structures such as the construction of elevators and ramps and use of wheelchairs, there will be no disability. In fact, they advocated for and promoted the social model and criticized the medical model. The medical model tends to see disabled persons to be responsible for their situation, whereas the social model puts the blame on societies.
- Various pre-service and in-service programmes that are organised for teachers and caregivers including mobility and orientation training programmes for the blind

Key ideas

- Historically, persons with disabilities were stereotyped, stigmatized and generally poorly treated.
- Factors that contributed to the delay in their education included ignorance and lack of assistive devices to facilitate their education and training, communication and mobility.
- Improvement in societal attitude and rapid development of science and technology are contributing immensely to and promoting the education of the disabled.

Reflection

- How can I fight discrimination in my community to facilitate social acceptance of all persons?
- In what ways can I promote the education of the disabled?

Discussion

- What are some of the beliefs societies hold for the disabled?
- What are some of the factors that contributed to the delay in the education of the disabled?
- What are some of the factors that are contributing to the education of the disabled?

UNIT 3: LAWS AND POLICIES SUPPORTING INDIVIDUALS WITH SPECIAL NEEDS

In this unit, attention is being drawn to the role laws and policies play in promoting the education of the disabled. The unit will look at both international and national initiatives that have supported their education.

Learning outcomes

By the end of the unit, the participant will be able to:

1. Describe international Acts and Conventions that support the education of the disabled.
2. Describe national Acts and Conventions that support the education of the disabled.

International Acts and Conventions that support inclusive education

Internationally, there are a number of Acts and Conventions that back inclusive education. These include:

a. Universal Declaration of Human Rights –1948

Soon after the end of the second world war in 1948, there was the formation of the United Nations (UN). In order not to infringe on the liberties and rights of individuals and nations, the UN set out rules generally regarded as fundamental human rights that guarantee the rights and responsibilities of every individual including persons with disabilities. These rights are not to be infringed upon. Among others, there is the right to life, freedom from slavery, freedom from torture and inhumane treatment, the right to liberty and security of person, freedom of movement, and the right to freedom of thought, religion, opinion, and expression.

b. United Nations Convention on the Rights of the Child (UNCRC) (1989)

The convention seeks to prioritise the interests of every child. Every child has the right to life, survival and development and the best interests of the child should be a primary consideration for all State Parties. The Article 3, subsection 10 of the UNCRC recognises that children differ from adults in their physical and psychological development, and their emotional and educational needs. They are therefore not to be treated as adults. The Article 6 talks about the right to life, survival and development. In the subsection 11, it is stated that this inherent right of every child should guide and inspire State Parties in the development of effective national policies and programmes for the prevention of juvenile delinquency because delinquency has a very negative impact on the child's development. In Article 12, the right to be heard is guaranteed. In the subsection 12, the right of the child to express his or her views freely in all matters affecting the child should be respected and implemented throughout every stage of the process of the juvenile justice. Also, the convention. Respect for the dignity of the child requires that all forms

of violence in the treatment of children in conflict with the law must be prohibited and prevented.

c. World Declaration for Education for All (1990)

It states that Every child, youth and adult shall be able to benefit from educational opportunities that are designed to meet their basic learning needs. Between 5th and 9th March, 1990, in the town of Jomtien, Thailand during the International Literacy Year, about 1,500 delegates from 155 countries and representatives of some 150 governmental, non-governmental and intergovernmental organisations met at the World Conference on Education. The Conference called upon all countries to universalise adequate basic education. The participants at the Conference adopted the World Declaration on Education for All and a Framework for Action: Meeting Basic Learning Needs. It was stated categorically that Every person child, youth and adult shall be able to benefit from educational opportunities designed to meet their basic learning needs.

d. Standard Rules on the Equalization of Opportunities for Persons with Disability (1993).

This was adopted by the United Nations General Assembly, forty-eighth session, resolution 48/96, annex, of 20 December 1993. Although not a legally binding instrument, the Standard Rules represent a strong moral and political commitment of Governments to take action to attain equalization of opportunities for persons with disabilities. The rules are 22 and consist of four chapters namely: preconditions for equal participation; target areas for equal participation; implementation measures; and the monitoring mechanism. They cover all aspects of life of disabled persons and serve as an instrument for policy-making and as a basis for technical and economic cooperation.

e. UNESCO Salamanca Statement and Framework for Action (1994)

In June, 1994, the UNESCO sponsored a Conference in Salamanca, Spain, with more than 300 participants representing 92 governments and 25 international organisations. The Conference reaffirmed that education is the right of every individual as per the "Universal Declaration of Human Rights 1948". A "Framework for Action", was adopted as a guiding principle. It was this Conference that promoted the idea of inclusive education where the disabled are to be enrolled in regular schools to enable them to study with their non-disabled counterparts. The neighbourhood or regular schools are to accommodate all children, regardless of their physical, social, intellectual, emotional, linguistic or other conditions.

The Salamanca Statement has five key clauses and these are:

1. Every child has a basic right to education;
2. Every child has unique characteristics, interests, abilities and learning needs;
3. Education services should consider these diverse characteristics and needs;

4. Those with special educational needs must have access to regular schools; and
5. Regular schools with an inclusive ethos are the most effective way to combat discriminatory attitudes, create welcoming and inclusive communities and achieve education for all. Such schools provide effective education to the majority of children, improve efficiency and cost- effectiveness.

f. Dakar Framework for Action (2000)

The Dakar Framework for Action is based on the most extensive evaluation of education ever undertaken, the Education for All (EFA) 2000 Assessment. This was one of the calls of the World Conference of Education for All. A study that had been conducted revealed that the state of basic education around the world was deplorable. The document called for "special technical support" to be provided by the international community to "those countries with significant challenges, such as complex crises or natural disasters." (para.16). States Parties were enjoined to commit to restoring learning opportunities in countries where there were conflicts so that education may take place "in secure and friendly environments, and to reconstruct destroyed or damaged education systems". (para. 57).

National initiatives that back inclusive education

Ghana was among the first countries to sign the UNCRC document and has been an active member of the United Nations to advocate for the rights and responsibilities of the disabled. At the national level, there are some initiatives backing inclusive education. Through the Ministry of Education and support from UNICEF and some non-governmental organisations, the Policy on Inclusive Education (MoE, 2015) was developed and successfully launched in May, 2016 in Accra. Apart from identifying some key sectors of the economy that can support its implementation, the Special Education Division has been given the mandate to coordinate its development and implementation. UNICEF, in particular, has been of much help towards the development and implementation of Inclusive Education in Ghana. Since its launching, there has been set up a National Steering Committee on the Implementation of Inclusive Education and a Committee responsible for the Monitoring and Evaluation of Learning.

- i. The 1992 Constitution: It protects the rights of all Ghanaians, including children (people under the age of 18).
- ii. The Children's Act 1998 (Act 560): It enforces the rights of children and provides for penalties when they are contravened.
- iii. The Labour Act, 2003 (Act 651). It ensures there is no discrimination whatsoever at the workplace.
- iv. Persons with Disability Act, 2006 (Act 715): The Act provides for the education, employment and health of the disabled. No head of school has to refuse or deny a child

with disability admission to school. Any one who commits this offence has to pay a fine, imprisoned or both.

Key ideas

- The United Nations fundamental human rights unreservedly guarantee the inalienable rights of every human being.
- The UNCRC provides for the life, survival and development of every child.
- The Education for All ensures that no child is left out in their education.
- The UNESCO Salamanca Statement creates the need for the child with disability to be educated in the regular or neighbourhood school.

Reflection

- How can we ensure that State parties protect the rights and responsibilities of every child?
- In what ways can communities in Ghana be encouraged to educate the disabled and support their development?

Discussion

- What are two international Acts and/or Conventions that support the education of persons with disabilities?
- What are two national Acts and/or Conventions that support the education of persons with disabilities?

UNIT 4: STAKEHOLDERS

In this unit, we look at professionals and sectors who have a stake in the education of learners with disabilities. The unit will identify the role(s) each can play to materialise the education and training of the disabled.

Learning outcomes

By the end of the of the unit, the participant will be able to:

1. Explain the term stakeholder in his or her own words.
2. State and describe the roles of stakeholders in the education of the learner with disability.

Meaning of Stakeholder

In this unit, the term stakeholder refers to any person or organisation interested in the welfare of a person or groups of persons and willing to support their growth and development in one way or the other. In the area of special education, stakeholders include individuals such as philanthropists; institutions and organisations including faith-based organisations. The institutions include the Ministry of Health, Ministry of Education and the Ministry of Gender, Children and Social Protection under which we have the Department of Social Welfare.

Roles of Stakeholders

a. Ministry of Health

We discuss the following in the health sector:

i. Neurologists

As medical practitioners, they specialise in the development and functioning of the central nervous system and detect abnormalities in the brain that affect mental health and physical developments. The central nervous system is concerned with the brain and spinal cord. They assess *soft neurological signs* such as minimal or subtle deviations such as difficulties in visual-motor, cerebral palsy e.g., fine motor or gross motor co-ordination difficulties. Also, they do *conventional neurological examination* involving investigating child's medical history and/or prenatal history as well as investigate genetic and environmental conditions.

ii. Psychiatrists

They are medical practitioners who specialise in conditions affecting mental health and physical aspects of psychological problems. They can detect emotional and behavioural difficulties and the consequences of substance abuse. They give information on people suffering from psychological diseases such as attention deficits disorders (ADD) and attention deficits hyperactivity disorders (ADHD). Inattentiveness, hyperactivity or restlessness, impulsivity, and withdrawal are all

symptoms of ADHD. Psychiatrists are legally equipped to prescribe medications to patients.

Optometrists

They examine the eyes and various vision-related abnormalities, including refractive error and eye disease and prescribe corrective lenses for medical eye care. Refractive errors include myopia (short-sightedness), hyperopia (long or far sightedness) and astigmatism. They provide primary eye care, both optical and medical. They are licensed to practice optometry, which primarily involves performing eye exams and vision tests, prescribing and dispensing corrective lenses, detecting certain eye abnormalities and prescribing medications for certain eye diseases.

Paediatricians

They manage medical conditions affecting infants, children, teenagers, and young people. They deal with illnesses and the child's physical, mental and behavioural development. They administer immunizations and carry out routine health checks, to diagnose and treat a wide range of illnesses, injuries and conditions. They often assess and treat babies including premature ones immediately after birth. They can assess and if necessary, resuscitate newborn and manage treatment of.

Ophthalmologists

They specialise in eye and vision care. After their initial training as medical doctors, they undertake additional specialist training in the diagnosis and management of disorders of the eye and visual system. Ophthalmologists differ from optometrists and opticians in their levels of training and in what they can diagnose and treat.

Nurses

The school nurse is responsible for handling the health care needs of school children including those of learners with disabilities. They give first aid and make referral where the condition appear to be severe. Also, they administer medication and advice teachers and parents on what to do in the case of a child falling sick.

Speech and Language Pathologists

They are also known as speech therapists. They study human communication, its development, and its disorders. They assess speech, language, cognitive-communication, and oral skills. They work with learners who have speech and language disorders and help them to communicate to the best of their ability. They help learners with speech disorders to participate actively in classroom instruction and boost self-esteem and confidence. Also, they assist learners who have eating, drinking and swallowing difficulties to be safe whilst eating

and drinking. They work in health centres, hospitals, clinics, schools, independent practices and patients' homes. Speech and Language Therapists also work

b. Ministry of Education

In the area of Education, the following are discussed:

i. Special Educationists

They work with learners who have learning disabilities, emotional, or behavioural, or cognitive impairments or with intellectual, hearing, vision, speech, gifted learners with advanced academic abilities; and learners with orthopaedic or neurological impairments. They assist regular education teachers to teach certain skills in resource rooms, make adaptation for learners with special educational needs and disabilities. They adapt general education lessons and teach various subjects to learners with mild to moderate disabilities. They also teach basic skills to learners with severe disabilities. They provide specialist services such as teaching a blind person to communicate in Braille and/or instruct a deaf learner to use sign language and finger spelling. The special educator collaborates closely with teachers, other professionals and administrators to foster the teaching and learning of learners with diverse learning needs.

ii. Regular Education Teachers

Their primary roles are to plan, coordinate, schedule, and evaluate curriculum and instructional outcomes within a secure and positive classroom environment for all learners, including those with disabilities. They supply information to other professionals and parents about a child's classroom achievements. They can also tell whether a learner can do regular classroom work or not.

According to Boyer and Mainzer (2003), the general education teacher should:

- a. Develop and implement weekly lesson plans that facilitate the participation and learning of all learners
- b. Monitor and evaluate progress of all learners
- c. Maintain communication with learners, parents or guardians
- d. Meet with special education teacher on a regular basis and provide information necessary for modifications and adaptations to be developed and implemented
- e. Work collaboratively with special education teacher to assist in development of a support plan that meets the needs of all learners in the classroom, assist in the

development of the para educator's schedule, and supervise the para educator's completion of designated activities when in the general education classroom.

- f. Keep the special education teacher informed as to the performance of learners with disabilities in your class on a regular basis. Further, provide a copy of midterm grades and assign report card grades collaboratively with the special education teacher.

iii. Educational Audiologists

They are healthcare professional who work with learners with hearing losses to make sure they receive maximum support in the classroom. They deliver hearing services to all children, particularly those in educational settings. Audiologists are trained to diagnose, manage and treat hearing and balance problems. They are members of the school multidisciplinary team who facilitate listening, learning and communication access via specialized assessments; monitor personal hearing instruments; recommend, fit and manage hearing assistance technology; provide and recommend support services and resources; and advocate on behalf of the learners.

iv. School Psychologists

They are qualified members of school teams that support learners' ability to learn and teachers' ability to teach. They administer, score and interpret intelligence tests. They also assist in decisions concerning a child's ability to do regular school work. They apply expertise in mental health, learning, and behaviour, to help learners and youth succeed academically, socially, behaviourally, and emotionally. They partner with families, teachers, school administrators, and other professionals to create safe, healthy, and supportive learning environments that strengthen connections between home, school, and the community.

c. The Ministry of Gender, Children and Social Protection

The Ministry has three main departments namely: the Department of Gender; the Department of Social Welfare; and the Department of Social Protection. That of the Department of Social Welfare are responsible for developing and coordinating community-based rehabilitation programmes for persons with disabilities. As much as possible, they are to ensure that persons with disabilities live a life so close to that of their non-disabled counterparts in order to prevent poor social attitudes, stereotypes and discrimination. Also, they are responsible for providing access to social services and places where the disabled person can be educated and trained.

Key ideas

- The roles of various professionals involved in meeting the needs of learners with diverse learning needs were looked at.
- Some of the professionals discussed under the Ministry of Health included Neurologists, Ophthalmologists, Paediatricians and Optometrists, In Education, we looked at School Psychologists, Educational Audiologists and Special Education Teachers, Regular education teacher. In the Ministry of Gender, Children and Social Protection we specifically looked at the Department of Social Welfare.

Reflection

- How can societies ensure that each of the stakeholders play their roles as required?
- What can you personally do to promote the education of persons with special educational needs and disabilities?

Discussion

1. Who is a stakeholder?
2. What are the roles of the following stakeholders in special education:
 - i. Regular Educationist
 - ii. Special Educationist
 - iii. Nurses
 - iv. Audiologists?

UNIT 5: EQUIPMENT AND MATERIALS

In this unit, we are going to look at some equipment and materials (assistive technology) that are used in meeting the needs of learners with special needs. Also, we will look at the professionals who use them.

Learning outcomes

By the end of the unit, the participant should be able to:

1. Describe the equipment and materials used in meeting the needs of persons with disabilities.
2. State the professionals who use the equipment and materials.

Audiometer

This is a machine used to measure hearing levels at various frequencies. An **audiometer** is used to test for pure tone audiometry (that is to test both air and bone conduction). Sounds of high and low frequencies are played to see if the individual will respond to the sounds. In testing for hearing losses, the two ears are tested one after the other. This is so because one ear may perceive sounds better than the other. Sounds are measured in decibels and the symbol used is dB. The results are plotted on an **audiogram** to determine hearing thresholds. If one ear is affected, it is referred to as unilateral hearing loss.

In finding out whether the middle ear is functioning, **tympanometry** or acoustic reflex measures are done. While the tympanometry checks the feedback from sounds put into the ear, the acoustic reflex measures look at the movements of the muscles in the middle ear in response to sound. Audiologists use the audiometer to measure hearing levels and advice on classroom seating.

Audiologists are professionals who are responsible for testing for hearing losses. Hearing loss can either be in the outer ear, middle and/or inner ear. If the loss is mild or moderate, it is referred to as hard-of-hearing. On the other hand, if it is severe or profound it results in deafness. **Hearing aids** are used to help the hard-of-hearing to perceive sounds. However, those who are deaf need to be given instruction in sign language, finger spelling and lip reading. Sign language and finger spelling can be interpreted.

Speech Training Unit

This is a device used to help individuals with speech and language difficulties to communicate. Speech disorders come in different ways. They can be the way sounds are articulated or pronounced, the voice level (whether low or high pitch), or the speed such as stammering or stuttering. Language disorders may be in the areas of the use of phonemes (how sounds are articulated), morphemes (use of the smallest units of words such as the prefixes and suffixes or the 'ing'), syntax (the rules governing the use of words), semantics

(the meanings of words) and/or pragmatics (the way words are applied). Speech and Language Therapists are professionals who use the speech and training unit to ease communication.

Snellen Chart

It is a chart used to measure *visual acuity*. Visual acuity refers to the distance a person can stand to clearly see the distinctive features of an object. The chart can be made up of the letter 'E' with different sizes and the legs facing various directions or numbers of different font sizes. An *ophthalmoscope* is used to view the optic disk, retina, macula, and choroid in the back of the eye. Visual impairments can appear in different forms such as low vision (also known as partially sighted) and blind. While the partially sighted can read print with magnified glass or medicated lens, those who are blind need instruction in **Braille**. The Braille is composed of a system of dots which can be composed through the use of stylus or Braille type writer. Braille can be transcribed. Also, an ophthalmic device can be used by an Ophthalmologist to assess vision.

Wheelchairs and Prosthetic materials

Wheelchairs, wheelchair lift, or a stair elevator are useful for individuals with physical or motor problems, that is people who are unable to walk or move from one place to the other. Prosthetic materials are special materials for persons who may have amputations in the lower limbs or legs. They include shoe inserts for someone with fallen arches or an artificial limb for someone who has undergone an amputation. Other assistive devices include the following:

- i. *Recreational Therapy Devices:* They enable the disabled to enjoy fun activities such as swimming and assistance being provided by recreational therapists.
- ii. *Communication Devices:* These are devices that help people who are partially sighted or deaf to participate in more activities. They could include a caption option on a television for a senior citizen who is hard-of-hearing, a hearing aid, telephone amplifier or a magnifier to allow for reading and the writing of letters.
- iii. *Adaptive Controls:* These are remote controls that individuals can use to adjust devices like air conditioners, fans, thermostats, power wheelchairs, and other electronic devices in the home.
- iv. *IT Computer Technology:* This includes special software that helps individuals access to the Internet such as touch screen technology, a modified mouse, JAWS (Job Access with Speech) and keyboard to make the computer more user-friendly.

- v. *Transportation Assistance*: This includes devices that facilitate getting into and out of vehicles and driving safely, including ramps, lifts, grabs bars, adjustable mirrors, seats, and special steering wheels with brake controls.
- vi. *Walkers*: Some students might be able to walk but have balance problems. Walkers can be something as simple as a cane or crutches, or a more complex device with seating in the frame for a student who easily gets tired. Book bags can be hung from older students' walkers but could disrupt the balance of a younger special needs child.

The equipment and materials enable the disabled to live a normal life at school, home or workplace

Key ideas

- To be able to detect hearing levels, Audiologists use a machine called Audiometer and plot the levels on audiogram for interpretation.
- Persons with speech and language difficulties are trained using speech and language unit.
- In order to test for vision loss, the Snellen chart and/or ophthalmic device are / is used.
- A wheelchair or prosthetic material can be used to facilitate movement from one place to another.

Reflection

- How can I support the disabled in my teaching experience to use some equipment and materials to ease learning and mobility?

Discussion

- What are the uses of the following assistive technology?
Audiometer
Hearing Aids
Speed Training Unit
Snellen chart.

UNIT 6: IDENTIFICATION AND ASSESSMENT PROCEDURE

The unit discusses the term assessment and the processes that have to be followed to identify and assess special educational needs and disability conditions. The unit will further examine discuss some principles that need to be observed in order to make assessment valid and reliable.

Learning outcomes

By the end of the unit, the participant will be able to:

1. Define the term assessment in his or her own words;
2. Outline the purpose of assessment; and
3. Describe the steps that have to be followed to assess special educational needs and disability conditions.

Meaning of the Concept of Assessment

The term assessment has been defined in several ways. First, it is seen as a “process” and it is concerned with the “collection of information”. On the basis of these, the following definitions will be relevant as far as special education is concerned. Salvia and Ysseldyke (1998) regard assessment as the collection of information in order to identify problems and make educational decisions. According to McLoughlin and Lewis (1994), assessment is “the systematic process of gathering educationally relevant information to make legal and instructional decisions about the provision of special services” (p.4). Airasian (1996) also defined assessment in a way that makes it easier to understand. According to Airasian (1996), assessment is the process of collecting, synthesizing, and interpreting information to assist in decision-making.

A cursory look at the definitions above shows that:

- (i) Assessment is a systematic process
- (ii) It gathers information that is educationally relevant, and
- (iii) Information is used in making vital decisions.

Assessment is teamwork. Both parents and teachers can assess. A team of experts can also carry it out.

Purpose of Assessment

The following can be considered as reasons why assessment is carried out in special education:

- i. Through assessment, we are able to know the strengths and weaknesses of a child.
- ii. Assessment enables teachers to identify the strength and weaknesses a learner has.
- iii. Assessment enables the needs of the learner to be identified.
- iv. Assessment enables professionals to place the learner in an appropriate environment.
- v. Assessment reveals the progress the learner is making on a programme.

- vi. Assessment enables us know how a learner is performing in relation to peers.

Airasian (1996), has acknowledged six major reasons for assessment. These are:

- i. Diagnosing learner problems
- ii. Judging academic learning progress
- iii. Providing feedback and incentives to pupils
- iv. To decide appropriate placement
- v. Planning and conducting instruction

Screening

Berdine and Meyer (1987) define screening as “the process of assessing a large number of learners for the purpose of identifying those who need more thorough evaluation to determine whether or not they actually have problems” (p. 113). In assessing whether a child or a person has a disability or not, the first step of assessment is identifying the population of learners of school age who are at-risk for developmental disabilities. In doing this, screening is done. Without screening, knowing those who are at-risk becomes difficult.

Screening can be done through the use of observation, interview or use of teacher made test. As a rule, screening should be simple, efficient and cost effective. The information obtained from screening should not be used for decisions affecting placement and/or type of programme a learner should receive.

Professionals and non-professionals can do screening. Teachers and nurses are professionals but parents are non-professionals. Teachers use tests to identify learners with academic needs. Nurses screen for information on health needs, while parents screen for information on physical, social and emotional needs.

Referral

Referral is the next step we take when screening results indicate that an at-risk condition is present. Referral is the process of asking more qualified professionals to help you know more about the nature of a problem.

We therefore make referral for the sole aim of obtaining information on a child’s exceptionality. Who makes referral and to whom are referrals made?

Teachers and parents make referrals to experts such as medical personnel and psychologists. As a rule, teachers cannot make referrals without permission from parents. Additionally, they can only make referrals when they have made some adaptations for the learner and have not succeeded.

Diagnosis

Once referral is made, the experts have to thoroughly assess or do diagnosis for information on the individual. This is where professionals are engaged to conduct thorough or comprehensive assessment to know the nature and degree of a disability. By rule, all the domains of the child's life have to be assessed including the mental, emotional, social and physical abilities. It means the professionals should be interested in finding out about the competences of the individual in academic skills such as numeracy, literacy and communication. Is the individual able to do arithmetic such as counting and being aware of measurements? Can he or she recognise letters and words and read fluently? How well is the person able to generate ideas and solve problems? How does the person relate to others? Is he or she interactive or withdraws from others? The assessors may also be interested in the sensory abilities (that is hearing and vision), vision efficiency, visual acuity and hearing levels. Also assessed are physical and health; communication (that is speech and language) and emotional status. This makes the evaluation comprehensive.

By implication, professionals in various fields have to be engaged in the assessment process. More important, parents must be available to supply information to the assessors. It is often not acceptable for only one person to do all the assessment. The procedures and tools used should be valid and reliable and the child must be assessed in a language he or she can understand. Assessors are therefore to be ethical. They should respect the rights and responsibilities of the child being assessed and the family. If a child cannot write, alternative ways should be found to solicit for information. More so, other factors affecting the behaviour of the child must be looked at and data must be properly recorded and reported.

Key ideas

- Assessment is carried out to have information on a child's strengths and weaknesses.
- The first step in assessment is screening and this is followed by referral.
- In order for assessment to be comprehensive, experts from various disciplines have to be engaged including those in Health and Education.
- Respect for the rights of the child and family, non-discrimination, and assessing in a language the child can understand are some of the principles that have to be followed in assessing.

Reflection

- What can you do to help teachers screen their learners in very simple terms?
- How crucial is assessment in the field of special education?
- What are the functions of the individual experts in assessing special educational needs and disabilities?
- How will the principles of assessment be useful to me in assessing a child's special educational needs?

Discussion

- What is assessment in your own words?
- What is screening?
- When is referral done?
- What principles should guide assessors in carrying out assessment?

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