Introduction to Special Needs Education

(Course code: Epsy 224)

A Module for BED. Teachers Training

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Alemayehu Teklemariam
Department of Psychology
Addis Ababa University

May 2005

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Table of Content

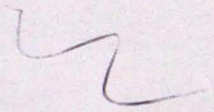
Unit one 6
Introduction 6
Structure of the Module 7
Target Population 8
How to use the Module 8
Objective of the Course 9
Definitions of basic concpts 9
Unit two 12
Theoretical frame-works and Paradigms 12
Introduction 12
Objectives 12
Unit Three 14
3. Categories of children with Special Needs 14
Introduction 14
3.1. Children with hearing disabilities 14
Introduction 14
Main content of the Unit 14
Objective of the unit 15
Types of hearing impairment 16
Conductive Hearing Loss 17
Sensory-neural Impairment 17
Mixed Hearing Loss 17
Causes of hearing impairment 18
Developmental characteristic of children with hearing impairment 19
Communication 10
Method of Communication 19
Cognitive Development 18
Academic Characteristics 17
Physical/Motor Development 17
Social/ Emotional Development 35
Identification, assessment and intervention 31
Identification 59
Assessment 58
Intervention 58
The Family 28
The School 28
Unit Summary 29
A Case of a deaf person 31
Supplementary Readings 32
3.2. Children with visual disabilities 34
Introduction 34
Main content of the Unit 34
Objectives of the unit 34
Educational Definition 34
Causes of visual Impairment 35

Developmental effects of visual impairment ... 37
Cognitive Development ... 38
Academic Characteristics ... 39
Communication Characteristics ... 39
Social/Emotional Development ... 40
Identification, assessment and intervention ... 41
Identification ... 41
Assessment ... 42
Intervention ... 42
Adapted Educational Materials and Equipment ... 44
Case Study ... 47
Summary of the Unit ... 49
Supplementary Reading ... 50
3.3 Mental Retardation ... 51
Introduction ... 51
Main content of the Unit ... 51
Objective of the unit ... 51
Definition Mental Retardation ... 51
Support Based Classification ... 55
Intermittent ... 55
Extensive ... 55
Causes of mental retardation ... 55
Developmental characteristics ... 58
Cognitive Characteristics ... 58
Academic Characteristics ... 59
Social / Emotional Characteristics ... 59
Physical /Motor Characteristics ... 60
Communication Characteristics ... 60
Characteristics in Adaptive Behavior ... 61
Identification, assessment and intervention ... 62
Identification ... 62
Assessment ... 63
Education of the milady Retarded ... 68
Prevention ... 71
Unit Summary ... 73
Case Study ... 73
Summary of the Focus Group Discussion ... 73
Supplementary Reading ... 77
3.4 Students with Learning Disability ... 78
Introduction ... 78
Main content of the Unit ... 78
Objectives of the unit ... 78
Definitions of Learning Disabilities ... 79
Types of Learning Disabilities ... 80
Causes of learning disability ... 82
Identification and assessment ... 83

Learning Characteristics: 83
Social Skills Characteristics.......... 85
Attention Deficit Disorder 86
Life Span View of Learning Disabilities assessment and treatment.......... 86
Intervention.......... 88
Teachers commitments 89
Parent-Teacher Partnerships 89
Case study.......... 90
Unit Summary.......... 91
Supplementary Readings 91
3.5 Language and Communication Disorder 93
Introduction.......... 93
Main content of the Unit 93
Objective of the unit.......... 93
Definition 94
Communication.......... 94
Speech Disorders 94
Language Disorders 94
Types of Speech or Language Impairments.......... 95
Cause of Speech or Language Impairments.......... 97
Speech Impairments.......... 97
Language Impairments.......... 98
Identification assessment and Intervention.......... 98
Prevention.......... 100
Effects of Language Impairments.......... 101
Social Competence.......... 101
Cognitive and Academic Performance. 101
Intervention.......... 101
Using itinerant teachers.......... 101
For Teachers.......... 102
Education and the Schoolchild.......... 102
Families.......... 104
Unit Summary.......... 105
Supplementary Reading.......... 108
3.6 Children with behavioral difficulties 109
Introduction.......... 109
Definition 110
Causes behavioral Disorders 111
Identification, assessment and Intervention 111
Effects of behavior difficulties.......... 115
Behavioral problems 115
Broad Dimension of Behavioral Problems 115
Cognitive.......... 115
Academic 116
Physical 116
Communication.......... 116

Identification, assessment and intervention 117
Identification 117
Assessment 118
Intervention 119
Supplementary Reading 124
3.7 Children with Physical Impairments 125
Introduction 125
Main content of the Unit 125
Objective of the unit 126
Classifications 126
General Causes of physical impairment 126
Orthopedic Impairments ..... **Error! Bookmark not defined.**
Health Related Impairment 136
Developmental effects of motor disorders 136
Cognitive Characteristics 136
Academic Characteristics 136
Physical characteristics 137
Social/Emotional Characteristics 137
Communication characteristics 137
Identification, assessment and intervention 138
Identification 138
Symptoms for children with health problems: 138
Assessment 139
Intervention 140
Educational 140
Case Study 145
Supplementary Reading 146
3.8 Giftedness and talents 148
Introduction 148
Content of the Unit 149
Objective of the unit 149
Definition classification of gifted and talent 149
Geardner's Seven Intelligences 151
Causes: Factors That Enhance or Inhibit Giftedness 154
Common Characteristics of the Gifted Child 155
Intellectual/Academic 155
Social/Emotional 155
Subgroups Requiring Special Attention 157
Gifted Females 157
Culturally and Linguistically Diverse Gifted Students 158
Identification and assessment 158
Gifted Individuals with Disabilities 161
Educational Interventions 162
Education and the Preschool Child 162
Education and the Schoolchild for gifted 162
For teachers: Consideration for Twice-Exceptional Children 164

Unit Summery 166
Unit Four 168
Mode of Special Needs Education Delivery Systems 169
Content 169
Objective of the unit 169
Inclusion 170
Supplementary Reading 171
Unit Five 172
Attitude, Legal and Policy Issues 172
Introduction 172
Contents 172
Attitudes and the Provisions in Ethiopia 172
Legal and policy issues 174
General Summery 176
Supplementary Reading 177



Unit one

General Introduction

Dear participants, welcome to the study of this first module entitled "Introduction to Special Needs Education". As you are well familiar with the trends and endeavors in Ethiopian education and development, despite significant progress over the past decade, a large number of Ethiopian people with disability and special needs are still functionally illiterate, and about 99.2% of school-age children with disability are out of school. As a result of being deprived from basic education many children, youngsters and adults with disabilities, are suffering from poverty and health problems. Basic education may help prevent poverty and sickness. Learning how to read and write opens the door to many possibilities: keeping track of sales and purchases in small businesses, developing attitudes and skill on agricultural practices, increasing knowledge about how to stay healthy and prevent HIV/AIDS, and reducing violence by encouraging understanding and tolerance. Basic education may help individuals exploit their potential as productive members of the society.

Special needs education focuses on children and students who are at risk of repetition and droppingout, have learning difficulties or disabilities, are excluded from education. Children and students with learning difficulties may be misunderstood as being unable, lazy, or misbehaving. Children and students who have physical, sensory or intellectual impairments may experience many difficulties in learning and participating in schools. Special needs education aims at making the education system inclusive by educating teachers about identifying learning difficulties and impairments, finding ways to facilitate active learning for all children, and establishing support system.

Education of children with special needs is quite a stimulating and interesting field for psychologists and educators and also for those who are interested in the welfare of children with special needs. It is an important area of study and research in Ethiopia where great work can be done on different aspects of the education of children with special needs. It is a fact that unfortunately education of children was completely neglected before the emergency of the

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education policy in 1994. Before that time education of children with disability seems to be the work of charities, rather than the duties of government, in Ethiopia.

Historically, it has been known that care, education and other services for children and youth with disabilities were traditionally carried out exclusively and in isolation by the individual families and religious or humanitarian organizations. Learning difficulties at schools were viewed as limitations of individuals. Consequently, the education of children and youth with special needs has emphasized on those with distinct (common) disabilities - sensory, mental, physical and/or multiple disabilities in separate/special schools with individual and charity approaches. Hence, Children and youth with common disabilities were regrettably excluded from formal schools and left segregated in special Institutions (schools), while the other larger group of children and youth with other special needs - specific learning disabilities, behavior disorders environmental deprivation, disadvantage, and the gifted as well, were left unidentified at regular schools without appropriate support, and finally labeled as drop-outs, repeaters or nuisances. Government participation was limited only to supporting voluntary efforts or did not existed at all, for some disability groups.

It seems that nowadays the situation is changing; life is requiring much more knowledge and techniques. Education and training are becoming more and more necessities and inherent rights of citizens. All the basic interrelated ideas of education included or outlined in international policy documents, declarations, conventions, Frame Work of Actions, Forums, etc., confirm these rights to education.

Structure of the Module

The module has an introductory part and five interdependent units. This two credit hours introductory course is designed for would-be teachers for high school and Technical and vocational education and the would-be teacher trainers. The course is divided into five major units:

Unit 1.General Introduction.

This unit consists of a general introduction, structure of the module, contents, target population, how to use the module, objective of the course, definitions and basic concepts used in the module.

Unit 2 Theoretical frameworks and paradigms

- Behavioral approach
- Psychodynamic (psychoanalytic) view
- Psycho-educational approach
- Ecological approach
- Social-cognitive approach
- Humanistic Education
- Biogenetic approach

Unit 3 Category of children with special needs

- ➢ Learning disabilities
- ➢ Mental retardation
- ➢ Hearing impairment
- ➢ Visual impairment
- ➢ Communication disorder
- ➢ Behavioral and emotional disorder
- ➢ Physical impairment
- ➢ Gifted and talented children

Unit 4 Different mode of educational delivery (merit and demerit)

4.1. Residential

4.2. Special school

4.3. Special classes

4.4. Integration

4.5. Inclusion

Unit 5 Attitude, Legal and Policy Issues

Target Population

The module is planned for would be high school teachers. The module is an attempt to improve their attitude, knowledge and skills, so that they can contribute to the enhancement the quality of education in high schools through the support system they provide for children with special needs and for all other children.

How to use the Module

The module is designed in a way that allows active participation by the participants. There are in-text questions, 47 activities with more than 285 questions and sub questions, which are

lesigned for self-check exercises and group discussions. The module may be used as a teaching eference in a course or individually for self-knowledge and development. It requires the students to read and work out the exercises referring to relevant materials. Since the module is designed in a way to encourage the learners to think critically, the students are required to work hard independently and in groups. The students are also requested to refer to relevant materials mentioned as supplementary reading and other available materials.

Objective of the Course

After completing this course the teacher students will be able to:

- Define all components of children and learners with special needs and their characteristics;
- Explain the basic concepts and developmental aspects of children with special needs;
- Appreciate diverse educational needs of children in the classroom;
- Recognize basic theoretical assumptions and paradigms in special needs education;
- Identify and assess needs, potentials and difficulties and provide support for children with special needs;
- Provide appropriate support and give special consideration for children with special needs in inclusive classrooms;
- Conduct action research in special needs education;

efinitions of Basic concepts

pairment refers to injury, deficiency, loss of part of a body or that lessening the function of e individual.

ability is a physical, psychological or neurological deviation that may result from impairment specific functions.

ndicap refers to the result of any condition or deviation, physical, mental or emotional, that ibits or prevents achievement, acceptance, and participation in economic and social activities. the disadvantaged and dependence status of an individual.

bilitation is the process of providing support, training and education for the individual's istic development and improvement before the happening of the deprivation. It is a support on development.

Rehabilitation is supporting a deprived individual from holistic development through re-teaching, retraining, and so on, after the individual is deprived. It is the process of helping deviant or deprived person toward restoration or the desired standard, through education or retraining.

Remediation is the process of correcting inappropriate behavioral skills; any method or exercise designed to alleviate difficulties and help students to perform nearer the level expected of her/his chronological age.

Intervention is the interception of unproductive or undesired behaviors or conditions and changing or directing them in ways that are more advantageous. It is a provision of appropriate support that enhance the individual's development. It could be a process of habilitation and/or rehabilitation.

Segregation refers to the placement of children with special needs in a separate educational programs in which the children do not have an opportunity to interact with regular schools or classes. This term represents the opposite of mainstreaming and integration.

Mainstreaming is the concept of serving children with special needs according to their needs and potential in regular school programs rather than placing them in segregated schools and special classes.

Integration it is a similar term with mainstreaming, but different in its forms from mainstreaming. Integration could have several forms. Functional integration, only for certain activities; social integration for social contact; and physical integration.

Inclusive education refers to an education system that is open to all learners, regardless of poverty, gender, ethnic backgrounds, language, learning difficulties and impairments. Inclusion emphasizes that all children and students can learn and need some form of support in learning and active participation (UNESCO 2001 and 2001). It requires identifying barriers that hinder learning, and reducing or removing these barriers in schools, vocational training, higher education, teachers education, and education management. Inclusive education promotes education for all.

Special needs education focuses on children and students who are at risk of repeting and dropping out, have learning difficulties and disabilities, or are excluded from education. Children and students with learning difficulties may be missunderstood as being unable, lazy, or misbehaving. Children and students who have physical, sensory or intellectual impairments may

experience many difficulties in learning and participating in school. If education systems and schools were inclusive, there would be no need to emphasize on special needs and special need education

- **Special needs.** Children with special needs are those children with learning difficulties, giftedness, socio-emotional or behavioral problems, communication disorders, mental retardation, sensory impairments, etc.

Activity 1.

Discus the following questions in groups and reflect on them in the classroom

1. How is special needs education defined, and what are its categories? Find out any new definitions different from the definition given in the text, above.
2. How do the perspectives of diverse societies and cultures influence the concept of "disability" and "handicap"? Find out the positive and negative aspects of oral literature on people with different disabilities
3. How prevalent is disability in Ethiopia? Refer to different sources and compare.

Unit two

Theoretical frameworks and Paradigms

Introduction

Conceptual models are important in the process of providing education for children with special needs. These theoretical approaches guide teachers on how to assess and intervene with children's needs, difficulties and potentials.

Objectives

After this lesson the teacher students will be able to:

- Identify different theoretical approaches in the education of children with special needs;
- Compare different approaches for assessment and intervention; and
- Select the appropriate theory for assessment and intervention.

Behavioral approach

Based on the work of B. F. Skinner and other behaviorists, this model focuses on providing children with highly structured learning environments and teaching materials. The student's behaviors are precisely measured, interventions are designed to increase or decrease behaviors, and progress towards goals is measured carefully and frequently.

Psychoanalytic (Psychodynamic) view

Based on the work of Sigmend Freud and other psychoanalysts, this model views the problems of the child as having a basis in unconscious conflicts and motivations based not on the behavior itself, but on the pathology of one's personality. Treatment is generally individual long term psychotherapy, designed to uncover and resolve deep seated problems.

Psycho-educational approach

This approach is combines the principles of teaching with treatment measured primarily in terms of learning. Meeting the individual needs of the youngster is emphasized, often through projects and creative arts, through every day functioning at school and at home.

Ecological Approach

The problems of children are seen as a result of interactions with the family, the school, and community. In this approach, the child or youth is not the sole focus of treatment, but the family, school, neighborhood, and community that may be changed in order to improve interactions.

Social-cognitive approach

The interaction of the effects of environment and the youngster's behavior are taught to the child. This approach seeks to integrate and re-conceptualize behavioral and cognitive psychology. The result is a view that behavior is the result of interaction in a person's physical and social environment, personal factors (thought, feelings, and perceptions), and the behavior itself.

Humanistic Education

Love and trust, in teaching and learning, are emphasized; and children are encouraged to open and free individuals. The approach emphasize self direction, self fulfillment, and self evaluation. This in turn helps a nonauthoritarian atmosphere in a nontraditional educational setting develop.

Biogenetic approach

Physiological interventions such as diet, medications, and biofeedback are used, based on biological theories of causation and treatment to address the need of the children.

Activity 2.

Discus the following questions in groups and reflect on them in the classroom

1. Explain the advantages and disadvantages of each of the theories mentioned above for assessment and intervention of children with disabilities.
2. Among the listed theories which one do you prefer for the assessment and intervention of children with disabilities and why? Give your convincing rationales.
3. Referring to books, elaborate further each of these theories.

Unit Three

3. Categories of children with Special Needs

Introduction

In this wider unit of the module there are eight main sub units;

- Hearing impairment
- Visual impairment
- Mental retardation
- Learning disabilities
- Communication disorder
- Behavioral and emotional disorder
- Physical impairment
- Gifted and talented children

3.1. Children with hearing disabilities

Introduction

One of the most neglect group of children in education are children with hearing impairment. This is due to their deprived language skills. Hearing like vision, is a distance sense and it provides us with information from outside our body parts. When hearing is limited, it affects the individual in significant ways: it limits communication, access to orally presented information, and independent living. However, if children with hearing impairment is understood during early age, their needs and difficulties are identified, assessed and intervened, they can develop in all aspects. This part of the lesson will focus on these issues as it is described in the content and objectives below.

Main content of the Unit

- Definition
- Type of hearing losses
- Causes
- Identification and assessment
- Intervention

Objectives of the unit

After completing this unit the teacher students will be able to:

- Give the meaning of hearing impairment and classify it into categories;
- Describe the procedures of identifying and assessing hearing impaired children;
- Describe the causes of hearing impairment;
- Explain the developmental characteristics of hearing impaired children;
- Describe the methods of educating hearing impaired children; and
- Demonstrate positive attitude towards hearing impaired children.

Definition

The definitions given to hearing impairment are said to pose controversies and to convey different meanings to different people. Different definitions and terminologies may be used in different countries for different purposes. Instead of including all type of definition, it is preferable to consider only the most important one for the purpose of this course.

Pasonella and Care (1981) defined **hearing-impairment** as a generic term indicating a continuum of hearing loss from mild to profound, which includes the sub-classifications of the hard-of-hearing and deaf.

A. Hard-of-hearing,

A term to describe persons with enough residual hearing, to use hearing [usually with a hearing aid] as a primary modality for acquisition of language and in communication with others. Whether, it is permanent or fluctuating it ranges between 21 and 69 Db (decibels). This conditions can adversely affect the child's educational performance to some extent.

B. Deaf

A term used to describe persons whose sense of hearing is non functional for ordinary use in communication, with or without a hearing aid. The hearing loss is usually above 70dB. It is so severe that the person is impaired in processing linguistic information which adversely affects the educational performance (Schulze, Carpenter and Ann,1991). The disability precludes successful processing of linguistic information through audition, with or with out a hearing aid.. Every one using sign language and belonging to that community is deaf. There are many ways of categorizing deafness:

- Congenitally deaf (born deaf), or
- Adventurously deaf (deafness acquired some times after birth).

More specifically it can be categorized as:

- Pre-lingual deafness (present at birth or before speech is developed); and
- Post-lingual deafness (occurring after the development of speech).

In Ethiopia, there is no document which helps to understand both the terms, hard-of hearing and deafness. Instead, it is described with a single term consisting negative notions such as "idiots" which is to say those who cannot be educated or do not at all understand.
Such an erroneous understanding of the hearing-impaired is evident by the widely used Amharic term "donkoro" meaning as described in the Amharic Dictionary; an individual whose hearing organ does not at all function; mentally handicapped; and who lacked the ability to understand any language- (Kesate Berhan, 1951).

Activity 3

Ask different persons in your environment or try to remember and answer the following questions.

1. How do you understand children with hearing impairment?
2. How do the community in your environment define hearing impairment?
3. What kind of attitude do you observe against people with hearing impairment?

Types of hearing impairment

Understanding the types and causes of hearing loss is very important for various reasons. It is important in the planning of educational programs, to solve parent anxiety, to take preventive and interceptive measures, etc. There are three types of hearing impairment: conductive, sensory-neural and mixed hearing loss.

Activity 4.

Discuss the following questions in groups and reflect on them in the class room

1. How is the auditory information processed?
2. Explain the anatomy and physiology of the ear.

Conductive Hearing Loss

Such a loss reduces the intensity of sound reaching the inner ear, where the auditory nerve begins. To reach the inner ear, sound waves in the air must pass through the external canal of the outer ear to the eardrum, where the vibrations are picked up by a series of bone like structures in the middle ear and pass on to the inner ear. The sequence of vibrations may be blocked anywhere along the line. Wax or malformations may block the external canal, the eardrum may be broken or unable to vibrate; the movements of the bones in the middle ear may be obstructed. Any condition hindering the sequence of vibrations or preventing them from reaching the auditory nerve may cause a conduction loss (Bam ford and sounders, 1994; Gallagher, 1983).

Sensory-neural Impairment

This involves damage to the fine structures in the inner ear or auditory nerve transmitting the impulse to the brain. Sensoryneural hearing loss may be complete or partial and may affect some frequencies especially the high ones more than others [Bamford and Sounders, 1994].

There is also central auditory disorder which results form damage to the central nervous system. This loss results in problems with auditory comprehension and discrimination (Schulze, Carpenter and Ann,1991).

Conductive hearing loss can be effectively reduced through prompt medical care and by amplification of sound when the severity of the condition warrants, whereas, for senseryneural hearing loss, there is relatively restricted range of options for treatments, i.e. they are not medically or surgically treatable and they require rehabilitative efforts.

Mixed Hearing Loss

When both conductive and senseryneural losses are present, the loss is classified as mixed loss. There may be a significant gap between air and bone conduction thresholds, but the air conduction component of the loss may be resolved. Many persons with mixed losses can benefit from amplification, although some have problems similar to those with senseryneural losses.

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Causes of hearing impairment

The causes of hearing-impairment can be studied in several ways, that is, in terms of birth period as prenatal, perinatal and postnatal (Taylor, 1992); genetic and environmental factors, chromosomal abnormalities, diseases, toxins etc. (Mittler, 1970) and in terms of ear structure: outer, middle and inner (Gardwood, 1983). The following are some of the causes of hearing impairments.

- Maternal rubella
- Hereditary
- Prematurity
- Pregnancy complication
- Trauma
- Rh incompatibility
- Meningitis
- Otitis media
- High fever
- Infection
- Measles
- Mumps

Activity 5.

Discus the following questions in groups and reflect on them in the classroom

1. What are the causes for hearing impairment traditionally believed by the society of Ethiopia?
2. Elaborate the causes of hearing impairment mentioned above.
3. Categorize which cause of hearing impairment resulted in conductive and sensory-neural hearing loss.
4. Can we prevent hearing Impairment? How?
5. Mention some of the viral and bacterial infections that cause hearing impairment.
6. Mention the congenital and acquired causes of hearing impairment.

Developmental characteristics of children with hearing impairment

Many traits or characteristics are attributed to deaf people in the literature. People with hearing impairments should not be stereotyped. The onset and causes for hearing loss and the effects it has are simply too varied to lend credence to a typical case. People with hearing impairments have different learning styles and abilities. They do have one characteristic in common: the ability to hear is limited and this disability may affect cognitive, academic, physical behavioral, and communication characteristics.

Communication

As it is indicated in Trussew Tefera (1998)Communication problems can seriously interfere with interpersonal relationships for students with hearing impairments who receive all or part of their education in regular classrooms. Their inability to communicate with other students can delay their language development. It is argued that the effects of hearing loss are pervasive and can create psychological stress (Moors, 1996 inTrusew, 1998).

- Children who are deaf are often passive participants in communication.
- vocabulary and syntax of children who are deaf grow slowly.
- Variations in normal hearing responses and deviations of speech and language development may be the first clues that tell that a child suffers from hearing loss.

Silverman, cited in Travis (1971), described the following abnormalities in speech, saying the speech usually accompanied by:

- high chest pressure with the expenditure of excessive amount of breath;
- prolonged vowels with consequent distortion;
- abnormalities of rhythm;
- excessive nasality of both vowels and consonants;
- imperfect joining of consonants with the consequent addition of super - flows flows syllables between abutting pairs and
- errors of rhythm in both consonants and vowels.

The more severe the deafness, the greater is the effect on verbal language development; but even mild degrees of conductive deafness are thought in some cases to have a significant effect (Freeland, 1989).

Functional hearing in relation to language and behavior

- Deaf people have a great deal of difficulty in processing the spoken language (McAnally, Rose and Qugely, 1994).
- Compared with hearing children, deaf children have notable delays and substantial differences in the development of reading and writing skills.
- They tend to use greater numbers of basic syntactic structures, including nouns.
- They demonstrate less frequent use of verbs, determiners, adverbs auxiliaries, and conjunctions than hearing children (McAnally, Rase and Quigley, 1994).
- They are characterized by lag in vocabulary skills when compared with normal hearing students of comparable age.

Method of Communication

The following are the highlights of methods of communication employed in the process of educating deaf children.

- Oral Method
- Auditory Training
- Lip-reading (speech reading)
- Cued Speech
- Manual Communication
  - Finger spelling
  - Sign language
  - Gesture
  - Sign system
- Total Communication

Activity 6.

Answer the following questions referring to different sources of books that elaborate communication of deaf children and students

1. What are the major communication difficulties of children with pre-lingual deafness, and post-lingual deafness. Explain each of them.
2. What communication differences may we observe between deaf children born from hearing parents and deaf children from deaf parents?.
3. What are the basic effects of hearing impairment on language development? Discus their advantages and disadvantages
4. How do deaf children best communicate in education?
5. Describe the above mentioned methods of communication in the education of the deaf
6. How can you communicate with and provide support for if you meet a hearing impaired student in your class?
7. Is there any relationship between language and cognitive development? Does the level of language acquired affect cognitive development?

Cognitive Development

Activity 7.

1. Some people label deaf people as dumb. Do you agree with this labeling? What are your rationales?
2. Do you think that learning sign language and promotes our interaction with them and it is the basis for cognitive, emotional and social development of the child?
3. Do deaf people think concretely, abstractly or both? Why?
4. Are deaf people less intelligent? For both yes and no answers explain why?
5. Does the onset of hearing impairment affect the level of intelligence of deaf students?
6. Looking at deaf children's performance some people label deaf people as mentally retarded What is your opinion?
7. What will be the remedy for the language and cognitive problems of deaf children?
8. What will be the place of hearing impaired people in the society?

In a recent study, Paul and Jackson [1993] maintained that differences in the cognitive performance of students who are deaf and of their hearing peers are more due to inadequate development of a conventional language system than to limited intellectual ability. Most probably, the limiting environment for interaction with one another may affect their intellectual ability as well as their social competence skills.

Academic Characteristics

Activity 8.

Answer the following questions referring to books and reading materials suggested

1. Are deaf students poor in their academic achievements? Why?
2. Can we generalize that deafness can negatively affect academic achievement?
3. How can we enhance the academic performance of children with hearing impairment?
4. What will be the role of teachers, curriculum developers and administrators to support deaf children so that they will best develop academically?
5. What factors can affect deaf students beside their deafness?
6. Do you think that the degree of deafness affects academic performance? What are your reasons?
7. Do you think that effective use of sign language for the deaf children will help to improve their academic achievements? Why?
8. Do you think that using hearing aid may help the academic performance of hearing impairment?

According to Tirussew (1998), we cannot make firm generalizations about the ways in which students who are deaf and hard-of-hearing function academically. They do not perform as well as the hearing students on standardized tests of reading and writing, and research suggests that children who are deaf have much more difficulty acquiring reading skills. Nevertheless, differences in language ability that result from deafness affect a student's ability to perform in traditional academic areas.

Physical/Motor Development

Activity 9.

Discuss in group and answer the following questions. Refer to relevant books before the discussions

1. Do you think that hearing impairment delays motor development?
2. Does inner ear damage cause balance and equilibrium problems?
3. Is there any compensation for hearing impairment? Compensation of vision, taste, smell etc?
4. Do you think that due to absence of movement on the part of speech organs leads to deformity of the face ?

In general, except for some specific difficulties that deaf children face, there are not much deviations in physical and motor characteristics from the normal ones.

Social/ Emotional Development

Activity 10.

Discuss the following questions and reflect on them in the classroom

1. Does impaired hearing influence a child's social and emotional development? Why?
2. What are the manifestations of the social and emotional development of hearing impaired children?
3. Are there adjustment problems among children and adolescents with hearing impairment?
4. Does hearing impairment have a negative impact on social/emotional development of the child? Why?
5. Do you think that a higher degree of hearing impairment leads to a higher degree of social and emotional development? Why?
6. What is the role of language for social and emotional development of a child?
7. How can you help children with hearing impairment to positively adjust socially and emotionally to their environment?

8. Are there differences and similarities between the emotional state of hearing impaired children and hearing children?

Recent evidence suggest that those who are deaf prefer to be with others who are deaf, and tend to cluster in groups, socialize, and marry. Stinson, Whitmire, and Klumin [1996] indicated that hearing-impaired students may have more positive perceptions about their relationships with other hearing-impaired peers than about those hearing ones. Because many people who are deaf see the experiences and sign language of deaf communities as the most important factors in their lives, the obvious barrier to hearing-impaired relationships is communication (Tirusew, 1998).

Generally, it appears that the extent to which a hearing impaired child successfully interacts with family members, friends, and people in the community depends largely on the attitudes of others and the child's ability to communicate in some mutually acceptable way. Feelings of depression, withdrawal, and isolation are frequently experienced in adventitious loss of hearing. Most hearing impaired people are fully capable of developing positive relationships with their hearing peers when a satisfactory method of communication is used. Even so, a number of deaf children do have serious behavior disorders that require treatment. Generally, intervention that deals with the change of parental attitudes contribute to the alleviation of the impact of deafness on a child's social behavior (Moors, 1996).

The greater the hearing impairment, the greater is the degree of relative social isolation, even within the most caring, and sympathetic environment. Such relative isolation affects the communication behavior of the hearing-impaired child, the education and the remediation [Bench, 1992]. Deaf individuals can show unusual personal characteristics in childhood and in adulthood, It is reported that the deaf tend to lag behind the hearing in social maturity (Garwood, 1983). Some evidence show that self-concept and social adjustment is lower with hearing impaired children (Taylor and Sternberg, 1989). In a study, by Mittler (1974) deaf subjects were characterized by: emotional under development, a substantial lag in understanding the dynamics of interpersonal relationships as well as the world, a highly egocentric life perspective and by a markedly contracted life area. It is also reported that the psychological and sociological problems of elementary school aged hearing-impaired children are not as pronounced as the older hearing-impaired students (Tylor and Sternberg 1989). Furthermore, some working in the

area (Bench, 1992) referred to an immaturity in deaf children of hearing parents which may appear in differences of arousal and expression of pediatricians' feelings.

It has been argued that hearing loss leads to problems of adjustment in children, because problems of communication produce barriers to social development which are difficult to overcome (Moors, 1996) These barriers in turn cause problems in social adjustment and interfere with the development of a concept about the self (Bench, 1992).

Furthermore, it is important to bear in mind that the age at which an individual becomes hearing impaired affects the degree of the language difficulty. If the impairment is a congenital loss, it affects acquisition of language. Adventitiously deaf children are more likely to have (1) knowledge of their native language, (2) clear oral speech, (3) understanding of the oral speech of others, (4) ability to read with speed and comprehension, and (5) understanding of abstract concepts (Tylor and Sternberg, 1986; Gardwood, 1983). Educators often use the term prelingual deaf child usually to focus on the acquisition of language and communication, whereas that of a postlingually deaf child usually emphasizes the maintenance of intelligible speech and appropriate language patterns.

The psychosocial consequences of the lately deaf person in comparison with the congenitally or prelingually deaf is highly pronounced. It is not merely the hearing loss per se as such but the secondary consequences, that is, loss of employment, loss of interpersonal relationship, friendship or contact which complicate the adjustment problem of the person.

Identification, assessment and intervention

Identification

If a child is deaf or severely hard-of-hearing, preliminary identification is usually done by parents, teachers, or there are several symptomatic behaviors that are used to determine whether a hearing impairment is be present. In Tirussew (1998) the following symptoms are mentioned:.

- Inattention, restlessness, distraction of others, more responsiveness in quiet conditions;
- Complaints of earache, full or 'popping ears, or a visible discharge from the ear;
- Giving inappropriate answers to questions; watching and following what other children do;

- Louder or softer voice than is usual;
- Slowness in responding to simple verbal instructions, with frequent requests for repetition;
- Searching visually to locate a sound source or turning head to give one side an Advantage;
- Needing to sit nearer a sound source than is usual or asking for volume, on TV, tape or record player to be turned up;
- Some irritability or typical aggressive outbursts; more frequent, behavioral upsets in school;
- Reluctance to participate in oral activity and little interest in following story;
- Failure to turn immediately when called by name unless other visible signals are given;
- Tiring easily, poor motivation, listlessness, lack of energy, difficult to reach, some stress signs such as nail-biting;
- Particularly, difficulties in verbally related skills such as reading, 'phonic' work; sound blending and discrimination, and writing, with better skills in practical areas;
- Speech limited in vocabulary or structure and use of gestures; and
- Best Work in small group.

Activity 11.

Think of your own way of identifying children with hearing impairment and answer the following questions.

1. Have you ever been able to identify children with hearing impairment? How did you identify them?
2. Do you think that the above symptoms help to perfectly identify children with hearing impairment?
3. Which one is the best means to identify children with hearing impairment? List them in order of importance.

Assessment

Among the several techniques of assessment the most practical methods, which can be employed in screening a child with hearing problems are:

1. Audiological (hearing) assessment
    - Careful observation of main symptoms of hearing loss mentioned above;

- Studying the causes of loss and its consequence in collaboration with parents;
- Distraction tests, introducing a sound source behind and to either side of the child. The child's response may be an obvious turning of the head [Freeland, 1989];
- Co-operation testing where testing is done as a game. The child is encouraged to respond to simple instructions, for instance putting a brick in a box or a ring on a peg [Freeland, 1989];
- Tuning fork assessment; and
- Audiometric assessment.

3. Communication Assessment
4. Assessment of speech and language development
5. Psycho-educational assessment
6. Personality assessment
7. Ecological assessment
    - Micro system
    - Exo system
    - Meso system
    - Macro system

Activity 12.

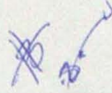
Answer the following questions

1. What are the basic objectives of assessment of children with hearing impairment?
2. Find out more about the techniques of assessment mentioned above
3. Why is it important to assess the social environment of hearing impaired children?

Intervention

Intervention is the interception of unproductive or undesired behaviors or conditions in ways that are more advantageous (Vergason, 1990). Tate (1994) in Tirussew, (1998) defined rehabilitation of the hearing-impaired as a process that is designed to minimize disability due to hearing loss in order to prevent the condition from handicapping the client. Intervention or rehabilitation of hearing impaired children, is multi-disciplinary by nature. It involves doctors specialized in

children's ear, teachers of the deaf, speech therapists, psychologists, audiologists, and parents [Freeland,1989]. However, for practical purposes, this chapter describes only the role of parents and teachers.



The Family

While communicating with a deaf child, parents need to observe the following points [Brinson 1986]. The teachers can help the parents to support their children:

1. Develop positive attitude towards their children;
2. Speak as clearly as they can and realize that an exaggeration of the mouth is not required. The movements of speech should be observed by hearing impaired child so that they will develop lip-reading skill;
3. Make your enunciation clear;
4. Consider the gestures and try to use them with hearing impairment;
5. Try to have hearing aids for the hard-of-hearing;
6. Parents must communicate in home sign and talk to the deaf child as much as possible; and
7. To give the deaf child an opportunity to communicate in sign, pointing gestures and noises. The family must encourage the use of these different methods.

The School

In practical instructional process, the school and the teachers for the hearing-impaired should pay attention to the following ten tips [Yoseldyke and Algonzine, 1995], In Trusew, (1998) when providing language instruction:

- Teaching small groups of hearing impaired students who function on different levels;
- Developing and adopting instructional materials and enhancing positive self concept;
- Using information from various assessment procedures to develop IEP [Individualized Educational Program];
- Dealing with crises calmly and effectively;
- Reducing distance between student and speaker as much as possible;

- Speaking slowly and with a stress clear articulation;
- Reducing background noise as much as possible;
- Seating students near the center of desk arrangements and away from distracting sounds;
- Using face-to- face contacts as much as possible;
- Using complete sentences to provide additional context during conversation or instructional presentations;
- Using visual cues when referring to objects in the classroom and during instructional presentations;
- Having classmates to take notes during oral presentations for student to transcribe after the lessons;
- Encouraging independent activities, co-operative learning and social skills;
- Talking with, not at, children. Remember at all levels that it is the sharing of meaning.
- Encouraging the child to question and initiate a dialogue;
- Providing social oil to sustain interaction;
- Expanding, clarifying and restating the child's intended meaning;
- Incorporating some aspects of the child's contribution in the adult's response to ensure topical continuity across turns;
- Listening to what the child has to say, handing conversation back to the child each time and allowing time for a reply, i.e. avoiding dominating the interchange;
- Giving personal contributions; and
- Using low-control moves to encourage spontaneous contribution from the child.

Unit Summary

Education of children and the youth is one of the most ignored in the Ethiopian context due to several reasons. However, there are favorable conditions in terms of policy and legislations that pave the way for appropriate educational provisions. To make adequate educational provisions,

the school should make proper arrangements for identifying children who suffer from hearing loss and who need help. It is unfortunate that we could not provide facilities for identification, assessment and intervention of these children for many decades, while the "normal" children get attentions of policy makers. With full provisions of sign language and relevant educational materials, deaf children should be taught in inclusive settings. If this is not achieved, they must placed in special classes or special schools. The hard-of-hearing children with appropriate classroom organizations and provisions of hearing aids, can be taught with "normal" children in regular classes. The deaf have a more restricted ability to communicate, a difference that should determine the way these students are taught, the content of the curricula, and the related services they require for appropriate education.

Activity 13

General questions

Many of the following questions are taken from Tirussew, (1998)

1. What strategies may we use to fully support children with hearing impairment in regular classes?
2. How can you help deaf children to improve reading?
3. How can you expand the use of sign language for those who communicate with deaf students in your school?
4. How do people understand and address persons with hearing impairment in your community?
5. What are the common characteristics of the hearing impaired children?
6. Which type of hearing impairment do you think is Common in Ethiopia? Why?
7. What implications do congenital and post-lingual hearing losses have in personality development of the hearing-impaired person?
8. What about the impact of being brought-up by deaf parents and Hearing parents?
9. Discuss about the language profile of the deaf and the hard-of-hearing.
10. What are the cognitive and academic implications of hearing impairment?
11. How do you describe the psychosocial profile of hearing-impaired persons?

12. Please cite possible symptoms of hearing impairment which you think are of great help for parents ? Please cite possible symptoms of Hearing impairment which you think are of great help for a teacher in The classroom?
13. What practical ways of assessing hearing impairment would you suggest for both parents and teachers?
14. When and where, should the intervention for hearing impaired persons need to be employed? Why?
15. Cite practical supports that parents and regular classroom teachers could provide to cater for the special needs of the hearing impaired child?
16. Write short notes on the following:
    (a) Sign language
    (b) Auditory training
    (c) What are the methods of educating hard of hearing and deaf children?
17. Reading the case of a deaf person below, discuss your personal observation and reflect in the classroom.
18. Collect some sayings by the deaf community, both negative and positive

A Case of deaf person

Study the following case and make a contextual analysis of the psychological and social implications of hearing Impairment . Draw the lesson that can be learnt from the case Derived from Tirussew, (1998)

Age:28
Sex: Male
Impairment: Hearing
On Employment Problems

The informant is a young man born in 1962 E.C in Addis Ababa. He lost his hearing ability at the age of 3 when a housemaid threw him on the ground. He attended and completed his high school education at Entoto Comprehensive Senior High School. Then, he joined the Addis

AbabaSchool of Arts and graduated with a diploma in graphics. Besides, he is Computer literate. After attending these schools and acquiring these skills he explains the hurdles: "It was very difficult for me to find a job. My grade level, skills and abilities. On top of my being deaf made it difficult to compete and get a job. I had applied for several jobs but I was not successful. I waited for over three Years looking for a job. The employers have attitudes that a deaf person couldn't perform any job. With their wrong thoughts, doubts, and ignorance. They created invalid reasons and became hindrances for the persons with disabilities not to get any job. Even when a disabled person competes and wins the position in their organization, they reconsider the disability problem and come-up with a number of reasons and don't offer the job. By the great effort of my mother, I got the current job. On my behalf, my mother asked People, explained my problems and finally found me a job at Alpha Deaf School. I am not interested with the job, because the payment is not satisfactory and it does not have any opportunity for promotion. Even if my relations with the authorities are smooth, I don't admire them for they don't make any effort to improve the lives of the teachers. I am intending to be engaged in drawing pictures and selling them as my career for the future. But I don't think this will be made practical for I don't have enough money to buy the materials. I am also fearful that even if I get the materials and draw pictures they may not be sold. Any way, I will try it."

Addis Ababa, May 1998 {Tirussew T, 1998]

Supplementary Readings

Bench, S, & Winyard, S. [1993]. Hearing and communication Disorders. London: The Macmillan Press Ltd.

Bamford, Jan and sounder, Elaine [1994]. Hearing Impairment, Auditory Perception and Language Disability. London: Whurr publication.

Bench, R. john [1992] . Communication Skills in Hearing Impaired Children. London: Whurr Publication.

Garwood. S.G. [1983]. Educating Young Handicap Children: A Developmental Approach [2nd Ed.] London: An Aspen Publication.

Freeland, Andrew P. [1989]. Deafness: The Facts. Oxford: Oxford University Press.

Gallagher, Kirk [1983]. Educating Exceptional children. Boston: Houghton Mifflin

Company.

Kessate Birhan Tessema [1951.E.C.] Amharic Dictionary. Addis Ababa Birhanina Selam Printing Press.

McAnnaly, Patrica L., Rose , Susan and Quigley Stephen P. [1994]. Language Learning Practice with Deaf Children. Texas: Shoal Clreak Boulevard.

Mittler,P.J. [1974]. Language Disorders, In P. Mitler. The Psychological Assessment of Mental and physical Handicaps. London: Tavistock Publication.

Mitchell, David and Brown, Roy 1. [1991]. Early Intervention: Studies for Young children with Special Needs. London: Champ man and Hall.

Moors, D.F [1987]. Educating the Deaf: Psychology, Principles, and Practices. Boston: Houghton-Mifflin.

Passonella, Ann and Cara B. Valkmar [1981]. Teaching Handicapped Students in the Mainstream: Coming Back or Never Leaving. Columbus: Charles E. Merill Publishing Company.

Schulze, Jane B., Carpenter, C. Dale and Trunbull, Ann [1991]. Main Streaming Exceptional Students: A Guide for Classroom Teachers. Bolston: Allyn and Bacon.

Tate, Mryane [1994]. Principles of Hearing: Aid Audio logy. London: Chapman and Hall.

Tirussew Teferra [1998]. Human Disability: Developmental, Educational and Psychosocial Implications. AAU: Addis Ababa University

Tyler, L.K. [1992]. Spoken Language Comprehension: An Experimental Approach to Disordered and Normal Processing. Cambridge.

Vegason, Alenn A. [1990]. Dictionary of Special Education and Rehabilitation. Children with Hearing Company.

Yoseldyke, James E. and Algozzine, BoB [1995]. Special Education: A Practical Approach for Teachers. Boston. Houghton Mifflin Company.

3.2. Children with visual disabilities

Introduction

When vision is limited, it affects the individual in significant ways: limiting mobility, access to printed information, and independent living. People with visual impairments also face stereotypes, social stigma, and barriers to fully participate in mainstream society. In order for visually impaired children to enhance their participation in a larger society we have to assess their needs, difficulties and potential and provide them with appropriate support. To achieve this, this part of the lesson will focus on the following contents.

Main contents of the Unit

- Definitions
- Types of visual Impairment
- Causes
- Identification and assessment
- Intervention

Objectives of the unit

After completing this unit, the teacher students will be able to:

- Give meaning to visual impairment and classify it into categories;
- Describe the procedures of identifying and assessing visually impaired children;
- Describe the causes of visual impairment;
- Explain the developmental characteristics of visually impaired children;
- Describe the methods of educating visually impaired children; and
- Demonstrate positive attitude towards visually impaired children.

Educational Definition

A. Partially Sighted Pupils

These are pupils who, by reason of impaired vision, cannot follow the normal regime of ordinary schools without determent to their sight or to their educational development, but can be educated by special methods involving the use of sight. Such pupils use print materials but may need modifications such as enlarged print or use of low vision aids magnification (Ysseldyke and

Algozine, 1995). This population may able be to read ink prints with or without lenses. With the increase in severity of visual problems there is more need to have magnifying lenses.

B. Blind Pupils

Blind pupils are those pupils are who are totally without sight or have little vision, and who must be educated through channels other than sight for example using Braille or audio-tapes (Ysseldyke and Algozine, 1995). They may have a series of difficulties of reading and writing ink prints even using powerful magnifying lens..

Causes of visual ipairment

In spite of several limitation to identify visual impairment, the workers and specialists reported the following casual factors of visual impairment:

Refractive Errors. The light rays that enter the eye do not fall exactly on the retina and myopia ([nearsightedness) results. Nearsighted persons can see things that are near to them, but they cannot distinguish images at a distance. When the eyeball is too short, the images fall at the back of the retina and hyperopia (farsightedness]) occurs. Farsighted persons see things better at a distance; however, the effort to view things better at a distance; requires excessive accommodation of the lens curvature and can cause fatigue and restlessness.

Astigmatism. This refers to distorted or blurred vision caused by irregularities in the cornea or other surfaces of the eye; both near and distant objects may be out of focus.

Amblyopia/ lazy eye. Refers to a dimension of vision in one eye, causing suppression of the weaker eye and the use of only stronger eye. The condition may be due to eye muscle imbalance, refractive errors, or other defects present when the infant is learning to use vision.

Cataract. Cataract is a condition of cloudiness in the lens of the eye that blocks the light necessary for seeing clearly. Vision loss depends on where the cataract is located on the lens and how dense the clouding is. Treatment [surgery and eye glasses or contact lenses] can be effective.

Glaucoma. This is a condition in which the normal fluid of the eye [aqueous humor] does not drain properly. This causes pressure within the eye, which may damage the optic nerve and result in severe loss of sight or tunnel vision. The person sees only the center of the visual field. If detected early enough, glaucoma can be treated by controlling the pressure in the eye.

Retrolental Fibroplasia. The loss of vision resulting from this condition is caused by the formation of scar tissue at the back of the lens of the eye. This condition has been linked to the concentration of oxygen administered to the child at birth in the incubator.

Strabismus is a condition in which the eye is turned inward or outward or squints because of weak or malfunctioning muscles. The child may use one or both eyes alternately. Treatment includes patching the stronger eye, corrective lenses, and sugery. Terms like squint, cross-eyed and wall-eyed are used to describe this condition.

Nystagmus. This condition results in involuntary, rapid, rhythmic eye movements, usually side to side continuously. This condition usually occurs in combination with other severe visual problems and may indicate certain Brain malfunctioning and inner ear problems. Effects may include dizziness and nausea.

Infectious Diseases

- Trachoma is common among people of many countries whose surroundings are unhygienic and who are crowded together in unhealthy environments wherein dirt abounds. It creates irritation and scaring of cornea which gradually leads to visual impairment;
- Syphilis manifest itself in the conjunctiva in the form of chancre;
- Measles, typhoid, scarlet fever, and meningitis;
- Hypertension;
- Diabetes; and
- Malnutrition, example, vitamin A deficiency.
- Injuries and poison

Activity 14.

Answer the following questions based on the discussions and referring to books

1. How is the disability of visual impairment divided into two subgroups?
2. What are the major causes of visual impairment in Ethiopia?
3. What preventive measures can protect children from visual impairment?

Developmental effects of visual impairment

The developmental effects of visual impairment largely depend upon the interaction of various factors such as degree of impairment (completely blind or weak sighted), onset of impairment (congenitally or adventitiously blind) as well as the abilities of the children and the nature of their environment. Not being able to see can in one way or the other have an adverse effect on physical-motor, cognitive, academic, social, and communication characteristics (Tirussew, 1998).

Physical and Motor Characteristics

Activity 15.

Discus and answer the following questions

1. Does visual impairment retard physical growth and development?
2. Does the age of onset of visual impairment plays an important role in motor development? How?
3. What do you think is the motor behavior of children with congenital blindness?
4. Can we see better psychomotor skills of an adventitious blind person compared to a congenitally blind person?
5. Are there differences of motor skills among various degrees of visual impairment, from mild to profound?
6. Does the presence of visual impairment deprive a child to explore her/his environment?
7. Does the visual impairment affect use of the body and body coordination? How?
8. Do you think that there will be a problem of muscular control such as head, neck, and trunk?

9.How do you evaluate the walking of blind persons? Does it seems awkward? Why?

10. Can we conclude that the lack of visual stimulation result in a lack of motivation to move about? Why?

11. Do you think lack of the opportunity to observe others affect the movements of children such as running, hopping, jumping, and skipping with visual impairments?

12. Do you think parental over protection may affect the blind child motor development? How?

Cognitive Development

Cognition is largely a matter of developing concepts. Because many concepts are learned through visual means, students with visual impairment have difficulty learning some concepts. Those with severe visual impairment have to rely on sequential observation. They cannot see but touch only part of an object and have to build up on image from the components. Awareness of the relationships with other objects does not usually occur until much later, and initially the connection between sound and object is not often made. Blind babies tend to be more passive and less inclined to go in search of new experiences. Therefore, severely visually impaired children tend to have fewer learning experiences in the same time period than the sighted children do. This may slow down their rate of intellectual growth, but not their capacity for it [Fielder, Bets and Bax, 1993].

- sensory input is lacking or limited;
- concept development may also be restricted;
- grasping some concepts such as color may not be easy;
- acquiring concepts of distance and time experiences from other sources of sensory information may pose difficulty;
- Oral and written communication provide a mechanism for sharing ideas and concepts with others;
- lack of visual stimulation may cause the child to be slower in language development. In addition, he/she may require a longer time to attach meanings to certain words;

- imitation from visual observations, a primary method of learning for young children, may be absent;
- incidental learning through observation may be unavailable to many children with visual disabilities; and
- Some children also develop repetitive stereotypic movements commonly referred to as "blindisms" such as rocking, eye poking, head rolling, and hand waving. These behaviors are explained as means of compensating the visual stimulation through self-stimulation.

Activity 16

1. Do you think that visual impairment deprives cognitive development? Why?
2. What are the major restrictions of visual impairment in the process of learning?
3. Do you think that congenital blindness may significantly lag behind compared to sighted children in their cognitive development? Refer to Piaget's cognitive development stages.

Academic Characteristics

The impact of visual impairment on academic performance depends on:

- a function of the severity of the condition;
- the degree of vision loss; and
- the age at which the student's vision was reduced.

Activity 17

1. What should be done to enhance the achievement of children with visual impairment?
2. What strategy should be designed to promote their learning in all subjects?
3. Can we use technologies for optimum learning of students with Visual impairment? List some of the devices.

Communication Characteristics

One of the most common misconceptions about blind children is that they are equally or more adept in language skills than their sighted peers. But the reality is different and many literature show the following (Tirussew, 1998):

- They have developed self-oriented language and that the word meanings were more limited for them than for normally sighted children;
- They missed visual references, and less integrated information is provided for them by their parents;
- A higher incidence of echolalia;
- They are more aware of the presence of auditory clues in conversations than are their normally sighted peers, but this does not guarantee the correct interpretation of the implied correct meaning;
- Especially in congenitally blind children, verbal reasoning skills seem to lag behind auditory memory skills;
- Absence of verbal forms of communication, so they miss out most of the information and feelings displayed with a look, a nod, a smile, a frown, or a shrug; and
- Generally, communication is the major area in which students with visual impairments experience difficulty. To "read " for example, they sometimes have to use large – print books, special reading methods [Braille], or recording materials and readers.

Social/Emotional Development

As indicated in Tirussew (1998), the absence of vision deprives the infant of observing the back and forth movement of family members from his presence, thereby slowing down the process of learning to distinguish between self and non-self. The move of the child from family into peer group may be hindered because the child cannot see to imitate his/her peers to utilize nonverbal communication skills in order to know when he/she is acceptable; if he/she is not acceptable, he/she cannot initiate the necessary behaviors to secure acceptance [Harley, R.K., 1973; Ysseldyke and Algozine, 1995]. His/her lack of vision may prevent him/her from learning what the peer group accepts. In general, the social developments of pupils with visual disability seem to differ from that of the sighted. Furthermore, studies indicate that pupils with visual disability in integrated settings have more age appropriate behaviors than those in segregated settings [Mc Guiness, A. R. 1981].

Activity 18

1. Do you think that Blindness may affect social skills?
2. Do attitudes of parents affect their children's social/emotional skills?
3. Are there relationships between communication skill and their social/emotional skill? How? Elaborate clearly;
4. Do blind children smile and play?
5. Does overprotection lead to maladjust?
6. Why are children with low vision believed to have more difficulty than the blind in their social/emotional development?
7. Does having bulky eye glass affect their social and personality adjustment?
8. Are there significant differences between the visually impaired and sighted children?

Identification, assessment and intervention

Identification

The following is a list of potential signs of visual impairment:

- Frequently experiences red or inflamed eyes, infections and rubs them;.
- Eye movements are jumpy or not synchronized and blinks frequently;
- Experiences difficulty moving around and show unusual clumsiness;
- Experiences difficulty reading small print reversing letters and losing place during reading;
- Experiences difficulty identifying small details in pictures or illustrations;
- Lacks interest in lights and visual stimuli;
- Has poor eye hand coordination;
- Unusual facial expressions and behaviors;
- Holding reading materials at an inappropriate distances
- Discomfort following close visual work;
- Difficulty with distance vision;
- Blurred or double vision
- Poor spacing in writing and difficulty in "staying on the line";
- Inability to distinguish colors;
- Stumbles frequently and trips over small object ; and
- Frequent head adjustments when looking at distant objects.

Assessment

1. Screen whether the child can see light or not
2. Visual acuity measurement:
    - Distance Acuity Measurement
    - Near Vision Acuity Measurement
3. Visual Field
4. Color Vision
    - Pseudoisochromatic chart
    - City University color vision
5. Contrast Sensitivity
6. Reading Acuity
    - Threshold
    - Optimal size
    - Reading speed
    - Reading Comprehension

Activity 19.

1. Identify the steps for each of the visual assessment techniques mentioned above (1-6)
2. Practice the measurement following the steps and using appropriate instruments for each of the measurements.

Intervention

The major intervention activities will be done at home and school.

The Home

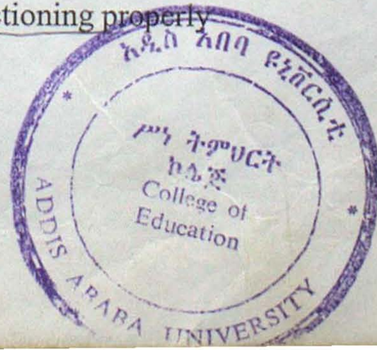
Among others the most essential ingredients for the harmonious development of the child include:

- Creating loving and accepting family environment;
- Developing positive interaction with the child through encouragement of the child to talk and discuss;
- Orienting the child about his/her surrounding using all possible senses, that is, listening, touching, smelling and even tasting;
- Training the child to move freely from place to place in his/her surrounding;

- Encouraging the child to explore and trust his/her environment;
- Playing with the child and providing the child with playing objects of mainly with auditory use;
- Assuring the safety of the home environment so that the child can freely move and will not be harmed;
- Avoiding over-protectiveness and encouraging the child to develop self confidence and self-reliance; and
- Maintaining close contact with teachers' of the child and seeking advice from professionals, parents of visually impaired children or from visually impaired adults.

The School

1. What the teachers and school personnel can do in the classroom are:
    - Reduce distance between student and speaker as much as possible;
    - Reduce distracting glare and visual distractions as much as possible;
    - Reduce clutter on classroom floor and provide unobstructed access to door and key classroom spaces;
    - Seat students near chalkboard or overhead projections, or give them the freedom to move close to areas of instructions;
    - Avoid partially opening cabinets, storage areas, and classroom doors and ascertain that fully opened or closed doors are safer;
    - Use auditory cues when referring to objects in the classroom and during instructional presentations;
    - When presenting visually dependent material, verbalize written information, described pictures, and narrate non-verbal sequencers in videotapes or movies. Use complete sentences to provide additional content;
    - Reduce unnecessary noise to help focus on content of instructional presentations;
    - Keep instructional materials in the same place so students can find them easily; and
    - Make sure glasses and other visual aids are functioning properly



Adapted Educational Materials and Equipment

- Braillewriter, Slate, and stylus: a Braille-writer is a six-key machine that is manually operated and types Braille. The slate is a metal form with openings the size of the Braille dot; the stylus is a pointed object used to emboss the dots.
- Cassette tape recorders, may be used to take notes, formulate compositions, listen to recorded texts, or recorded assignments.
- Talking calculator: it is an electronic calculator that presents results visually and auditorily.
- Closed-circuit television: it is a system that enlarges printed material on a television screen and can be adjusted to either black on white or white on black.

The following list of additional visual aids represents the types available from various sources:

A. Geography aids

- Braille atlases
- Molded plastic, dissected and undissected relief maps
- Relief globs
- Land form model

B. Mathematical aids

- abacus
- raised clock faces
- geometric area and volume aids
- write forms for matched planes and volumes
- Braille rulers

C. writing aids

- raised-line check books
- signature guide
- longhand-writing kit

- script letter – sheets and boards

The Curriculum Area

In the education of children with visual impairment, the following eighteen curriculum areas are basic skills training mentioned by smith, Neisworth and Hunt [1983].

Skill readiness

- Optacon training
- Visual- efficiency training
- Sensory- awareness training
- Map reading
- Reference material skills
- Auditory –aids training
- Physical education

Gross to fine motor movement Rhythm and games

- Vocational training
- Orientation and mobility training safety awareness
- Daily living skills
- Typing
- Concept development

  Spatial relations

  Categorizations

  Identification
- Leisure-time activities
- Recreation
- Human sexuality
- Social skills
- Speech
- Handwriting

Orientation and mobility aid

Listening Skill Training

Braille training

Enhanced Image Devices

Audio Aids

Optical character Recognition [OCR] Devices

Activity 20

1. What is the difference between visual acuity and visual behavior?
2. How do people in your community perceive visual impairment?

Please identify some of the derogatory sayings and terms used to address visually-impaired persons in your community.

3. Identify essential psychomotor impacts of visual impairment? How do you compare the psychomotor profile of blind and the partially sighted?
4. Does visual impairment affect cognitive and academic profile? If your answer is yes, explain how? If your answer is no, explain why? Discuss about the psychosocial conditions of persons with visual impairment? Consider the situation of different onsets in your discussion.
5. Why are early detection, assessment and intervention important for visual impairment?
6. Suggest possible symptoms of visual impairment, which are easily detectable by parents at home.
7. Identify symptoms of visual impairment, which you think are easy to detect by a teacher in the classroom or in the playground.
8. Suggest practical assessment procedures, which can be easily conducted by a teacher or a parent.
9. What sort of advice do you suggest that parents of children with visual impairment need to be given in order to provide the necessary care for their children?
10. How can a regular classroom teacher help a child with visual impairment, in terms of both the academic as well as the psychosocial adjustment?

Case Study

Please go through the following case and analyze the personal and social situations the person with visual impairment has gone through. Draw the lesson that can be learnt from the case.

Age: 54

Sex: Male

Impairment: Visual

Occupation: Manager of Training Center

"Better if he died" "Said Relatives when I became Blind" One of the difficulties encountered by persons with disabilities is the social predicament. The informant who is a father of four children, narrates the unforgettable memories of his childhood as follows:.

" The social problem started immediately after I lost my vision. My parents relatives were coming from very distant places to express their 'sorrow and remorse' as if somebody were dead in the family. Most of them were saying 'better he were dead than living as a blind.' The worst of all was the ill expression of a close relative, who said to my mother, 'He is your only male child; you baked only a piece of 'Injera' and it was a broken one.' This statement was a psychological and mental torture to me. It was a big blow to me. I was terribly disturbed and frustrated. One third (1/3) of my weight decreased within a few months."His eyes were injured by sun rays as the informant reported. He had tried to seek treatment but it was not effective . After losing his vision and experiencing negative reaction n the family, he joined a boarding school with many difficulties. He continued, "The social reaction in boarding school was extremely different compared to that of the home environment. The school was an integrated one. Both sighted and blind students were learning together . Almost all students were from a higher socio- economic status, they were treating me as equally as any sighted student. They were helping me financially and materially. Except for

the inferiority complex I felt due to my low economic condition, there was no problem. However, when I completed my high school and joined Addis Ababa University, my experience was different and difficult. Some of the students and the university community had unexpected negative attitudes towards Blind students. I remember one day, I was walking in the campus and on my way I just collided [bumped] against an object; there were two students a little far away from me, and one of the two was rushing to save me, but I heard the other one saying "just leave him alone, let us see how sensitive he is." I shrank; I was mortified ; it was something which I did not expect from a university student". He continues... "In fact, female students were more sympathetic, but their minds were not free . They were afraid of the social reaction when they were with blind students. Due to this problem, they usually fly away from us. As far as I remember, my only problem was with regard to dating and having a girl friend. My self-esteem was low. I thought that since I was blind, I might not get accepted, and I thought if I got a girl friend I might not attend my education properly. As the result of these and other psychological problems created by myself, I didn't ask any girl for dating in my school days." Regarding his marriage and his condition status he has the following remark; "After completing my education and getting a job for my livelihood I decided to marry. I tried two girls and one of them rejected my request ; and an old person advised me that the other one couldn't be a wife. My friend brought my present wife. He met her, knew her, and when he was certain that she was a kind of girl with good attitude, unaffected by the social prejudices, he chose her for me. He came to me and we discussed the matter. Finally, he let me know her. We asked her parents for marriage. They approved our marriage, and we got married. But we didn't have an eventful ceremony. It was not necessary for us to go to the parks and other recreation places for the ceremony. It was my decision and she accepted it, She is kind, understanding, unprejudiced. We have spent 22 years of happy marriage life. I still enjoy my family life."

The informant has the following comment on the degree of his participation in the community affairs: "Social ceremonies, interactions, etc. around my neighborhood and in the community are taken-up by my wife. I don't like to go to social gatherings, because I can't be free. People's reaction is not good and not proper. But sometimes and if it is a must, I participate in condolences, marriage ceremonies, etc. My experience has shown me that as a person with disability my interaction with the society has often resulted in people's improper reaction contributing to many of my psychological problems. But if we (persons with disabilities) get equal treatment and are entertained equally as any 'normal' person we would have no problem. So, the attitude of most people has to be changed. I still meet my parents' relatives. They usually come to my home to express their regrets when they see my success."

Addis Ababa, May 1998 [Tirussew Teferra, 1998]

Unit Summary

For most of us, the primary way we learn is through vision. Often when in the process of learning how to perform a new task, we show how to do the task. We observe the action of others and imitate their behaviors. We gain information by watching television or reading a news paper, book or magazine. People with visual impairment have a restricted ability to use their sight, and that can affect how they function as independent adults. Visual impairment is one of the smallest special needs education category in very few schools of Ethiopia. In many schools of Ethiopian general education nowadays, it has become common to see a significant number of children with low vision and some blind students. Many blind children are still out of school, but need attention by the education system. With changed attitudes, children and the youth with visual impairment will participate more fully in society and take their places alongside sighted people. This is possible only when teachers are able to support these children in their difficulties and fulfill their needs to and enhance their potential.

Supplementary Readings

Fielder, Alistair, Best, Antony B., and Bax, Maritin [1993]. The Management of Visual impairment in Childhood. London: Mac Keith Press.

Hareley, R.K [1973]. Exceptional Children in Schools: Children with Visual Disabilities. New York.

Mc Guiness, A. R. [1981] Functional Linguistic Strategies of Blind Children. Journal of Visual Impairment and Blindness, 75 210-214

Tirussew Teferra [1998]. Human Disability: Developmental, Educational and Psychosocial Implications. AAU: Addis Ababa University

Ysseldyke, James E; and Algozine [1995]. Special Education; A Practical Approach for Teachers. Boston: Houghton Mifflin Company.

Unit 3.3 Mental Retardation

Introduction

Mental retardation is mainly a cognitive disability. It is identified by reduced intellectual ability, limited adaptive behavior, and the need for support to participate fully in the community. Mental retardation is one of the most complicated disabilities being confused with other disabilities. The mentally retarded are also the most forgotten and negatively labeled members of their community. People with mental retardation have not been gaining access to education, employment, society, and independence, in Ethiopia.

Main content of the Unit

- Definition
- Classification of Mental Retardation
- Causes
- Identification and assessment
- Interventions

Objectives of the unit

After completing this unit the teacher students will be able to:

- Give meaning to mental retardation and classify it into categories;
- Describe the procedures of identifying and assessing mental retardation;
- Describe the causes of intellectual impairment;
- Explain the developmental characteristics of mentally retarded children;
- Describe the methods of educating mental retarded children; and
- Demonstrate positive attitude towards children with mental retardation.

Definition Mental Retardation

The American Association on Mental Retardation, defined it as: substantial limitation in present functioning. It is characterized by significantly sub average intellectual functioning, existing concurrently with related limitations in two or more of the following adaptive skill areas: communication and self-care, home living and social skills, community use and self-

direction, health and safety, functional academics, leisure, and work. Mental retardation manifests itself before the age of 18 [AAMR, 1992].

The first part of this definition establishes mental retardation as a category of concern for people whose current levels of functioning are limited. Mental retardation is difficulty in learning and performing certain daily life skills as a result of substantial limitations in conceptual, practical, and social intelligence.

The second part of the definition-"significantly sub average intellectual functioning"- is usually translated as a score of 70 to 75 or below on one or more individually administered general tests. Test scores and other information are reviewed and evaluated by teams of professionals as a part of the process of diagnosing mental retardation.

The third part declares that the individual must also demonstrate limited adaptive skills in key areas. That is, first, adaptive skills limitations must occur at the same time as intellectual limitations for intellectual functioning alone provides an insufficient basis for a diagnosis of mental retardation. Second, more than one area of adaptive skills must be limited to reducing the chances of making a mistake in diagnosing mental retardation. Finally, key skill areas central to successful life are listed to facilitate the identification process.

The last part of the definition indicates that mental retardation manifests itself before individuals are typically expected to assume adult roles (the eighteenth birthday). From this perspective, mental retardation is viewed as mainly a disorder manifested during the childhood periods.

For many authors, mental retardation has been classified into four educational levels [Zigler E, 1986: Beirn et al., 1994].

1). Educable / Mildly Retarded;

- IQs between 50 to 70.
- They are not noticeably different from "normal" children in their physical characteristics and general health;
- they can develop language and social skills;
- They have little sensor-motor impairment;
- They display delays of only 1 to 3 years in school performances;
- They are capable of learning fundamental academics and personal responsibilities;
- Given this minimal delay, these children are able to function within the traditional grade level curriculum with only minor modifications or assistance. They can be placed within regular classes, and special education support services are provided to maintain reasonable academic and social progress:
- As adults, they can be self-sufficient and live independently as productive members of the community; and
- They can adequately pursue many occupations, although they may need outside assistance when they face stressful situations.

2). Trainable / Moderately Retarded

- IQs between 35 and 49;
- Their adaptive capacity is more seriously impaired;
- These children, have functioning ability of approximately one-half to one-third of that is expected for their chronological age;
- They are able to master self-care skills, basic language, and cognitive concepts to include functional academics;
- They can learn to talk or communicate during the pre school years, but are only minimally aware of social conventions;
- As adults, with supervision, they will be able to live in community homes and work with supervised workshop facilities;

- They can benefit from vocational, occupational and social training and, with supervision, can care for themselves; and
- Traditionally, these children have been educated within segregated schools, training center, or private facilities. Currently, however, the trainable retarded are being integrated into regular school compounds.

3). Supportable / Severely Retarded / Dependent Mentally Retarded

- IQs between 20 and 34;
- They manifest poor motor development during the pre-school years;
- They develop little or no speech;
- They learn to talk during their later school years;
- can learn basic hygienic skills;
- They profit little from vocational training; and
- Adults they may be able to perform simple tasks with close supervision;

4). "Life – Support" Mentally Retarded / Profoundly Retarded

- IQs less than 20;
- They manifest only minimal sensor motor functioning during their preschool years;
- They show some motor development during the later school years;
- They may benefit from minimal self-care training;
- When they reach adulthood some speech and greater motor development may occur;
- They may be capable of very limited self-care; and
- They require constant supervision in a very structured environment.

Support Based Classification

The following are the definitions and examples of intensity of supports:

Intermittent

- Intermittent supports are provided on "as needed basis";
- They are characterized by their episodic nature; and
- They may need support on a short-term basis during the life-span transitions.

Limited

- Limited supports are intensity of support characterized by consistency over time; and
- Time limitation occurs.

Extensive

- These are characterized by regular involvement;
- They are not time-limited; and
- They involve long-term home living support.

Pervasive

- Pervasive support is characterized by constancy and high intensity support provided across environments; and
- The support is potentially life-sustaining in nature.

Causes of mental retardation

1. Organic/ Physiological Causes

A. Hereditary Factors

- Defect in the genetic materials of the individuals could result in mental retardation.
- What individuals inherit from their parents will have profound effects on their intellectual, social, and personality development.

B. Hormonal and Metabolic Conditions

- Phenylketonuria (PKU): It is an inherited defect in enzyme activity;
- Cretinism (Hypothyroidism): This disorder results from dysfunction of the thyroid gland. Most children with this disorder suffer from severe retardation;
- Down's syndrome: This involves abnormal number or patterns of chromosomes, with a resultant severe retardation;
- Hydrocephaly: It involves a fluid accumulation in the cranium which causes an enlargement of the head; and
- Microcephaly: It is characterized by a small brain and head.

C. Prenatal Influences

- These may be chemical agents or events that may contribute to structural deficits. Examples of these agents include radiation, viruses, vitamins, hormones, and drugs.
- Viruses constitute one of the most frequent causes of prenatal infection leading to retardation. Mumps and chickenpox early in pregnancy, as well as some forms of influenza can have adverse effects, especially if they occur during the first trimester of pregnancy; the degree of retardation hinges on the extent and location of the damage.

  - Heavy alcohol intake of pregnant women,
  - poor nutrition,
  - birth injuries,
  - insufficient oxygen during or shortly after birth,
  - prematurely,
  - lead poisoning,
  - carbon monoxide poisoning,
  - ingestion of other toxins,
  - blood incompatibilities, and
  - allergic reactions can result in brain damage of the fetus and consequent retardation.

D. Postnatal Conditions

- physiological;
- organic problems that can result in retardation include infections such as meningitis or encephalitis, lesions and hemorrhaging;
- There can also be toxic influences, such as ingestion of lead and other poisons, or injuries. Malnutrition in infants and young children can also cause developmental problems permanent retardation; and
- Malnutrition is often considered to be the greatest single factor in infant mortality and morbidity especially in developing countries;

E. Cultural – Familial Causes

- higher number of complications during pregnancy delivery, and infancy;
- larger family size (five or more children);
- greater crowding;
- unskilled and semiskilled labor;
- the premarital work-background of the mother;
- Children in the impoverished environment may experience intellectual, social, or linguistic deprivation;
- Environmental influences (psychosocial deprivation, sensory deprivation, severe neglect, malnutrition, complications of severe mental disorders); and The child may have been severely punished for specific behaviors, causing an overall suppression of behaviors.

Activity 21

1. What do you understand by mental retardation?
2. Discuss the educational definition of mental retardation?
3. How do people in your community perceive persons with mental retardation?

4. What do people in your community attribute for the cause of mental Retardation?

5. How do you understand mental illness and mental retardation? Discuss the specific personal features.

6. Discuss the main causes of mild mental retardation.

7. Why do we identify the causes of mental retardation?

Developmental characteristics

Mental retardation is characterized by generalized developmental delay: cognitive, motor, and social development; self-help skills; language development and use; and academic readiness skills. Students with mental retardation fail to meet expectations in several cognitive, academic, physical, behavioral, and communication areas. The following summarizes general cognitive, academic, physical, communication and behavioral characteristics of children with mental retardation (Garwood; 1983; Ysseldyke and Algozzine, 1995).

Cognitive Characteristics

Learning

- Attention- low attention level;
- Memory- deficits in memory, specially in the short-term memory processes;
- Transfer of learning- Persons with mental retardation are said to experience difficulties in applying an information to new situations, that are similar but somewhat different from those experienced during initial raining;
- Discrimination- The ability to discriminate between instances is one of the foundations of learning;
- Relativity- The ability to make relative comparisons along dimensions of size, distance, time and order is the basis for more complex tasks;

- involving measurement and sequencing. Children with mental retardation exhibit limitations in performing almost all tasks.
- Imitation- retarded children do not naturally develop imitation skill in the same manner as the "normal" ones;
- Speech and Language- Delays in speech and language development are common among the mildly retarded; and
- Articulation, voice and stuttering are the most common problems of children with mental retardation. Mildly retarded in their language are generally more limited in vocabulary, shorter sentence length and fewer abstract words than their non-retarded peers. Grammar rules are also acquired at a slower rate.

Academic Characteristics

- Students with mental retardation perform poorly in most academic areas;
- Because of a depressed mental age, retarded children are not ready to begin the traditional school curriculum at the same chronological age as are non-retarded children; and
- Faced with repeated failure and frustration in the classroom, they fall further and further behind academically, thereby increasing their expectancy for failure.

Social / Emotional Characteristics

- The slow maturation of retarded children results in poor judgment and immaturity;
- They exhibit socially inappropriate behaviors;
- Often they are both socially and emotionally immature.
- They show inappropriate and antisocial behaviors;
- Odd mannerisms can lead others to reject those with mental retardation;
- Some children with severe or profound retardation have difficulty with independent living skills such as dressing, eating, exercising bowel and

3. How do you see the cognitive and academic performance of children with MR? Identify major learning difficulties of children with mental retardation?
4. Identify the differences between children with MR and children with Learning Disabilities (LD)?
5. Discuss about the psychosocial and emotional profiles of children with MR.
6. How do you compare the motor and physical development of children?
7. Do you think a child with delayed language development is a child with mental retardation? If yes or no, explain why?
8. What is adaptive behavior? Give detailed explanations

Identification, assessment and intervention

Identification

Children with severe and profound mental retardation are usually identified before they reach school age. Many of them exhibit typical physical features and serious delays in development soon after birth. However, for the majority of students with mild mental retardation, their retardation does not become obvious until they start formal schooling. Some difficulties are observed in the course of development in the following parameters (Tirussew, 1998)

Difficulties of Infancy and Early childhood

- Development of sensor motor skills
- Communication skills including speech and language;
- Self-help skills; and
- Socialization ability to interact with others

Difficulties of Childhood and Early Adolescence

- Application of basic academic skills in daily activities;

- Application of appropriate reasoning and judgment in mastery of the environment; and
- Application of social skills to participate in group activities and interpersonal relationships.

Late Adolescence and Adult life

Besides vocational and social responsibilities and performance the following is a list of identifying characteristics that help the classroom teacher to identify children with mild retardation (Kough et al. 1955).

- is unable to think abstractly or to handle symbolic material;
- is unable to understand and carry through teacher's directions for assignments;
- lacks the so-called "common sense" and reasoning level of the group;
- is unable to understand complex game rules;
- is slow in all areas: academic, social emotional and physical;
- breaks rules of conduct or of games and is often unaware of it;
- is unable to work independently;
- is easily confused;
- has a short interest and attention span;
- is unable to voluntarily concentrate; and
- finds it extremely difficult, if not impossible, to keep up with the class on academic work

Assessment

Assessment of children with mental retardation will focus on:

- Standard measures used to assess IQ, and
- The child's adaptive behavior .

When the possibility of deficits in adaptive behavior is being investigated, two critical variables that must be considered are age-group expectations and expectation of cultural groups. For this purpose, three general age groups are delineated, infancy and early childhood, late childhood and early adolescence, late adolescence and adulthood.

Infancy and Early Childhood

Assessment focuses:

- on sensor motor development,
- speech language, and
- self – help and socialization skills.

Indicators of adaptive behavior deficits commonly found among young children are delays in standing, walking, and fine motor tasks; delayed language expansion, poor understanding of safety rules; inability to use money, and problems in number and work recognition.

Late Childhood and Early Adolescence

Assessment focuses on:

- social skills
- application of basic academic skills,
- reasoning, and
- judgment in mastery of the environment are assessed to determine the child's ability to learn a function of experience.

Late Adolescence and adulthood

Assessment focuses on:

- vocational performance and
- social responsibility.

In general, although adaptive behavior and intelligence are positively correlated, there is enough individual variation to warrant using separate measures and to require the presence of deficits before a label of "retardation" is applied [Grosssman, 1973], Thus, a child may be considered retarded at one time and not

at another. Such a classification is always relative to social norms and expectations for the child's chronological age. These days, behavior rating scales or checklists which can be teacher-made, are used as assessment instruments which offer the teacher an efficient method of determining which children could benefit from further evaluation and intervention. The following are areas considered in the assessment of education and training of children with moderate to profound intellectual disabilities [Heward and Orlansky, 1988 in Tirusew 1998].

Sensor motor Skills

- Stimulation of senses and reflexes- includes visual fixation tracking and searching, sound localization;
- Eye- hand coordination – includes reach, grasp, and use of objects;
- Spatial relationship and operational causality; and
- Identification of objects and sensory characteristics – includes, colors, shapes and textures.

Physical Development

- Balance, posture, walking and running;
- Manual dexterity and fine motor coordination; and
- Ball skills including catching, throwing and hitting;

Self-Care and Self-Help

- Feeding includes using table utensils, cups, glasses and plates;
- Toileting – includes toilet training, washing showering, shaving;
- Money skills – includes recognizing and using coins and notes Purchasing goods and receiving change, banking, saving etc;
- Transportation – includes use of buses, taxis, trains etc; and
- Meal preparation – includes planning, purchasing and preparing meals.

Language and Academics

- Looking at and imitating behavior;

- Non verbal and augmentative language and using signs, use of symbol systems [such as Bliss symbols] if appropriate;
- Receptive language – includes word recognition, listening, following directions;
- Expressive language – includes initiating speech, asking, and conversations; and
- Functional academics – includes recognition of important signs [e.g. male & female, toilet signs, "no entry" signs}, functional reading and mathematics.

Social and Interpersonal Skills

- Recognizing familiar skills;
- Play – isolated and cooperative play, sharing and self-protection etc;
- Use of leisure time – watching TV, records; sport and use of community facilities etc; and
- Sexual development – includes intimacy, privacy, sexual behavior, marriage, child raring etc;

Vocational skills

- Prerequisite physical skills – coordination, threading, repetitive activities, etc.
- Prerequisite social skills – following instruction, social language and interactions, etc; and
- Employment skills – telling time, attendance, and specific task skills etc.

Intervention Programs

Intervention must focus on:

- education and training
- good care and

- medical care

The intervention programs must be in the family, school and at work places

Family Support

- Attitudinal changes;
- Adaptation training;
- Intensive counseling and proper guidance as early as possible; and
- Work with professionals- participate in rehabilitation programs.

School Support

Educational Intervention

Mentally retarded children may be placed in regular classes, special self-contained classes, special day schools, or institutions based on the their degree of retardation and adaptive behaviors.

- Mildly retarded children are likely to be placed in the regular classroom, and to receive special help in the resource room.
- Moderately retarded children may learn in the regular class or in special self-contained class classrooms.
- Severely and profoundly retarded children may learn in special classes, special schools, or in group homes.

The following include the ten top list of tips for teachers of students with mental retardation (Ysseldyke and Algozzine, 1995).

1. Provide alternative instructional presentations using varied examples and focus on functional skills;
2. Provide opportunities for students to demonstrate active understanding actively before moving to independent practice;
3. Provide more opportunities for practice than appropriate or necessary for classmate;
4. Use concrete examples when teaching new skills.

5. Provide supportive and corrective feedback more often than necessary for classmate;
6. Modify tests and evaluation measures to compensate for learning problems;
7. Evaluate student performance and progress more frequently than appropriate or necessary for classmates;
8. Adapt instruction to the environments where what is being learned will be used;
9. Break lessons into smaller parts when teaching complex skills; and
10. Be prepared to repeat teaching more frequently than necessary for peers.

The general trend of the education of children with mental retardation can be summarized as follows.

Education of the mildly Retarded

Mildly retarded children, for example, need readiness for skill-discrimination, relativity, cause-and-effect relationships, mediation, imitation – and training in adaptive social behavior. The educational provisions should be on the following basic factors:

- mainstreaming the mildly retarded student;
- Educating options depend on the child's unique set of strength and weakness.
- supporting services
- resource room assisting
- modifying curriculum
- accepting by other students
- experiencing with, and exposure to exceptional children; and
- making community resources available

As stated in Tirussew (1998), teachers teaching mild mentally retarded students should consider the following:

- Direct instruction of a skill or concept is absolutely necessary for the mildly retarded may not acquire important concepts through inferential learning.
- Complex skills should be presented in small sequential steps to ensure mastery.
- Practice of a skill in small increments distributed overtime is more effective than concentrated or massed practice within one or two lessons. This helps over-learning.
- New concepts or skills should be presented by means of concrete examples of the learning to take place. These children require realistic experience with new learning tasks in order to understand the relationship or process being taught.
- External sources of motivation [praise, attention] provided by the teacher increases the rate at which new learning is acquired.
- Once a skill or behavior has been taught and learned, the teacher should make follow ups during the year to ensure that these children maintain that ability.
- Mildly retarded children are highly susceptible to distracters. The teacher should keep excess noise and movement in the classroom to a minimum, limit the number of irrelevances found in instructional materials, and keep verbal instructions clear.
- When planning work activities, the teacher should build on success opportunity, since frustration or failure may cause retarded children to give up.

Education of the Moderately Retarded

The moderately retarded need training in functional skills such as self – help skills, vocational skills, and social and communication skills.

The ultimate goal in education for moderately retarded children is functional independence:

- daily-living and job-related skills;
- self-help skills as independent eating, dressing, toileting, washing, combing hair, brushing teeth, and using a handkerchief;
- their curriculum should be less academically oriented than it is for the mildly retarded child;
- simple homemaking skills, such as dusting, sweeping, setting and clearing the table, washing and drying dishes, washing and ironing, sewing, using simple tools, and telephoning;
- safety rules and how to use public transportation;
- Communication training; and
- Personal and social skills include consideration for others, common courtesy, and tactile modalities, eye-hand co-ordination, balance, and gross and fine motor movement

Education of the Severely and Profoundly Retarded

The severely retarded need training on social and communication skills whereas the profoundly retarded need self-help and survival skills.

For the severely and profoundly retarded children, we must redefine the term education beyond its traditional academic limits. For these students, the major educational goals are to:

- decrease dependence on others;
- increase awareness of environmental stimulation;
- learn how to communicate;
- basic survival and self help skills;
- eliminate undesirable behavior;
- push achievement levels higher;
- increase their responses such as head and trunk balance, sucking, swallowing and chewing, grasping, movement of body parts, and vocalization;
- train in imitation, language acquisition, self-feeding, ambulation, dressing skills, toilet training, social; and

- train in recreational behavior and functional academic skills.

These services may be possible involving such professionals as doctors, speech therapists, social workers and psychologists.

Furthermore, as it is indicated in Tirussew (1998) the following are very important for the development of children with mental retardation:

Prevention

The prevention of mental retardation could be primary, secondary and tertiary.

- Before pregnancy, good immunization programs and genetic counseling regarding inheritable disorders can be enormously helpful.
- During pregnancy, good prenatal care is essential, including prenatal education and information regarding the physical and psychological care and healthy development of the future.
- Good nutrition for pregnant women as well as for infants and young children is mandatory. Restraint in the use of alcohol, medication, toxins, and other teratogenic agents during pregnancy is also important.
- Birth control for high-risk populations, and parental training. Widespread immunization programs and good, accessible medical care are also essential.
- Habilitation (early intervention)
- Rehabilitation
- Promoting Educational Strategies
    - Learning Readiness Skills
    - Discrimination
    - Relativity
    - Mediation
    - Imitation
    - Language
    - Social Development

Motor Development (physiotherapy)

- Gross motor activities
- Fine motor activities

Self-help Skills

Academics

- Reading
- Arithmetic

Behavior modification techniques

Vocational Training

Psychotherapy

Activity 23

Discus the following questions in groups and reflect on them in the classroom

1. Why do we conduct assessment of mentally retarded children?
2. What are the learning characteristics of students with mental retardation?
3. How can you and other educators become more effective when working with families of students with mental retardation?
4. Who do you think would be the first person to suspect that a child has mental retardation?
5. What do you think are the possible symptoms for mental retardation ? Please pin down the steps to be taken if a parent or a teacher suspects that a child has retardation.
6. How do the four support based classifications make a difference in the lives of people with mental retardation?
7. What sort of practical support do you suggest for a child with mental retardation at a family level? Please explain the type of support you would give if you were requested to do so.
8. Discuss the feasible educational provisions that could cater for the special needs of children with various degrees of mental retardation.
9. What practical suggestions do you provide for a regular classroom teachers to do if he/she comes across a child with mental retardation in his/her class?

10. Should the education of mentally retarded children organized in segregated settings or inclusive setting? Give convincing reasons for your suggestion.

Unit Summary

People with mental retardation have significantly impaired intellectual functioning, have problems with adaptive skills, and require a variety of support to achieve independence as adults and assume their places in modern society. Their disability must have manifested during the developmental period, from birth to age the 18. People with mental retardation are people with all the emotions, motivations, and complexities of any human being, Thus, attempts to provide education and habilitation/rehabilitation to students with mental retardation must be based on the realization of the fundamental similarities of all people.

Case Study

This case study is directly taken from Tirusew Tefera (1998)

Below is an extract of the result of a focus group discussion held with Parents of children with mental retardation in Addis Ababa. Please read

The text critically and identify:

- the central problems of female children with MR at different settings (family, neighborhood and school);
- the possible sources for the worries and frustrations of the mothers; and
- the possible interventions which you think are very essential in the respective settings.

Summary of the Focus Group Discussion

A two hours discussion was held with 13 parents of children with mental retardation at the Mekainsa Center for Children with Mental Retardation. This Center is run by the Mekane Yesus Church. The focal point of the discussion was on the situation of children with mental retardation focusing on issues

surrounding gender. However, other points were raised by the participants in the course of the discussion. Among others, the following were the pertinent topics

- The relations and interactions of the children with different family members.
- The attitudes and responses of the neighbors and other people.
- Violent acts against children with mental retardation by the people and the police.
- Worries and frustrations of parents, specially parents of the female retarded children etc.

Family setting

Regarding this issue, parents explained that when a girl or a boy child with mental retardation is criticized by a member of the family he/she will be easily upset, angry and aggressive; moreover, unless what they have said or asked is done their aggression and rage increase considerably. These characteristics of the children expose them to frequent conflicts with the members of the family, specially with their brothers and sisters who don't understand and realize their behavior, In creating peaceful and good relationship and interactions, the girl child was noted to surpasses the boy child. Furthermore, it was also disclosed in the discussion that most of the children with mental retardation tended to have good emotional attachment and mutual understanding exclusively with their mothers. Their relation with their fathers and brothers were limited. Fathers were especially reported that as not giving enough attention to them. For instance, it was disclosed that it was either the mothers or the caretakers who usually accompanied the children to school. That is, most fathers tend to leave all responsibilities to the mothers and avoid providing the necessary care and attention.

Neighborhood

With regard to their interaction with people in the neighborhood, the participants described it as very insignificant. This limitation was primarily due to the disgusting and humiliating reactions of the people in the surrounding. Persons in the surroundings, consider children with mental retardation as "fouls, sick and insane". Particularly, children and youngsters tend to make fun out of them. At times they consider them to be 'dolls full of life', doing such awful acts as pouring

dust, throwing dirt and passing urine on them. They also regard them as persons possessed by devil power or evil spirit. One of the participants said, "Some Persons insulted my daughter saying 'you wit 44 devils' 'Ganel Am', 'Dedeb', 'Kilw', Fuzo'" These are all "Amharic" terms used to address person with mental retardation which by and large mean, a person who cannot understand and who are possessed by evil spirits. For this reason parents usually fight against persons to guard their children from such evil deeds. But parents most of the time use "locking the child behind the home "as a better solution. A woman said, "I always don't allow my daughter to get out of the compound because I couldn't tolerate fighting with people in the neighborhood." In fact, the only option they have for interaction is at schools if they have a chance to join, but some parents complain stating that there are similar problems are encountered in schools.

Parents have cited that children feel happy to come to such special centers even once in 15 days. They further stated that their children are eager and happy to come to such centers because:

> " They able to meet friends with similar problems who might understand each other, they go to school stay there, and come back home as any other child does, which may give them a sense of belongingness or acceptance, a feeling of competence and also providing them and also an enabling environment for learning skills etc."

School Experience

Fortunately, all of the parents have tried to send their children to the traditional priest schools. But due to their mental impairment they don't meet and compete with their equals. They are usually physically bigger and older in age than the other children with whom they attend class. The conspicuous gap in the physical development of these children and others draws the attention of others and distracts the learning situation. One of the participants of the discussion said,

> " My daughter has stoped going to school because every pupil ridicules her saying 'Oh ! look ! mother is coming This is simply for she is physically bigger and older than them,"

Even the teachers do not allow such children to continue coming to school because they will soon find out that the other students' divert their attention all the time to the child with mental retardation and the teacher gets tired of them. Finally, concerning the education and the skills that their children have to get in he future, the majority of parents suggested that it will be practically effective if the children, [both male and female] learn handcraft skills and janitorial service.Worries and Frustrations of Mothers. Mothers reported that they are always in a state of worry and anxious about their daughters because they are afraid that their daughters might one even contract the deadly disease AIDS. So, this is a great concern and fear of parents. As a result parents force their daughters to stay at home; they are scared if they are out of their sight, they feel that they may not come back safely. A mother revealed the following in the discussion, "... Due to this reason, I always take my daughter with me whenever I got to distant places."

Parents, especially mothers, are greatly afraid of and deeply frustrated by their children's destiny. They feel that if they die and they will leave them forever without any attendants. Parents realize that their children do not [can not] live all by themselves, they, somehow need some attendants. So, if they die, life will be even worse than now for their children. One of the mothers spoke out the following words, accompanied by tears and deep sorrow and feeling of hopelessness,

"...parents are not monuments. We don't live forever. We may die
today or tomorrow. I always pray and beg God to give me loner life
in order to stay close to my daughter."

The fate of a child with mental retardation will be deplorable, particularly it will be worse if a mother from a single- headed family passes away. The other difficulty mentioned by parents which needs special thought and attention is the violent acted out against their children. Such act include being caught by the police and being beaten. This happens because the police may not understand whether the children are mentally, so whenever they do something wrong they take such measures. Males are more liable to such problems than females. The

other shocking act is the possibility of mentally retarded kids to be stolen and used by able bodied adults for Begging purposes.

Tirussew Teferra [1998].

Supplementary Readings

Garwood, S.G. (1983).Handicapped Children: Developmental Approach (2nd edition) London: An Aspen Publication

American Association on Mental Retardation [1992]. Mental Retardation:Definition, Classification, and System of Supports [9th ed.]. Washington, Dc: American Association on Mental Retardation.

Beirne-Smith, Mary, Patton, James R., and lttenbach, Richard [1994] Mental Retardation. Upper Saddler River: Prentice Hall.

Grossman , H. J. [1973] : Manual on Terminology and Classification in Mental Retardation. Washington DC : American Association of Menatl Retardation.

Garwood, S. G. [1983]. Educating Yonung Handicapped Children : A Developmental Approach [2nd edition]. London: An Aspen Publication.

Heward, William L. and Orlansky, Michael D. [1988]. Exceptional Children, Columbus: Merril Publishing Company.

Tirussew Teferra [1998]. Human Disability: Developmental, Educational and Psychosocial Implications. AAU: Addis Ababa University

Ysseldyke James E. and Algozzine, Bob [1994]. Special Education: A practical Approach. Boston: Houghton Mifflin Company.

Zigler E., & Hodapp R.M. [1986]. Understanding Mental Rtardation. New York: Cambridge University Press.

3.4. Students with Learning Disability

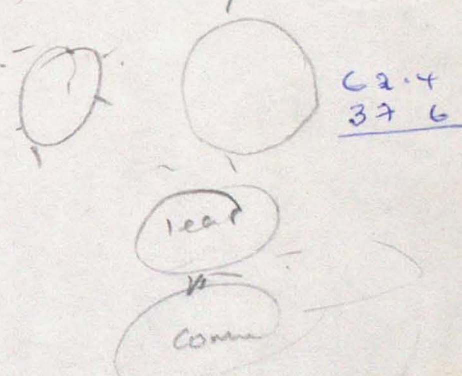
Introduction

People with learning disabilities belong to a group of very diverse individuals, but they do share one common problem: they do not learn in the same way or as efficiently as their non disabled peers. Although most possess normal intelligence, their academic performance is significantly behind their classmates'. Some have great difficulty learning mathematics, but most find the mastery of reading and writing to be their most difficult challenge (Kavale & Forness, 1996).

In this chapter, you will come to understand learning disabilities. You will learn that because of this group's heterogeneity, or diversity, there is no single answer about why such otherwise normal individuals have problems learning at the same rate and in the same style as their non disabled classmates. You will learn that professionals in this area do not agree about how best to teach these individuals. You will also learn that many individuals overcome their learning disabilities through highly specialized, intensive, individualized instructional programs. Unfortunately, for many others, a learning disability will last a lifetime.

Main contents of the Unit

- Definitions
- Classifications of learning disability
- Causes
- Identification and assessment
- Interventions



Objectives of the unit

After completing this unit the teacher students will be able to:

- Give the meaning of learning disability and classify it into categories;
- Describe the procedures of identifying and assessing learning disabilities;
- Describe the causes of learning disability;
- Explain the developmental characteristics of children with learning disability;
- Describe the methods of educating children with learning disability; and
- Demonstrate positive attitude towards ~~children with~~ children with learning disability.

Definitions of Learning Disabilities

Students who qualify for special needs education services because of a learning disability must meet specific criteria. There are many different forms of definition among different disciplines. Some differences among these definitions are due to philosophical orientations about what causes the disability and how it should be treated. Some definitions are medically oriented; others are educationally based; still others seek to limit the size of this population of learners. Some key features, however, exist in almost every definition. Unfortunately, in Ethiopia, we do not have any specific criteria or definition to identify students with learning disability. However, in this material I would like to consider the experiences of other countries. According to the Department of Education of the U.S (1992)

> Specific learning disability" means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not apply to children who have learning problems that are primarily the result of visual, of hearing, of motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantages.

Learning disability is a general term for heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perception, and social interaction may exit with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions (for example, sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic influences (Such as cultural differences or insufficient of inappropriate instruction), they are not the result of those conditions or influences.

Despite the ongoing debate and controversy surrounding the definition of learning disabilities and its implementation, professionals outside of special education and even children without disabilities hold common beliefs about what constitutes a learning disability (Swanson & Christie, 1994). These "non-experts" make these statements about the condition we call learning disabilities: "specific reading/math problems, general impressions/writing, planning/ attention/memory, communication/motor skill, work habits, perception, intelligence, social/affective skills, instructional support/procession, and expression of sympathy" (p. 250). They also believe that this is a diverse group. Possibly, such public opinion should be used to validate new definitions or criteria for identification as they emerge.

Types of Learning Disabilities

Learning disabilities are manifested in different ways with different individuals. There is no uniform classification system for studentS with learning disabilities. Although these students have normal intelligence, they do not achieve academically. Some individuals' academic problems occur in only one area, and others' are more pervasive. However, results from achievement tests allow teachers to talk about how far behind a particular student is in a certain academic area. Information about an individual's social skills, learning style, and other characteristics that might be interfering with efficient learning is usually discovered only by working individually with that person.

As it is indicated in Smith (1998), the following are some Key features of definitions of Learning Disabilities:

- Intelligence scores within the normal range;
- A significant discrepancy between academic achievement and expected potential often manifested in language-related areas, such as communication, written language, or reading;
- Problems intrinsic to the individual involving that person's central nervous system;
- Specific defects in information processing and the ability to learn; and
- Learning problems specific and confined to one or two cognitive areas

The above is the general characteristics of children with learning disability. Despite the diversity in types of learning disabilities, however, professionals have observed some characteristics

common to these individuals. Some other professional classified them referring to their achievement difficulties.

The following are some of the types of learning disabilities:

- Difficulty in reading (dyslexia) and writing (dysgraphia). Reading is significantly below the levels of their non-disabled classmates;
- Language Processing disability i.e. language understanding and expressive difficulties (dysphasia);
- Mathematical (Dyscalculia) difficulty;
- Behavioral problems with poor academic achievement;
- All areas of academic challenges;
- Fine motor disabilities;
- Nonverbal Learning Disabilities; and
- Visual-perceptual disabilities (how brain process visual information)

Reading and writing, obviously, are important skills; in school, students must be able to read information from a variety of texts (social studies, science, literature) and write in varying formats (essays, reports, creative writing, notes). As the complexity of academic tasks increases, students who are not proficient in reading and writing cannot keep pace with the academic expectations of school settings.

A small percentage of students with learning disabilities have difficulties only in mathematics; however, most find all areas of academics challenging. In the past, students with specific academic difficulties were grouped together. For example, those with severe reading problems were called dyslexic. Students with writing disorders were said to have disgraphia, and those unable to learn mathematics readily had dyscalculia. These terms imply that the individual has experienced brain injury that resulted in the disorder. Given that very few students with learning disabilities have documented brain damage, such terms should be applied cautiously.

Some youngsters with learning disabilities display behavioral problems along with poor academic performance. For example, many are hyperactive or impulsive, they seem unable to control their behavior, and display excessive movement. These children are unable to sit or concentrate for very long; their parents and teachers comment that they are in constant motion.

Both hyperactivity and impulsivity are characteristics frequently associated with other disabilities (traumatic brain injury, emotional disturbance) and attention deficit disorder.

Activity 24

1. How do you define learning disabilities?
2. Why do children need to be proficient in reading?
3. What are the main characteristics of children with dysphasia?
4. How does reading and writing affect learning? Explain clearly.
5. What kind of learning behavioral problems affect learning? Why?
6. From this definition can we guess the prevalence of learning disability in Ethiopian school. How? What are the evidences?

Causes of learning disability

Cause of learning disability are so many and no single factor can contribute as the cause of learning disability. Some of the causes which have been listed by professionals are given below:

- Maturational lag: lag in mental and physical development for language and mathematical (academic) skills;
- Neurological disorganization: brain injury that inhibit neurological organization for mastery of functional skills such as mobility, language, manual competence, visual competence, auditory competence and tactual competence;
- Educational deficiency: poor teaching, attendance, curriculum, material, attitude, and poor aspiration;
- Malnutrition and vitamin deficiency;
- Central processing dysfunction: deviation in processing information; and
- Minimal brain dysfunction.

In general, learning disability may be also due to a central nervous system dysfunction, language impairments and lack of social skills .

Activity 25

1. Can we improve the learning potential of children with disability? How?
2. What could be the causes of many children repeating classes and dropping of school?
3. What could be the major causes of learning disability in Ethiopia?
4. Are the cause for hyperactivity the same with dyscalculia?

Identification and assessment

Identification and assessment may be possible through studying the different forms of characteristics, such as learning sociability and attention. The following are some major characteristics of children with learning disability.

Learning Characteristics:

- Significant discrepancy between potential and academic achievement;
- Distractibility or inability to pay attention for as long as peers do. Inattentiveness during lectures or class discussions;
- Hyperactive behavior, exhibited through excessive movement;
- Impulsiveness;
- Poor motor coordination and spatial relation skills;
- Inability to solve problems;
- Poor motivation and little active involvement in learning tasks;
- Over reliance on teacher and peers of class assignments;
- Evidence of poor language and/or cognitive development;
- Disorganized approach to learning;
- Substantial delays in academic achievement and poor academic performance. For most, the learning impairment is so severe that by the time they are in high school, they are many years behind their classmates in achievement;
- Lack of motivation, inattention, inability to generalize, and insufficient problem-solving, information-processing, and thinking skills;
- School failure can result in both academic and motivational defects;
- Students are afraid to respond, take risks, or actively engage in learning;
- They develop a negative attitude and come to believe that their failure is result of lack of ability, rather than a signal to work harder of ask for help;
- They lower their expectations and believe that success is an unattainable goal. They do not believe in themselves and do not try to learn;
- When people expect to fail, they become dependent on others- a situation referred as learned helplessness; and

- They come to believe that they are not responsible for their achievements and that luck is the reason for their successes and failures, not effort.

Discrepancy scores , classroom observations, input from parents and teachers, and evaluations of children's academic performance on their daily schoolwork may be used as means of identifying children with learning disability. But discrepancy scores could be complicated and focusing only on academic achievement rather than cognitive and social skills.

Professionals currently employ alternative methods of assessment for identification purposes. Some use a standard cutoff score as an identification measure. Thus a student may be identified as having a learning disability if a standard score on an achievement test falls below a certain number. Other professionals compare the subtest scores on an IQ test or use an arbitrary, minimum cutoff score so that students with scores below a certain number cannot qualify as having a learning disability. For example, in this method, students with IQ scores below, say, 90 would not be identified as having learning disabilities. Still other professionals carefully consider observational data and input from parents, teachers, and support staff acquainted with the student. Despite their inherent subjectivity, such data can provide valuable information. Clearly, professional debate will continue on these issues.

Most children with learning disabilities are not identified as having a learning disability until they have attended school for several years. And, what happens in those early school years can set the stage for future success or failure. Identification helps to support children with different degree of support.

- Youngsters with learning disability may have very low scores on achievement tests and perform very poorly on academic tasks in the classroom. They tend to perform far below what is expected of them.
- Many students with learning disabilities have experienced grade retention. Retention actually increases the probability that a student will eventually drop out of school.
- As the demands of schools increase, many of these students fall further and further behind their classmates' academic achievements.
- Some develop behavioral problems, and many develop poor self-esteems

- Mild learning disability may benefitfrom the standard curriculum offered in general education.
- Children with severe disabilities, however, require intensive remedy and support throughout their school years and into adulthood.

Social Skills Characteristics

Students with learning disabilities tend to

- significantly less active in social competence and school adjustment than their other students;
- be poor at distinguishing emotions, particularly, disgust, neutrality, and surprise;
- be less proficient than their non-disabled peers in comprehending nonverbal messages. misinterpret social, nonverbal cues;
- have difficulties in a related component of communicative competence: understanding implied messages;
- miss-understand figurative or non literal language;
- Choose less socially acceptable behavior;
- be less able to predict the consequences of their behaviors;
- make poor decisions;
- be unable to solve social problems;
- use social conventions (manners) improperly;
- pay no close enough attention during classroom assignments;
- be shy, withdrawn, distractible, or hyperactive;
- be socially naïve and unable to determine when other people are sincere, deceptive, or sarcastic;
- be lonely;
- experience rejection from their peers; and
- be victimized more often.

Attention Deficit Disorder

Sometimes called attention deficit hyperactivity disorder (ADHD), attention deficit disorder (ADD) has been estimated to affect between 10 and 20 percent of the school-age population (Shaywitz & Shaywitz, 1992). This condition can be reasons for confusion in parents, professionals, and people in the community. For one thing, not all students are diagnosed as having ADD qualify for special education services (Learner, Lowenthal, & Lerner, 1995). Those who are covered by various special education categories are considered to have a co-existing condition of learning disabilities. Hyperactivity and attention problems are common among children with learning disabilities and are characteristics of the ADD condition.

Life Span View of Learning Disabilities assessment and treatment

Preschools

Problem areas- Delay in developmental milestones (e.g., receptive language, expressive language, visual perception, auditory perception, short attention span and hyperactivity.

Assessment: Prediction of high risk for later learning problems

Treatment: Treatments with most research and/or expert support

Grades K-1

Problems areas- Academic readiness skills (e.g., alphabet knowledge, quantitative concepts, directional concepts, etc) Receptive language, Expressive language, Visual perception, Auditory perception, Gross and fine motor, Attention, and Hyperactivity.

Assessment: Identification of learning disabilities

Treatment: Preventive direct instruction in academic and language areas behavior management and parent training

Grades 2-6

Problem areas- Reading skills, Arithmetic skills, Written expression, Verbal expression, Receptive language, Attention span, Hyperactivity, Social-emotional and Social skills.

Assessment: Identification of learning disabilities

Treatment: Remedial corrective direct instruction in academic areas behavior management self-control training and parent training.

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Assessment: Identification of learning disabilities

Treatment: Remedial corrective direct instruction in academic areas behavior management self-control training and parent training.

Grades 7-12

Problem areas- Reading skills, Arithmetic skills, Written expression, Verbal expression, Listening skills, Study skills (meta-cognition), Social-emotional and Delinquency.

Assessment: Identification of learning disabilities.

Treatment: Remedial Corrective Compensatory Learning strategies; direct instruction in academic areas. Tutoring in subject areas direct instruction in learning strategies (study skill). Self-control training and Curriculum alternatives.

Adults

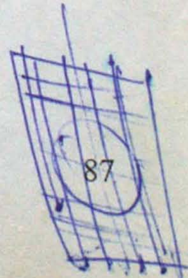
Problem areas- Reading skills, Arithmetic skills, Written expression, Verbal expression, Listening skills, Study skills and Social-emotion

Assessment: Identification of learning disabilities

Treatment: Remedial Corrective Compensatory Learning strategies; Direct instruction in academic areas; Tutoring in subject (college) or job areas Compensatory instruction (e.g., using aids such as tape recorder, calculator, computer, dictionary). Direct instruction in learning strategies

Activity 26

1. Have you ever come across children with learning disability? How did you know? Share your experiences with your classmates.
2. Are teachers able to identify and help children with learning disability in Ethiopian Context?
3. Are there other means you know to identifying and asses children with disability? Share them to the class.
4. Do you believe that we can improve the learning capacity of children with disability? How?
5. What are the major learning characteristics of children with disability?
6. What are the major social characteristics of children with disability?



bladder control, and maintaining personal hygiene; often, they must be cared for throughout their lives;

- They socially deprived and rigged;
- They lack of self-motivation; and
- Students with mild or moderate mental retardation suffer from poor self-images or self-concepts.

Physical /Motor Characteristics

Mentally retarded children lag behind their peers on measures of gross motor proficiency and physical fitness, showing a marked difference in body coordination, strength, and flexibility – generally described as 'clumsiness'. This deficiency is evident in activities that involve

- Body awareness in space;
- Basic physical abilities (i.e., strength, flexibility, agility, balance and endurance);
- Sequential patterns of movement;
- Eye-hand coordination;
- Eye-foot coordination; and
- Fine motor activities that are timed.

Generally, they are slow to perform physical movements such as rolling over, grasping toys and objects, holding their heads up, etc. that are easy for their peers without mental retardation.

Communication Characteristics

- Delayed cognitive functioning typically shows delay in language and communication skills;
- Cognitive deficits in the language proficiency of children with mental retardation is below that of their non-retarded peers and lower than expected for their mental age;

- Articulation, voice, and stuttering problems are the most common:

  Omissions

  Substitutions

  Additions

  Distortions

In sum, students with mental retardation may have difficulty expressing themselves well enough to be understood. This is especially true of those with severe or profound retardation. Almost all students with severe mental retardation have limited abilities to express themselves or understand others. Many do not talk or use gestures to communicate; they often do not respond to communication from others.

Characteristics in Adaptive Behavior

- Lack of school coping behaviors;
- Poor social skills;
- Poor language skills to understand directions, communicate needs, express ideas, listen attentively, and voice modulation;
- Poor emotional development;
- Poor self-care skills;
- Limited success in applied cognitive skills; and
- Delayed academic development

Activity 22.

Answer the following questions

1. What are the basic differences between each category of mentally retarded children (Mild from moderate, severe from profound)?
2. What is the basic limitation of children with mental retardation?

Interventions

Learning strategies are now taught to students to help them learn to learn. Other research explored how individuals with learning disabilities acquire, retain, and transfer knowledge. This line of research follows the information-processing theory. Meta-cognition, or cognitive behavior modification, has students use self-management techniques as they learn and is proving to help students remember what they are taught, to think, to organize their study, and to solve other problems. Research in the 1980s has provided promising preliminary results that may universally change the way these students are taught and how successful they are in school and later life. Hence, some of the following are the possible interventions that are applied in the school: Many individuals with learning disabilities need structure; they find that working in a systematic and predictable environment helps them learn more efficiently.

Teachers and parents should therefore provide structure for them and organize their day carefully as well as help them learn to structure their lives themselves. These skills are also important in later life when, as adults, they need to be able to allocate time to a variety of activities, including work and leisure. Children with learning disabilities also must learn to handle failure. These students need careful instruction. For example, they need to be told how to solve a problem, even when others seem to know how to instinctively. Tutoring from a classmate or extra assistance from the teacher often helps these students. Teachers help students learn to generalize by having students take more responsibility for managing their own instructional programs. To benefit from the information they receive in class, students must pay attention and must remember information. Educators can help by repeating important information, presenting material that is organized and grouped in a systematic fashion; providing students with information that is meaningful to them and associated with other information they are already familiar with.

In addition, educators can help students manipulate information-that is, use the information in their writings and discussions. Developing Problem-Solving and Thinking Skills. To study efficiently and remember content, students must be proficient in the following thinking skills: classifying, associating, and sequencing. Classifying allows the learner to categorize and group items together by common characteristics.

Teachers' commitments

When teaching how to Learn teachers should:

- Use instructional tactics that actively involve the child in learning activities;
- Start every lesson with advance organizers;
- Teach students how to use and apply strategies to help them comprehend and remember academic assignments;
- Use concrete examples, often demonstrating how to perform the instructional task correctly;
- Help children focus their attention on the relevant features of a task.
- Include activities in the instructional day that teach youngsters how to think and solve problems.
- Allow children to manage some part of their instructional day (decide when they will do an academic task, pick the instructional technique you will use, determine a reward for achieving a goal);
- Individualize instruction, allowing children to master basic academic skills at their own rate;
- Help children understand the connection between effort and success;
- Have children predict the consequences of their behavior;
- children to evaluate their own progress in learning and mastering academic tasks; and
- Refer to members of your school-based IEP them children who are unable to keep peace with the academic demands of your classroom, do not have the communicative competence of their peers, or have inappropriate or immature social skills (withdrawn, hyperactive).

Parent-Teacher Partnerships

Many parents of children with learning disabilities become active participants in their children's educational programs. Some also tutor their children in the skills being learned at school (Hudson & Miller, 1993). Their effectiveness is enhanced when teachers help them develop good teaching skills and provide the materials needed for appropriate instruction. For example, each day, a parent may review and practice the week's spelling

words and set a reading time when parent and child read to each other. Parents can learn to observe and take notes on their children's behavior so that they can share information with the teacher about progress made at home. If parents and teachers note data on a target behavior, they will be able to compare performance at school and home and determine whether progress is being made or whether new tactics should be selected. Although not always achievable, collaboration between school and home is a goal that all parents and educators might work toward.

The development of parent-teacher partnerships reaps many benefits (Garland, 1993). For example, knowledge that might not otherwise be communicated is often shared when full partnerships exist. In addition, teachers often gain a better understanding of students' strengths and weaknesses, family values and culture, home conditions, parental attitudes, and family needs. Another benefit can be increased support from parents for school programs and the teacher's efforts. Active partnership requires considerable effort. This ongoing process encourages professionals and parents to share, disagree, solve problems, and work together to meet a mutual goal (O'shea, 1993). Parents and educators must assume more responsibility for imitation communications when problems can be predicted (Jayanthi et al., 1995). Remember, the basis of all positive partnerships should be trust and openness.

Case study

Now an adult, Bekele, 38, recalls that, for him, going to school was a form of child abuse. Every morning he awoke sick to his stomach knowing that the school day would be filled with struggle, humiliation, failure, and pain. He says that he spent hours alone in his bedroom trying to figure out ways to hide his reading problems from family and friends. As an uninformed and innocent child, the labels he gave to himself were stigmatizing and debilitating. He reports that the label of learning disabilities freed him, helped him and his teachers find an appropriate instructional remedy, and assisted him in becoming a productive citizen. Bekele's difficulties have not disappeared, but he is able to understand and cope with them constructively.

Activity 27

1. Why is it correct to consider learning disabilities a lifelong condition?
2. What are some learning characteristics that contribute to these students' poor academic performance?
3. How can social competence and status affect these individuals?
4. What constitutes an appropriate education for these students and in what setting should it be provided?
5. Identify some priority areas of research on learning disability;
6. How are educational services best delivered to children with learning disability?

Unit Summary

Individuals with learning disabilities do not learn in the same way as their non-disabled classmates. They are neither identified and assessed nor supported in their education in Ethiopia. As a result of such poor educational provisions and poor individual perceptions, children with learning disabilities repeat classes and dropout of schools. Current research is attempting to find better methods of instruction so that these students see further improvement in academic and social performance. When taught by teachers who are well trained and Knowledgeable about the newest research findings, many of these individuals should be able to compensate for their disabilities. However, without the best that education can offer, the likelihood that individuals with learning disabilities will succeed as they should in life, is small.

Supplementary Readings

Bos, C. & Vaughn, S (1994). Strategies for teaching Students with learning and Behavioral Problems. Boston: Allyn and Bacon.

Deshler, D.D., Ellis. E.S., & Lenze, B.K. (1996). Teaching Adolescents with Learning Disabilities: Strategies and Methods (2nd ed.). Denver:Love Publishing.

Hallahan, D.P., Kauffman, J.M., &Lioyd, J.W. (1996) Introduction to Learning Disability. Boston. Alyyn and Bacon.

13

- Make learning more functional by giving the students a chance to apply it to everyday life.
- Use stories to raise interest in lesson content.
- Plan field trips and projects.
- Introduce games and simulations.

Create Learning Environments

- Emphasize the importance of meaning and purpose in learning activities;
- Set tasks that are both realistic and challenging;
- Ensure that there is progression in children's work;
- Provide a variety of learning experiences;
- Give pupils opportunities to choose;
- Have high expectations of success;
- Create a positive atmosphere for learning;
- Provide a consistent approach;
- Recognize and reward the efforts and achievement of pupils;
- Organize resources to facilitate learning;
- Encourage pupils to work co-operatively;
- Monitor progress and provide regular feed back;
- Help pupils to develop negotiating skills such as listening, managing conflict, assertiveness training, taking risks, accepting responsibility and dealing with feelings; and
- Support the development of a positive self-concept as well as an internal locus of control.

For Teachers of Students with Serious Emotional Disturbance

- Establish rules for appropriate classroom behaviour.
- Establish consequences for inappropriate classroom behaviour.
- Praise students frequently for appropriate behaviour.

Lerner, J. (1997). Learning Disabilities: Theories, diagnosis, and teaching Strategies (7th ed.). Boston: Houghton Miffin.

Lovitt, T.C. (1995). Tactics for Teaching (2nd ed.). Columbus, OH: Merril, an Imprint of Prentice-Hill.

Lyon, G.R., Gray, D.B., Kavanga, J.F., Kransnegor, N. A. (1993). Better Understanding Learning Disabilities: New Views From Research and their implications for education and public policies. Baltmimore: Brooks.

Rivera, D.P., & Smith D.D., (1997). Teaching Students with Learning and Behavioral Problems. Boston: Allyn and Bacon.

Smith,C.R., (1994). Learning Disabilities: The Interaction of learner, task, and setting. Boston: Allyn and Bacon.

Smith, T.E.C., Dawdy, C.A., Polloway, E.A., Blalock, G.E. (1997). Children and Adults with Learning Disabilities. Boston: Allyn and Bacon.

3.5. Language and Communication Disorder

Introduction

Communication occurs only when the message intended by the sender is understood by the receiver. The sender may have an idea or thought to share with someone else, but the sender's idea needs to be translated from thought to some code that the other person can understand. Coding thoughts into signals or symbols is an important part of the communication game. Communication signals announce some immediate event, person, action, or emotion. Signals can be gestures, a social formality, or a vocal pattern, such as a gasp or groan. A teacher rapping on a desk announces an important message. Symbols are used to relay a more complex message. Communication symbols refer to something: a past, present, or future event; a person or object; an action; a concept or emotion.

Most people use oral language for their primary means or communication, and if the communication process is flawed, all facets of interpersonal communication are affected. The relationship between early identification of a language impairment and later identification of a learning disability is strong because language is the foundation for cognition, reading abilities, and social competence. The importance of acquiring language in the normal developmental sequence cannot be underestimated for it influences the overall child's potential and achievements.

Main contents of the Unit

- Definitions
- Types of communication disorders
- Causes
- Identification and assessment
- Interventions

Objectives of the unit

After completing this unit the teacher students will be able to:

- Give the meaning of communication disorders and classify them into categories;

- Describe the procedures of identifying and assessing children with communication disorder;
- Describe the causes of communication disorder;
- Explain the developmental characteristics of communication disordered children;
- Describe the methods of educating communication disordered children; and
- Demonstrate positive attitude towards communication disordered children.

Definitions

Communication

As indicated by Tirussew (1998), Communication, in its broadest sense, is an interaction that transmits information, and establishes common understanding. Communication is the process of exchanging knowledge, ideas, opinions, and feelings (Owens, 1994). It is not necessary for spoken or written words to be used; however, in order for true communication to exist, there must be both a sender and a receiver. We observe and take part in literally thousands of communicative interactions every day. An infant cries, and his/her mother reacts by picking him/her up. A dog barks, and its owner responds by letting it out of the house. A teacher smiles, and his student knows that an assignment has been accomplished well. In each of these interactions there has been a message, expressive communication by the sender, and receiver. Communication disorder could be both non-verbal and verbal. By verbal communication, I mean communication in speech and language. When I say communication disorder I mainly mean speech and language impairment/disorder which are defined in this text in the next section.

Speech Disorders

Any imperfection in the production of sounds of language, caused by problems such as inadequate muscle co-ordination, faulty articulation, poor voice quality, or organic defects results in speech disorder. The most accepted definition emphasizes that the condition, to be so identified, must interfere with communication, call attention to the speaker, or cause the person anxiety or maladjustment.

Language Disorders

This is communication problem in comprehending, expressing, or otherwise functionally utilizing spoken language. Ysseledyuke and Algozine [1995], gave a more elaborate

definition as follows: " Speech disorders are problems with producing speech sounds (articulation),controlling sounds that are produced (voice), and controlling the rate and rhythm of speech (fluency). Language disorders are problems with using proper forms of language (phonology, morphology, syntax), using the content of language (semantics) and using the functions of language (pragmatics)".

Accordingly, language form refers to the utterance or sentence structure of what is said – phonology, morphology, and syntax. Language content refers to meanings of words and sentences, including abstract concepts-semantics and language function and it refers to the context in which language can be used and the purpose of communication-or pragmatics. Problems can be receptive (related to hearing, listening to, or receiving language) and expressive (related to producing or language).

Types of Speech or Language Impairments.

People with speech or language impairments have difficulty using the communication process efficiently. Although considered one special education category, speech impairments and language impairments are really two separate, though related, disabilities. Each of these major problem areas is further broken down into more specific problems.

Speech Impairments. Speech is abnormal when it is unintelligible, unpleasant, or interferes with communication (Van Riper & Erickson, 1996). The three major types of speech impairments are voice, articulation, and fluency (for example, stuttering). Any one of these three speech impairments is distracting to the listener and can negatively affect the communication process.

- ***Speech* Voice**: Impairment in the production of oral spoken language due to absence or abnormal production of vocal quality, pitch, loudness, resonance, and/or duration. Two aspects of voice are important: pitch and loudness. Pitch is the perceived high or low quality of voice. If the receiver of communication pays more attention to the voice than to the message, though, communication is impaired (Van Riper & Erickson, 1996). Loudness is the other main aspect of voice. In some cases, if the quality of voice is so

distracting that the message is misunderstood or lost, speech therapy is probably necessary.

- **Articulation Fluency:** Abnormal production of speech sound, interruptions in the flow, rate, and/or rhythm of verbal expression. Articulation problems are the most common speech impairments (Van Riper & Erickson, 1996). Articulation is the process of producing speech sounds. The receiver of communication must understand the sounds of the words spoken to understand the full message. If speech sounds are incorrectly produced, one sound might be confused with another, changing the meaning of the message.
- **Fluency Problems**: Fluency difficulties are associated with the rate and flow pattern of a person's speech. A fluency problem usually involves hesitations or repetitions that interrupt the flow of speech. Stuttering is one type of fluency problem.

Language Impairment. Language is the second major area within the special education category referred to as speech or language impairments. It is the complex system we use to communicate our thoughts to others. Oral language is expressed through the use of speech sounds that are combined to produce words and sentences. There are three aspects of language: form, content, and use.

Delayed or deviant development of comprehension and/or use of the signs and symbols used to express or receive ideas in a spoken, written, or other symbol system.

- **Form:** Lack of knowledge or inappropriate application of the rule systems that govern the sounds of language, word structures, and word forms that provide the basic elements of meaning, and the order and combination of words to form sentences results in language impairment. Three rule systems characterize form in language: phonology, morphology, and syntax.

    1. Phonology is the sound system of language; it includes the rules that govern various sound combinations.
    2. The rules that govern the parts of words that form the basic elements of meanings and the structures of words are called morphology (For example, prefixes and suffixes)

- Syntax determines where a word is placed in a sentence. Like phonology rules.

- **Content**: relates to the intent and meanings of spoken or written statements. The rules and form of language are important, but for communication to be effective, words must be meaningful. Semantics is the system that patterns the intent and meanings of words and sentences to comprise the content of the communication. The key words in a statement, the direct and implied referents to these words, and the order of the words used all affect the meaning of the message. Inability to understand or correctly transmit the intent and meaning of words and sentences is also one form of language impairment.

- **Use**: concerns itself with the application of language in various communications according to the social context of the situation. Inability to apply language appropriately in social context and discourse is another form of language impairment.

Activity 28

1. What comprises speech impairments and language impairments?
2. How do language delays, language differences, and language impairments differ?

Causes of Speech or Language Impairments

Researchers attempt to find what factors cause certain disabilities so that they might be prevented. In this section, you will learn that although there are various theories, professionals still do not know what cause many types of speech or language impairments. You will also find that some impairments are preventable and that others are not. As with so many disability areas, the most common cause of speech or language impairments is unknown. As you read through this section, however, you will find that many causes for some specific impairments are well known.

Speech Impairments.

Organic causes

- brain damage;
- malfunction of the respiratory or speech mechanisms, or malformation of the articulators;

- severely misaligned teeth; and
- cleft lip or palate affects the production of nasal sounds;

Bad practices and psychological causes

- Undue abuse of the voice by screaming, shouting, and straining can cause damage to the vocal cords and result in a voice disorder.
- Stress that creates stuttering- a lack of fluency in speaking, may be characterized by severe hesitations or the repetition of sounds and words.

Language Impairments.

Many problems that fall into the area of language impairments have multiple causes.

Organic causes

- Brain injury or disease that damages the central nervous system that results in aphasia.
- Inability to hear well at the time of language be development.

Environmental factors

- Lack of stimulation,
- Lack of proper experiences for mental development and learning language,
- Inappropriate role models'
- Punishment for speaking or being ignored trying to communicate.

Identification, Assessment and Interventions

Although most people can tell that someone has a speech or language impairment by listening to that person, the formal assessment of speech and language impairments is complicated.

Speech Impairments. Each of the three aspects of speech - articulation, voice, and fluency - requires a different type of assessment to determine whether the child has an impairment. Given that it is the most common problem in children, let's look at articulation first.

- **Articulation**: Some children make articulation errors because they do not use the right motor responses to form the sounds correctly. The cause may be a physical problem, such as a cleft palate, where the roof of the mouth is not joined together, or an injury to the mouth. The cause may also be errors in the way the individual

uses the speech mechanisms – tongue, lips, teeth, mandible (jaw), or palate – to form the speech sounds. People can make four different kinds of articulation errors: substitutions, distortions, omissions, and additions;

- **Omission**. A sound or group of sounds is left out of a word. Small children often leave off the ending of a word (sounds in the final position).
- **Substitution** A common misarticulation among small children, one sound is used for another. ***Example*** Intended: I see the rabbit. Substitution: I tee the wabbit.
- **Distortion:** Give the pencil to sally (the/p/is nasalized).
- **Addition:** An extra sound is inserted or added to one already correctly produced. Example Intended: I miss her. Addition: I missed her.

- **Voice**: Sign of a serious laryngeal disease that needs medical examination. Overall, there are two general reasons for voice problems in children: an organic cause (such as a tumor) and a functional cause. Functional causes of voice problems are usually due to individuals using their voices inappropriately. For example, screaming for long periods of time puts undue stress on the vocal folds and larynx, causing damage to the voice mechanisms: The voice will sound hoarse, too low or high in pitch, or breathy.

- **Fluency**: The third kind of speech impairment is a fluency problem. The flow of speech breaks down because syllables are repeated or a communication includes many hesitations or extraneous words or sounds. Stuttering is a fluency problem, but there are important distinctions between stuttering and dysfluent speech.

Language Impairments: Difficulties in language can result in more serious learning problems than speech impairments cause. Lack of language competence influences children's ability to learn to read and write at the pace of their classmates as well as their ability to communicate orally with others. Assessing individual's language competence can be done through a thorough

evaluation, which usually includes assessment of the three aspects of language: form, content, and use.

- Form:. To assess the form or structure of an individual's language, the SLP determines how well the child uses the rules of language. Problems with form cause errors in letter or sound formation, grammatical structure usage, or sentence formation. Many children who have difficulty with the rules of language also have problems recognizing sounds and understanding the meaning of different grammatical constructions; sentence types, and sentence complexities. For example, a child who has not mastered the rules of language might not be able to tell the difference between sentences.
- Content: Children with problems in language content often do not understand the meaning of what is said to them and choose inappropriate words for their oral language communications. They might also have difficulty comprehending the written material presented in textbooks- the third aspect of language competence.
- Use (pragmatics): is discussed to determine how appropriately a child uses language in social contexts and conversations.

One aspect of evaluation or assessment is a case history that documents the child's birth, development, and cognitive and physical growth. Usually, the child's doctor and the parents complete a case history form. When the parents bring their child to the clinic for the evaluation, they are interviewed and the child's language is evaluated in several different situations: free play, informal testing, and formal testing. The free play situation is the primary source of the assessment of the child's spontaneous speech.

Prevention

Some types of speech or language impairments can be prevented today:

- Proper prenatal care is important to the health of babies.
- Good nutrition influences the strength and early development of very young children.
- The availability of proper medical care at birth is crucial so that conditions like viral encephalitis can be avoided or treated early.
- Public education programs available to the entire population inform people of the necessity of good prenatal care, nutrition, and medical care.

Effects of Language Impairments

Language impairments have many different outcomes. Unlike most speech impairments, however, multiple results – beyond the production of oral language – are observed. Many youngsters' social competence is affected, and a variety of their social skills are inferior to those of peers without this disability. It is also quite common to find correlated cognitive and academic difficulties in children with language impairments.

Social Competence

- Language impairments due to problems in the area of pragmatics can result in other difficulties that negatively impact social skills. Many of these youngsters are unable to understand ambiguity in messages (Lloyd, 1994). They are unable to identify the features that uniquely identify of specific objects due to undeveloped pragmatic skills
- Most children with language impairments do not develop the skill of using oral language to persuade others to adopt their position on an issue.

Cognitive and Academic Performance.

"Cognition involves the representation and processing of knowledge about physical objects, events, and their relationships." The foundation of cognitions is language.

- They have difficulties mastering reading when they are in elementary school (Catts, Hu, Larrivee, & Swank, 1994);
- Reading comprehension is the most seriously affected (Catts, 1993);
- Academic difficulties in school (Wallach & Butler, 1995); and
- Learning disability during the school years is observed.

Interventions

Using itinerant teachers

- Itinerant teacher, traveling from one school to another and provide therapy, and consult with teachers concerned about a student's communicative abilities;
- Itinerant teachers guide teachers in the implementation of language development and remedial programs;

- Regular teachers must create rich learning environments by providing a stimulating instructional setting that encourages oral language and provides the framework necessary for literacy; and
- Preschool Child educational program that makes a significant, positive, and long-term difference for young children and their families should be adopted.

For Teachers

Creating a Language-Sensitive Environment

- Be alert to the presence of speech or language impairments.
- Remember that children with speech or language impairments have difficulty communicating with others.
- Incorporate activities in class that allow children to practice skills mastered in therapy.
- Always consider the developmental stage of the child suspected of having language impairment before making a referral.
- Create a supportive environment in which children are encouraged to communicate with one another.
- Create a section of the classroom where the physical environment – perhaps a large, round table – encourages sharing and discussion.
- Provide opportunities for children to feel free to exchange ideas and discuss what they are learning in different subjects.
- Arrange for activities in which children use oral language for different purposes (making a speech, leading a discussion) with different audiences (classmates, children in different classes).
- Build self-confidence in all children, but particularly in children with these disabilities.

Education and the Schoolchildren

Teachers and parents need to be alert to substantial differences in children's speech, language use, and development. The responsibility for creating and fostering a positive learning

environment rests with the teacher. Effective teachers understand the role that language plays in learning. They know they must adjust their language and adapt written materials so that students understand the message being delivered. They make these adjustments by moderating their rate of speech, the complexity of their sentences, and their choice of questions (Gruenewald & Pollack, 1984). Almost naturally, teachers adjust their rate of speech depending on the age and level of their students (Cuda & Nelson, 1976). They systematically show students the relationships among items and concepts. They expand discussions about new concepts and ideas and show children how the concepts are related.

They also ask questions at graduated levels of difficulty to help students test the accuracy of their new knowledge. Effective teachers are also sensitive to the individual needs of their students.

Necessary Student Behaviors.

- Follows directions in class;
- Comes to class prepared with materials;
- Uses time wisely;
- Does assignments and tests;
- Treats teachers and peers with courtesy;
- Completes and turns homework in on time;
- Appears interested in subject;
- Works cooperatively in student groups;
- Completes tests with a passing grade;
- Takes notes in class;
- Scans a textbook for answers and information;
- Volunteers to answer questions in class;
- Writes neatly; and
- Be able to give oral report and speeches. (Ellett, 1993,p.59)

These minimal student expectations can be challenging for many students with speech or language impairments.

Necessary Teacher Behaviors. As noted previously, teachers must adjust their teaching styles, presentation of content, and expectations for each student in their classes. Studies have shown

that successful inclusion of students with disabilities, although an ideal held by most educators, is not automatic. Teachers should

- Talk more slowly;
- Crate a relaxed communication environment by using short pauses in between responses;
- Model good language; keep it simple when appropriate;
- Accept what the child has to say rather than how it is said, particularly for stutters;
- Set good conversational rules whereby people do not interrupt each other and take turns;
- Listen attentively to the students;
- Give students more time to finish assignments and tests;
- Shorten assignments and make them less complex;
- Provide tutors;
- Give students extra help with assignments;
- Give students credit for effort;
- Evaluate work on the basis of gain, not specific level of mastery;
- Allow students to retake tests or redo assignments;
- Create a variety of activities so that students can do well on at least some of the work across the course of a semester or school year; and
- Reduce the probability of failure and increase the probability of success.

Families

The home environment as a necessary and crucial ingredient for language development in young children

Language Development and the Home

The early childhood years for children with exceptionalities are crucial to their long-term development. It is at this stage of development that young children begin to develop the motor, social, cognitive, and speech and language skills they will use the rest of their lives.

Hearing Impairment
Hearing Impairment

25

- Parents can be advised to develop the following strategies that can be used at home to improve language skills:

  - Specifically label or name objects in the home;
  - Use simple words more often to describe the objects the child is playing with: "This ball is red. It is round. It is soft.";
  - Encourage repetitions of correct productions of sounds and repeat the child's error to help make a comparison;
  - Play a game of "fill in the blank" sentences;
  - Ask the child questions that require expanded answers;
  - Include the child in activities outside of the such as visits to the zoo, the market, or a shopping center, so that the child has more to talk about;
  - Practices of good language skills can be incorporated into everyday events;
  - Model language and have the child imitate good language models; and
  - Encourage children to engage in the act of "storytelling."

Alternative and Augmentative Communication

- The term alternative and augmentative communication (AAC) includes both low-tech devices (such as communication boards) and high-tech equipment (such as speech talkers).
- AAC devices can be electronic or non-electronic, they can be constructed for a certain individual, and they can be simple or complex. The common characteristic of AAC systems is that they are used to augment oral or written language production.
- They can computerized communication devices.

Unit Summary

Communication does not occur in isolation. It requires at least two parties and a message. Communication is impaired when either the sender or the receiver of the message cannot use the signs, symbols, or rules of language effectively. Communication occurs only when the message

intended by the sender is understood by the receiver. The sender may have an idea or thought to be translated from thought to some code the other person can understand. For most of us, oral language is the primary mode of socializing, and learning, and performing on the job. Therefore, communicative competence-what speakers need to know about language to express their thoughts – is the most important goal for students with speech or language impairments. Because oral communication (or sign language for those who are deaf) occurs in a social context, this ability directly affects an individual's social competence as well.

Understanding and being able to use speech and language well influences an individual's success in school, social situations, and employment. A speech impairment affects how a person interacts with others in all kinds of settings.

It is not uncommon for children to develop emotional problems because of their stuttering. Some researchers (Shames & Raming, 1994) believe that as listeners, and the individuals themselves, react to this non-fluent speech, feelings of embarrassment, guilt, frustration, or anger are commonly experienced. Stuttering can lead to confusion, feelings of helplessness, and diminished self-concept. The long-term effects can be quite serious. Some individuals respond by acting overly aggressive, denying their disability, and projecting their own negative reactions to their listeners. Others withdraw socially, seeking to avoid all situations in which they have to talk, and ultimately they become isolated.

A language impairment has the potential of being even more serious, for it can have an impact on all aspects of a child's classroom experiences, including the ability to speak, write, and comprehend what is written and spoken. Language is a complex system to master: its rules are not consistent, and it has many subtle conversions to learn and follow. Language is an important foundation to the skills children learn at school, however. We know of the relationship between the knowledge of language and the ability to learn to read and write easily. The histories of many children with learning disabilities reveal that they were identified as having a significant language delay or impairment as preschoolers. There are many reasons for a relationship between learning disabilities and language impairment. For example, children who do not understand what is said to them do not develop language at the same rate as children who do understand and benefit from communicative interchanges. Some children with delayed language do not also develop cognitive or thinking skills at the same pace as their non-disabled peers, which can influence all levels of academic achievement, particularly in reading and writing.

Clearly, people who cannot communicate well find that their impairment affects the way they interact with others and how efficiently they communicate and learn. Ultimately, it influences employment options. For example, a receptionist in an office must be able to talk on the phone, take and deliver messages to the public and to other workers in the office, and provide directions to visitors. Thus these individuals should be provided with the services they need to enable them to learn how to communicate successfully with others.

28

Activity 29

1. How can teachers enhance language development and help to remedial a language impairment?
2. What is alternative and augmentative communication, and what are its benefits to this population of learners?
3. What related service provider serves the needs of students with speech or language impairments, their families, and their teachers, and what roles does this professional serve today?
4. What are the roles of family members?
5. Can you provide supports for children with language and communication disorders?

Supplementary Readings

Catts, H.W. (1993). The Relationship between Speech Language Impairments and Reading Disabilities. Journal of Speech and Hearnign Reseach, 36, 948-958

Catts, H.W., Hu, c-f., Larrivee, L., &Swank, L. (1994).Early Identification of Reading Disabilities in Children with Language Speech Impairments. In R.V. Watkins and M.L.

Llod,P. (1994) Referential Communication: Assessmnet and Intervention. Topics in language disorders, 14, 55-59.

Shames, G.H., & Raming, P.R. (1994). Staturing and other Disorders of Fluency.NY: Mirril

Rice (eds).Specific Language Impairments in Children: Volume4, 145-160. Baltimore: Paul H. Brooks.

Ownes, R.E., Jr. (1994). Developmenmt of Communication, language, and speech. In G.H.Shames, E.h. Wiig, and W.A. Secord (eds.) Human Communication Disorder: An Introduction (4th ed.), pp 36-81. NY: Merrill

Van Riper, C., 7 Erickson, R.R. (1994). Seech correction: An Introduction to speech Pathology and adiology (9th ed.) Boston: Allyn and Baccon.

Tirussew Tefera (1998). Human Disability: Developmental, Educational and Psychosocial Implications. Addis Ababa: AAU Printing Press.

3.6. Children with behavioral difficulties

Introduction

One of the most confusing and potentially explosive labels that can be attached to a child (and, perhaps, family) is behavioral disorder. Childhood is supposed to be an enjoyable time; a time for playing, growing, learning, and making fiends and for most children, it is. But for some children, life seems to be in a constant turmoil. They are in conflict, often serious, with others and themselves. Or they are so shy and withdrawn that they seem to be in their own worlds. In either case playing with others, making friends and learning all the things a child must learn are extremely difficult for these children. Their behavior violates expectations for what is accepted and causes concern for parents, teachers or other children (Taylor and Sternberg 19890 cited in Tirussew, 1998). These children are referred to by a variety of terms such as – emotionally disturbed, socially maladjusted, psychologically disordered, emotionally handicapped, or even psychotic if their behavior is extremely abnormal or bizarre. Such children are seldom really liked by anyone. Worst still, they do not even like themselves. They are difficult to be around, and attempts to befriend them may lead only to rejection, verbal abuse, or even physical attack.

Some of the problems associated with behavior difficulties include disruptiveness, tantrums, anxiety, and depression. Although children with behavioral difficulties are not physically disabled, their noxious and/or withdrawn behavior can be as serious as a handicap to their development and learning. Behavior disordered children make up a significant portion of tho[se] needing special education.

Definition

Although behavior disorder in children has been recognized as a problem in psychiatry and special education for well over a century, there is no definition of behavior disorder that is generally agreed upon by the professionals. There are several reasons for the lack of a clear definition (Bower, 1969; Bower, 1981). It is due to:

- measurement problems;
- lack of clear agreement about what constitutes good mental health;
- Theories use their own terminology and definition;
- The expectations and norms for appropriate behavior are often quite different across ethnic and cultural groups;
- Frequency is also a concern for all children to behave inappropriately at certain times; and
- Finally, disordered behavior sometimes occurs in conjunction with other handicapping conditions (most notably learning disabilities and mental retardation), making it difficult to tell whether one condition is the result or the cause of the other.

The term 'behavior problems' means a disability characterized by behavioral or emotional responses in school programs so different from appropriate age, cultural, or ethnic norms that they adversely affect educational performance, including academic, social, vocational or personal skills (Zionts et al, 2002), or a disorder exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance (Taylor and Sternberg, 1989; Garwood, 1983):

- An inability to learn which cannot be explained by intellectual, sensory, and health factors;

- An inability to build or maintain satisfactory interpersonal relationships with peers and teachers;
- Inappropriate type of behavior or feeling under normal circumstances that is more than temporary and exhibited in two different settings;
- A general pervasive mood of unhappiness or depression; or
- A tendency to develop physical symptoms or fear associated with personal or school problems.

This category may include children or youth with schizophrenic disorders, affective disorders, anxiety disorders, or other sustained distained disturbances of conduct or adjustment. Generally, definitions of behavior disorders are subject to controversies.

Causes of behavioral Disorders

Emotional and behavioral disorders may be explained by:

- Biological factors including genetic disorders, brain damage or dysfunction, malnutrition, and allergies, temperament, or physical illness;
- Family factors such as family definition and structure, family interaction, family influence on school success and failure, and external pressures affecting families; and
- School like deficiencies in the ability of school personnel to accommodate students' variable intelligence, academic achievement, and social skills.

Identification, assessment and Interventions

Perhaps the most functional way to look at behavior disorders is to describe how children, who are called emotionally disturbed, actually act. What dimensions of their behavior are different from those of their normal peers? It is possible to analyze or measure several dimensions of children's behavior in terms of their

rate, duration, topography, and magnitude (Chazan M.et al, 1986; Forness & Knitzer, 1992).

Rate

It refers to how often a particular behavior is performed and how it is severe. The primary difference between behavior disturbed children and normal children is the rate at which theses kinds of undesirable activities occur. How does it get in the way of the child's (society's) goal? How much does it draw attention from others? (e.g., crying, hitting others, playing alone).

Duration

Duration is a measure of how long a child engages in a given activity. Again, even though normal and behavior disordered children may do the same things, the amount of time the behavior disordered child spends in certain activities is often markedly different from that of the normal child. It is either longer or shorter.

Topography

It refers to the physical shape or form of an action. For instance, throwing a baseball and rolling a bowling ball involve different topographies. Although both involve the arm, each activity requires a different movement. The responses emitted by a behavior disordered child may be of a topography seldom, if ever, seen in normal children. These behaviors are often maladaptive or dangerous to the child or others (e.g., pulling hair).

Magnitude (or force)

Behavior is sometimes characterized by its magnitude or force. It may be either too soft (e.g., talking in a volume too low that you cannot be heard) or too hard (such as slamming the door). Disturbed children also have difficulty

discriminating when and where certain behaviors are appropriate. Learning that kind of stimulus control is a major task of growing up, which most children master naturally through socialization. They pick it up from their friends, siblings, parents, and other adults. However, some behavior disordered children often appear unaware of their surroundings. They do not learn the proper time and place of many actions without Being carefully instructed.

Activity 30

1. Read the following statements carefully and discuss why and how the factors cause behavioral disorder.

- Basic needs being unmet (physical abuse and neglect), overcrowding or large family size, unsatisfactory housing conditions and poverty inducing psychological stress and health problems;
- Marital discord or 'broken home;
- Maternal depression/ neuroticism;
- Child 'in care;
- Father-any offense against the law;
- Lack of routines may mean that the child gets overtired or restless;
- Prolonged separation from mother may slow down development and can lead to acute distress followed by apathy;
- Domestic crises and parental disharmony can affect children's emotional well-being;
- Parental illness can adversely affect children if, through ill health, parents are erratic or moody or children are anxious abut them; and
- Unsatisfactory parental attitudes and practices. This means that the children's emotional development is likely to suffer if they are rejected or over protected, or if parental discipline is inconsistent so that it is unclear what behavior will result in praise or reprimands.

2. How do socializing factors with peer groups cause behavioral disorders? Give detailed explanations.

3. How do the school factors affect behavioral disorders?

- Teachers' behavior;
- Teachers' competence and commitment;
- Teachers' expectation of students performance;
- Types of instructional program;
- Sensitivity of teachers to the student as an individual;
- Guiding quality of the teachers;
- Teachers consistency in managing behavior; and
- Availability of desirable models

4. Do you think that poor school conditions may contribute to emotional and behavioral difficulties? Focus your discussion on the following main points:

- A large number of 'untreated' maladjusted pupils;
- An unstructured environment, that is, deficient management with poor communication between staff;
- A number of staff who are unsympathetic to children;
- Unused support services;
- Absence of school liaison with parents;
- Lack of choice in faculty curricula;
- Inadequate remedial assistance;
- Poor morale amongst teachers and lack of trust;
- Erratic use of sanctions;
- High staff turnover; and
- Lack of good teaching-classes out of control.

5. What kind of cultural factors may contribute for behavioral disorders?

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Effects of behavior difficulties

Behavioral problems

Behavioral disorders may be manifested in the following ways: aggressive, aloof, annoying, anxious, attention seeking, avoidant, compulsive, daydreamer, depressed, delinquent, destructive, disruptive, distractible, disturbing, erratic, frustrated, has short attention span, hostile, hyperactive, immature, impulsive, inattentive, irritable, jealous, manic, negative, obsessive, passive, preoccupied, restless, rowdy, schizoid, self-conscious, tense, truant, unmotivated, unsocialized, and withdrawn.

Broad Dimensions of Behavioral Problems

Behavioral problems and disorders fall into two very broad classifications:

Externalizing behavior – also sometimes called under controlled, conduct disorder, or acting out. This includes disobedience, disruptiveness, fighting, destructiveness, temper tantrums, irresponsibility, impertinence, jealousy, anger, bossiness, profanity, attention seeking, boisterousness, truancy, stealing, delinquency, defiance of authority, irritability and troublesomeness, and hostile aggression. The child relates to others in a social group, but in the context of aggressive, socially disapproved, or delinquent behavior.

Internalizing behavior – sometimes called over controlled, anxiety withdrawal, or acting in. This includes social withdrawal, anxiety, feeling of inadequacy [or inferiority], guilt, shyness, depression, hypersensitivity, chewing finger nails, seclusion, infrequent smiling, chronic sadness, immaturity which includes a short attention span, preoccupation, clumsiness, passivity, daydreaming, sluggishness, drowsiness, giggling, preference for younger play master, chewing objects, and a feeling of being 'picked on' by others. The child worries a great deal and is timid.

Cognitive deficiency

Many cognitive deficiencies are attributed to students with serious emotional disturbance. They

- have poor memory;
- have short attention spans;
- are preoccupied, overly active;
- are anxious; and
- are slightly below average on intelligence tests.

Academically

- do not do as well as one would expect from their scores on intelligence tests;
- perform poorly on measures of school achievement;
- face emotional problems that can lead to academic problems; and academic problems can lead to emotional problems.
- Act out in the classroom, constantly defying the teachers' instructional and classroom rules and procedures.

Physical

Most students with behavior disorder are physically normal. However, students who have serious physical problems can develop behavior disorders.

Communication

- students with behavior disorder or emotional problems have language problems;
- Students who are considered schizophrenic do sometimes demonstrate abnormal language and communication skills;
- Many never speak; and

- others develop language and speech disorders like echolalia, illogical or disorganized speech, and inadequate comprehension of verbal instructions.

Identification, assessment and interventions

Identification

Stow and Selfe [1989], identified some of the following behavioral symptoms:

- Nervousness or emotional disturbance sometimes referred to as neurotic disorders and include children with excessive fears and anxieties and those who are very quite and withdrawn;
- The presence of developmental disorders or habit, an example might be enuresis occurring in an older child.
- Conduct disorders, these are sometimes referred to as antisocial or acting out behavior; (for example, stealing, aggression, vandalism or truancy);
- Organic disorders: these have a physiological origin, such as temper tantrums which result from some forms of epilepsy;
- Psychotic behavior: some are conditions such as childhood schizophrenia and may present such symptoms as abnormal fears, delusion and hallucinations; and
- Educational and behavioral difficulties.

Teachers can identify and help children with emotional disorders by the following behaviors [Kough et al, 1955].

a) For aggressive maladjustment

- Doesn't go along gracefully with the decisions of the teacher or the group;
- Is quarrelsome; fights often; gets mad easily;
- Is a bully; picks on others; and

- Occasionally is disruptive of property.

b) For withdrawn maladjustment

- Is noticed by other children, is neither actively liked nor disliked-just left out;
- Is one or more of the following: shy, timid, fearful, anxious, excessively quiet, tense; and
- Is easily upset; feelings are readily hurt; is easily discouraged.

c) For general maladjustment

- Needs an unusual amount of prodding to get work completed;
- Is inattentive and indifferent, or apparently lazy;
- Exhibits nervous mannerisms such as nail biting, sucking thumb or fingers, stuttering, extreme restlessness. Muscle twitching, hair twisting, picking and scratching, deep and frequent sighing;
- Is actively excluded by most of the children whenever they get a chance;
- Is a failure in school for no apparent reason;
- Is absent from school frequently or dislikes school intensely;
- Seems to be more unhappy than most of the children;
- Achieves much less in school than his ability indicates he should; and
- Is jealous or over competitive.

Assessment

Assessment of emotionally or behaviorally disturbed should help us identify those students who need special help, plan programs to address their problems, and monitor progress toward reaching our goals. An adequate assessment does not focus exclusively on student's behaviour. Assessment should be solution-centered, that is, it should not merely be descriptive of what is but also should be a process that leads to suggested interventions.

behavioral assessment may employ:

- rating scales;
- interviews; and
- direct observation for measurement of the particular behaviors.

Interventions

The child's behavior problem is defined in measurable terms so that a reliable, objective, daily record of its occurrence can be kept. The direct daily measurement of behavior is useful in assessing the extent of the problem and in judging the success of the methods used to modify it.

There are several different approaches to educate children with emotional disturbance, each with its own definitions, purposes of treatment, and types of intervention. Based on the work of Rhodes and Head, [1974] Rhodes & Tracy, (1972); and Kauffman (1985), there are six categories of models.

Biogenetic

Deviant behavior is a physical disorder with genetic or medical causes. The causes must be cured with medical or nutritional treatment to treat the emotional disturbance.

Psychodynamics

Disordered personality develops out of the interaction or experience and internal mental processes that are out of balance. It relies on psychotherapy and creative projects for the child [and often the parents] rather than academic remedies.

3. Psycho educational

This is concerned with unconscious motivations and underlying conflicts. Yet stresses in the realistic demands of everyday functioning in school and home put as much emphasis on the student's emotional development and growth as an academic growth (Taylor and Sternberg, 1989). Intervention

focuses on therapeutic discussions to allow the children to understand their behavior rationally and plan to change it.

Humanistic

A disturbed child is not in touch with her/his own feelings and cannot find self-fulfillment in traditional educational settings. Treatment takes place in an open, personalized setting where the teacher serves as a non-directive, non-authoritarian "resource and catalyst" for the child's learning.

Ecological

This stresses the interaction of the child with the people around him/her and with social institutions. It considers children's problem as largely emanating from social or cultural forces exerting influence on the individual (Tylor and Sternberg, 1989). Treatment involves teaching the child to function within the family, school, neighborhood, and the larger community.

Behavioral

A child has learned disordered behaviour and has not learned appropriate responses. To treat the behaviour disorder, a teacher uses applied behaviour analysis techniques to teach the child appropriate responses and eliminate inappropriate ones.

Other Supports

- Working with Individual Pupils and Small Groups and
- Non-directive counseling in schools. Non-directive counseling practice rests on the humanistic assumptions that human beings tend to grow and flourish in their own best way when their needs are met. Self-esteem and self – confidence are the goals of the non-directive counseling. Children develop their self-esteem and self-confidence through being accepted, valued, respected and challenged.

Peer Support Practices in Classrooms and Schools

Interventions should not only be of high scientific and technical quality but should also have social validity that

- a significant problem should addressed;
- the intervention procedures must be acceptable; and
- the outcome of the intervention should satisfactory.

Some interventions that have been shown to be effective for teaching appropriate behavior include:

- Providing clear instructions, followed by appropriate monitoring and consequences;
- Using examples or peer models to teach appropriate behavior by presenting correct and incorrect examples in clear, sequential steps;
- Giving students reasonable choices;
- Providing positive reinforcement [i.e., reward the behavior that is desirable]; and
- Teaching social skills through systematic and prolonged methods with field- tested curriculum combined with effective instruction.

Make the Curriculum Meaningful

- Build new learning from the previous knowledge and experience of students by holding brainstorming sessions with the students on a specific topic and letting them relate what they know; giving students a problem and encouraging them to use whatever they already know to 'get into the problem' and encouraging them to use whatever they already know to 'get into the problem' The teacher can then introduce new concepts and skills required to solve the problem.
- Use a student's daily experience to clarify new concepts.

- Be consistent when using consequences for inappropriate behaviour.
- Teach appropriate behaviours and practice them every day.
- Use preferred activities as rewards for good behaviour.
- Monitor behaviour and post-performance record.
- Rewards good behaviour models
- Teach students to monitor their own behavior.
- Consider developmental levels before making referral for outside assistance

Activity 31

1. When is a child considered to have behavioral problem in your community?
2. Which type of behavior disorder is common in your community?
3. Do you think it is difficult to define behavioral problems? Why?
4. What is the most functional way to look at behavior disorders?
5. Which type of behavior problem is common in your community?
6. Who do you think is responsible for different types of behavior disorders?
7. What are the two broad dimensions of behavioral problems?
8. How do you understand the cognitive development of children with behavior disorders?
9. How do you comment on the academic performance of children with behavioral problems?
10. How do behavioral problems affect the social and interpersonal relationships of children?
11. Do you commonly observe behavioral problems of children as disabilities? If yes, explain why.

43

Supplementary Readings

Garwood S.G. [1983]. Educating Young Handicapped Children: A Developmental Approach [2nd edition]. London: An Aspen Publication.

Taylor R.L. and Sternberg L. [1989]. Exceptional Children research and Teaching. New York: Spring Verlag.

Taylor R.L. and Sternberg L. & Richards S.B. [1995]. Exceptional children Research and Teaching. London : Singular publishing Group, Inc. Spring Verlag.

Tirussew Teferra [1998]. Human Disability: Developmental, Educational and Psychosocial Implications. AAU: Addis Ababa University

Ysseldyke, James E. and Algozzine, Bob [1995]. Special Education: A Practical Approach for Teachers. Boston Houghton Mifflin Company.

3.7. Children with Physical Impairments

Introduction

Physical impairment is a disability category that comprises hundreds of conditions and diseases having high incidence disabilities. Today, some children with physical impairment may attend neighborhood schools, but they require modification of the physical environment. Modification of the environment helps children with physical disability to interact with the physical and social world.

Physical disabilities are often broken down into two subcategories: the physically impaired and the health impaired (Taylor and Sternberg, 1989). Physical disabilities are problems that result from conditions affecting the central nervous system or loss of limbs or other body systems and their related functions. These conditions affect the motor functions or how children use their bodies. Health impaired children, on the other hand, suffer from illness or diseases that normally affect the operation of various organs of the body. Some times, these illnesses or diseases can directly affect the motor movements of the children (Love and Walthall 1977; Taylor and Sternberg, 1989). Those with health related problems tend to have high rates of absenteeism, and they require flexibility and modifications in their instructional programs. Some of these children may present problems to their teachers and require emergency techniques. Physical (motor) impairment can be generally categorized into two major components: Orthopedic and health related impairments, which will be discussed in this unit

Main contents of the Unit

- Definitions
- Types of physical impairment
- Causes
- Identification and assessment
- Interventions

Objectives of the unit

After completing this unit the teacher students will be able to:

- Give the meaning of physical impairment and classify it into categories;
- Describe the procedures of identifying and assessing physical impaired children;
- Describe the causes of physical Impairment;
- Explain the developmental characteristics of physical impaired children; and
- Describe the methods of educating physical impaired children.
- Demonstrate positive attitude towards physical impaired children

Classifications

Mild. A child can ambulate [with or without prostheses or orthoses], use arms, and communicate well enough for her/his own needs.

Moderate. A child has difficulties in locomotion, self-help, and communication, but is not totally disabled; a child requires some special help.

Severe. A child is incapacitated and usually confined to a wheelchair; complete rehabilitation may not be possible.

General Causes of physical impairment

- Chromosomal abnormalities;
- Environmental hazards;
- Congenital physical malformations that is present at birth. They may be large or small; they may be inside or outside the body;
- Teratogens – exposure of the developing fetus to certain environmental agents;
- Accidents; and
- Viral and bacterial diseases which may cause both orthopedic and health related problems, Example poliomyelitis and bone tuberculosis

Orthopedic Impairments

It is a condition related to a physical deformity or disability of the skeletal system and is associated with motor function such as:

- Affected muscular or skeletal system; and
- Affected central nervous system;
- This may, in turn, limit movement and mobility; and
- Adversely affect a child's psychosocial, educational, and other developmental achievements.

Orthopedic impairment may be classified in many forms as listed and discussed below.

Cerebral Palsy

A group of neuromuscular disorders that results from damage to the central nervous system (the brain and spinal cord) before, during, or after birth (Garwood; 1983; Guralnick M. & Benett , 1987; Vergason, 1990; Nugent , lvory and Ross , 1995; Taylor, Sternberg & Richards, 1995; Yssedyke and Algozzine, 1995). It is characterized by paralysis, weakness, and poor coordination. The causes of cerebral palsy are complex and include the following:

- birth injury, including anoxia and hemorrhage;
- congenital cerebral defect;
- postnatal head injury;
- infection; and
- unidentified or other causes.

Some of the following are general features of cerebral palsy:

- It can be treated but not cured.
- It does not get progressively worse as a child ages.
- It is not fatal and, in the great majority of cases, it is not inherited.
- It exhibit disturbances of the voluntary motor functions,

- Children suffering from this disability may have little or no control over their arms, legs, or speech
- They may also have impaired vision or hearing.

Cerebral Palsy may be categorized into specific physical disability groups: spasticity, athetoid, ataxic, hypotonic, rigged and tremor.

Spasticity

Children with spastic cerebral palsy have tense, contracted muscles. Their movements may be jerky, exaggerated, and poorly coordinated. They may be unable to grasp objects with their fingers. If they try to control their movements, they may become even more jerky. If they are able to walk, it may be with scissors gait, standing on their toes with their knees bent and pointing inward.

This type is the most common one of all paralysis. Spastic cerebral palsy is further classified by topographical distributions:

- Quadriplegia
- Deplegia
- Hemiplegia

Athetoid (extrapyramidal)

A type of cerebral palsy characterized by uncontrolled tightening or pulling of muscles. Children with athetoid cerebral palsy make large, irregular, twisting movements that they cannot control. When they are at rest or asleep, there is little or no abnormal motion. An effort to pick up a pencil, however, may result in widely waving arms, facial grimaces, and an extension of the tongue and throat and they may drool. They may also seem to stumble and lurch awkwardly as they walk. At times their muscles may be tense and rigid, whereas at other times they may be loose and flaccid. Extreme difficulty in expressive oral language often accompanies this form of cerebral palsy.

Ataxic

A type of cerebral palsy characterized by movements disrupted by impaired balance-depth perception. Children with ataxic cerebral palsy have a poor sense of balance and body position. They may appear to be dizzy while walking and may fall easily if not supported. Their movements tend to be jumpy and unsteady, with exaggerated motion patterns.

Hypotonic

Children with hypotonic cerebral palsy retain normal movement patterns but lack the tone to initiate or maintain a change in posture. They are dominated by gravity, and influence of gravity interferes with eight shifting and the emergence of righting and equilibrium reactions.

Rigidity

Children with rigidity type of cerebral palsy display extreme stiffness in the affected limbs; may be fixed and immobile for long periods.

Tremor

This is marked by rhythmic, uncontrollable movements. The tremors may actually increase when the children attempt to control their actions.

Anatomical or Topological Classification of Cerebral Palsy

- Quadriplegia –means that all four limbs [both arms and legs] are affected; movements of the trunk and face may also be impaired.
- Paraplegia – indicates a motor impairment of the legs only.
- Hemiplegia – is an impairment of one side of the body.
- Diplegia – refers to a major involvement of the legs, with less severe involvement of the arms.
- Monoplegia – is a less frequent form of involvement of only one limb.

- Triplegia –is when three limbs are affected [refers to major involvement of the arms, with less sever involvement of either leg].

Although cerebral palsy is often difficult to diagnose prior to 6 months of age, there are early diagnostic signs, such as difficulty in sucking and feeding, a weak cry, abnormal muscle tone qualities, and continuation of reflexes past their usual point of integration. In a normal child, primitive reflexes are synthesized, elaborated, and reintegrated into more mature motor patterns. In the cerebral-palsied child, these reflexes remain static and constant, completely dominating the child's motor skill development unless therapeutic intervention is initiated.

Poliomyelitis

Poliomyelitis [Polio] is an acute disease that inflames nerve cells of the spinal cord or brain stem and leaves a residual paralysis or muscular atrophy.

- communicable disease caused by the polio virus;
- muscular atrophy; and
- even fatal motor paralysis.

Spina Bifida

It is a congenital defect in the development of the spinal cord. It is an opening in the spinal column caused by the failure of vertebrae to fuse.

- lack of closure of the vertebral into a sac at the base of the spine. It is characterized by;
- feeling in the lower part of the body fail to develop normally;
- paralysis of the lower extremities;
- changes in tactile and thermal sensations;
- lack of bowel and bladder control;
- accompanied by hydrocephalus;
- mild to severe visual and perceptual motor development delay;

- mild to moderate asymmetry of hand preference, posturing in the hands, mild decreased of tone and strength of upper limbs, and deceased range of motion at the shoulders have been among the major deficits observed; and
- children with this problem walk with braces, crutches, walkers, or they may use wheelchairs.

Epilepsy

Epilepsy is a convulsive disorder that is caused by excess firing of electrical discharges in the brain cells. Electrically the brain is unstable. It is characterized by

- seizures;
- disturbances of movement, sensation, behavior, and/or consciousness; and
- chronic conditions of the central nervous system with various forms grand mal, petit mal, kinetic seizure, and myoclonic seizure

specific causes of epilepsy are:

- not clearly known;
- underlying lesion caused by scar tissue caused by a head injury, tumor, or by an interruption in blood supply to the brain; or
- a wide variety of psychological, physical, and sensory factors are thought to trigger seizures in susceptible persons.

Three major forms of epileptic seizures include:

- Grand mal
- Pettit mal;and
- Psychomotor

Grand mal/Generalized Tonic-Colnic Seizure

- serious type of epileptic seizure.
- loss of consciousness
- postural control, muscle rigidity [tonic phase] that progresses to jerking reactions; suspended breathing, loss of bowel and bladder control, and a frothing of saliva.

- lasting form 1 to 10 minutes, a grand mal seizure is often preceded by an aura, a warning sign that a seizure is forthcoming.
- Auras may take the form of unusual taste, smell, or sound; dizziness; or headache.

Petit mal/Absence

- It is far less severe than the grand mal but may occur much more frequently as often as 100 times per day in some children.
- During the onset, the child may appear to be daydreaming.
- brief loss of consciousness, lasting anywhere from a few seconds to half a minute or so.
- The child maintains postural control and may not even be aware of the seizure.
- The petit mal seizure is the most common form of epilepsy among children 4 to 10 years of age, and may recur many times during the day, interrupting attention span, memory, and thought processes in general.
- can be detected by observing the repeated occurrence of two or more of the following signs:

  - Head dropping
  - Daydreaming, lack of attentiveness
  - Slight jerky movements of arms or shoulders
  - Eyes rolling upward or twitching
  - Chewing or swallowing movements
  - Rhythmic movements of the head; and
  - Purposeless body movements or sounds.
  - Dropping of whatever object. .
  - Being unaware that he/has had a seizure, and no special first aid is necessary.

Kinetic and myoclonic seizures are variant forms of petit mal seizures in which the child experiences sudden involuntary muscular contractions of the limbs and trunk, in that order. The child does not lose consciousness, and the seizures are brief but frequent.

Psychomotor Seizure

- a brief period of inappropriate or purposeless activity.
- conscious but is not actually aware of his/her unusual behavior.
- lasts for a few minutes but go on as long as several hours in some cases..

What to Do in the Event of a Seizure?

Halliday [1989] mentioned the following procedures:

- Keep calm and reassure the other pupils;
- Loosen clothes around the neck of the child;
- Place the child in the semi-prone position with the head to one side;
- Note state of eyes and color of face;
- Check breathing and pulse;
- Monitor the length of the attack. If it lasts more then five minutes get some one to call for a doctor and /or arrange for the child to be taken to a hospital; and
- On no account attempt to place anything in the child's mouth; it can obstruct the air way and it may break the child's teeth; it may even cause injury to the person attempting to do so.

Musculoskeletal Disorders

Muscular Dystrophy

Muscular dystrophy is a hereditary disorder that causes a loss of utility and progressive deterioration of the body as a result of atrophy, or replacement of muscle tissue with fatty tissue [Vergasen, 1990; Garwood; 1983; Taylor, Sternberg & Richards, 1993]. It is actually a group of birth disorders in which the skeletal muscles progressively are in atrophy.

Muscular dystrophy has four forms (ysseldyke and Algozzine, 1995):

Pseudohypertrophic (duchenne's) type

- it is inherited from the mother in a sex-linked recessive transmission.
- mainly affects male
- it affects involuntary muscles of the heart and diaphragm and early death is common in this population; and
- slowness or clumsiness in walking is an early sign of muscular dystrophy.

Facioscapulohumeral (Landouzy)

- Affects both sexes, with weakness of the shoulders and arms more than the legs;
- Usually appears before the age of 10 but can start later in adolescence;
- The child has difficulty raising the arms above the head or lifting heavy objects and stands with stooped shoulders; and
- Early symptoms include the inability to pucker or whistle, and abnormal facial movements when laughing or crying.

Limb-Dudle dystrophy [juvenile dystrophy, or Erb's disease

It follows a slow course and often causes only slight disability. Usually the disease begins between ages 6 and 10. Muscle weakness appears first in the upper arms and pelvis. Other symptoms include poor balance, a waddling gait, and an inability to raise the arms.

Mixed dystrophy

This form generally occurs between ages 30 and 50, and affects all voluntary muscles, and causing rapidly progressive deterioration.

Leprosy

Leprosy is a chronic disease which damages the nerve cells around the different parts of the body affecting the motor behavior both in fine and gross motors. The mutilating effect of the disease generates great fear and horror from people.

Osteogenesis imperfecta

It is a hereditary disorder marked by bones that are extremely brittle. The skeletal system does not grow normally, and the affected child's bones are easily fractured.

Legg-Calve-Perthes disease

It is a disease of the circulatory system that can result in destruction of the head of the femur, the upper bone in the leg. Interrupted blood flow causes the head of the bone to degenerate; a new head that is misshapen, usually flattened is formed.

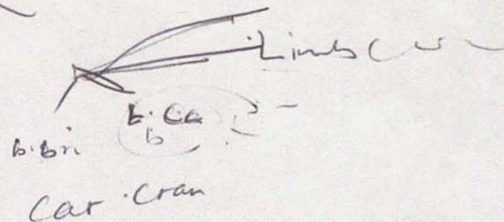
Limb Deficiencies

Limb deficiencies, or loss of one or more limbs, may be present at birth [congenital] or occur later in life [acquired]. A student may be born missing entire limbs or parts of the limbs.

Craniofacial Anomalies

These are defects of the skull and face.

Microcephaly



Activity 32

1. Which type of motor disorder is common in your community? What do you think is the possible cause for the motor disorder?

2. What do you think is the common problem of motor disorder in Ethiopia? Would you please suggest possible means of preventing motor disorders in Ethiopia?

3. Indicate possible causes for accident based motor disorders.

4. What would you do in an event of a seizure?

5. Discuss the type of motor problems faced by children with musclo-skeletal motor disorders and children with health impairments.

Health Related Impairment

Heart Conditions

Asthma

Diabetes

Cystic Fibrosis

Hemophilia

Accident – Based Impairments

Traumatic Brain Injury [TBI]

Spinal Cord Injuries [SCI]

Burns

Activity 33

1. Mention other health related problems that affect education of students in Ethiopia;

2. How can you provide support to students who have health problems in your class?

Developmental effects of motor disorders

The impact of motor limitations on the different parameters of the personality is varied as the type and severity of motor disorders are heterogeneous.

Cognitive Characteristics

The cognitive characteristics of students with physical disabilities depend on their particular diseases or injuries and their severity. Students with motor or speaking difficulties often have no cognitive impairments, as in the case of cerebral palsy in which limitation of movement can affect the cognitive development of the child adversely.

Academic Characteristics

Students with motor impairments experience academic difficulties than their peers without disabilities: they face limited learning opportunities that translate

into limited academic achievements for a lot of academic content may be missed due to chronic health conditions like asthma, diabetes, etc.

Physical characteristics

Motor dysfunction are the primary difficulties faced by children with orthopedic handicaps or other health impairments. Their disorders may mean chronic illness, weakness, and pain.

Social/Emotional Characteristics

The reactions of parents and other care-givers as well as well as teachers and students do influence the social and emotional behaviors the children exhibit in school, at home, and in the community. Hyper irritable or non-responsive and may not have as many opportunities to interact positively with caretakers. Being restricted from social and school activities can impede the social and emotional development of students. Limited language and communication skills, which can restrict their social and emotional interactions with others.

Communication characteristics

Communication disorders may result depending on the type and severity of the impairment; however, their speech and language skills are normal. Still, they must use special assistive augmentative, and/or alternative systems to communicate.

Activity 34

1. How do you understand the cognitive development of children with motor disorder?

2. How do you comment on the academic performance of children with motor disorder? Compare the situation of children with musculoskeletal disorders and health impairment.

3. How does motor dysfunction affect the social and interpersonal relationship of children?

4. What do you understand by barrier-free environment? Consider the school, community and home environment?

Identification, assessment and interventions

Identification

Teachers or parents can use the following hints to identify children with motor impairments:

- Has poor motor control or coordination
- Walks with a limp or with awkwardness
- Shows signs of pain during exercise
- Has jerky or shaky motions
- Has defects which interfere with normal function of the bones, muscles or joints

- In addition, the teacher can engage the children with mild physical activities to identify the disorder such as:
- One-legged Race; have the children run always, keeping their feet at right angles to the direction in which they are running; and
- Backwards race; mark two lines on the gym floor or on unstructured space out-of-doors. Have the children stand on-one line and race backwards until they have crossed the second line

Symptoms for children with health problems:

They are:

- Easily fatigued;
- Abnormal in size so cannot participate in the group; is subject to ridicule;
- Excessively restless and overactive;
- Usually breathless after exercise;
- Subject to frequent dry cough; complains of chest pains after physical exertion;

- Flushes easily; has a slightly bluish color to cheeks, lips or finger tips;
- Extremely inattentive;
- Excessively hungry and thirsty;
- Complaining of pains in arms, legs or joints; and
- Faint easily.

Assessment

A. Examiner to child: speech, gesture, touch, movements or any combination of these in direct or code form.

B, Child to examiner; speech, hand function, gestures, "yes-no" indications, eye pointing, vocalization other than speech, etc.

The following are some of standardized tests given for children with physical handicaps.

- Pre-test of vision, hearing and motor coordination. (Grades kg-12)
- Oseretsky Test for motor proficiency. [Educational Test Bureau, Educational Publishers, 720 Washington Ave., S.E. Minneapolis, Minnesota].

Activity 35

Evaluate the social and physical environment of your school and community.

1. Is the attitude towards children with physical environment positive in your community and school?
   - Students with non-disability
   - Teachers
   - Administrative staff members
   - The community around the school
   - The general community

2. Is the physical environment accessible to students with physical disability?

- School compound
- school gates
- Classrooms
- Classroom gates
- Desks
- Toilets
- The building
- Roads
- Bridges
- List more

Intervention

Educational

A good early intervention program can be of enormous help to the child and family in providing information and support.

Altered seating arrangements equipment and considerable assistance in mobility, eating, using the toilet, administering medication, and performing other daily activities.

Treatment of motor impairments usually falls into one of four general categories [Heward & Orlansky, 1988]:

- Hands-on therapy:- Physical, occupational, and other specialists provide direct hands on treatment.
- Assistive device:- braces and splints [usually made of molded plastic] are used to give a child movement with stability, to correct abnormal postures, and to control involuntary motions. Special inserts or wedges can help children sit or stand in positions that are comfortable and suitable for instructional tasks.

- Medication:- medicines can sometimes help reduce spasticity and rigidity but generally are of only limited usefulness in improving the muscle tone of children with physical disabilities.
- Surgery:- orthopedic or neurologic surgery also helps, although this often regarded as a last resort in the treatment of physical impairments.

Special Devices and Appliances

Many children with physical disabilities use special orthopedic devices to increase their mobility and help their bone, joints and muscles develop. Accordingly, some of the important special devices include [Garwood, 1983; Heward and Orlansky, 1988; Yssleydke and Algozzine, 1995]:

- Prosthesis, these are artificial replacement of missing body part [most frequently arm, leg or eye];
- Wheelchair locomotion;
- Adaptive devices, these include special eating utensils, such as forks and spoons with custom designed handles or straps. They may enable children to feed themselves more independently;
- Orthosis, this is a device that enhances partial functioning of a body part, such as a long brace;
- Residual functioning;
- Facilitating communication- communication boards and electronic devices;
- Writing aids- these include computers with word processing programs and with keyboard adoptions. Students with orthopaedic impairments of muscle; and
- Positioning, this refers to sitting, standing, sitting or other positioning device should provide adequate support without looking the child into a static position.

Modifying the Environment

- Changing desk and table tops to appropriate heights for students who are very short or use wheelchairs.
- Providing a wooden pointer to enable a student to reach the upper buttons on an elevator control panel.
- Adding adaptive devices [rubber bands, plastic wedges, plastic tubing] to writing instruments to make them easier to grip.
- Using word processors, computers, typewriters, and calculators rather than handwriting responses.
- Using study buddies in activities that require extensive writing.
- Installing paper cup dispensers near water fountains so that they can be used by students in wheelchair.
- Moving a class or activity to an accessible part of a school building so that a student with a physical impairment can be included.
- Substituting a different body position from the one normally used [as in lying on a mat to play checkers].
- Modifying equipment – for example, adding a longer handle to a tennis racket or a rake so that it can be used from a wheelchair.
- Developing alternative techniques for accomplishing activities, such as having two handed tasks performed with one hand, with the feet, or with the teeth.
- Decreasing the distances a student must move or reducing the size of a court on which a game is played.
- Providing move frequent rest periods than usual.

Adapting Instruction

Ysseldyke and Algozzine, (1995), suggested some common modifications teachers make to help students respond to academic tasks:

- Securing papers to work areas with tape, clipboards, or magnets.

- Limiting response options to single words or multiple choice items that require minimal writing.
- Placing rubber strips or pads on work mate (rulers, calculators, science equipment) to prevent slipping during use.
- Using writing instruments that require less pressure to produce marks (felt-tip pens, soft lead pencils);
- Adding adaptive devices (rubber bands, plastic wedges, plastic tubing) to writing instruments to make them easier to grip;
- Using word processors, computers, typewriters, and calculators rather than handwriting for responses or calculators; and
- Using study buddies in activities that require extensive writing.

Adapting Physical Education

According to Gearheart (1988), there are at least four ways that physical education activities can be changed to allow greater participation for students with physical and health problems:

- Change the way all students participate;
- Change the way one player of each team participates;
- Modify the equipment; and
- Make special allowances for the children with motor problems.

Movement from place to place

WHO (1989), suggested some practical training guidelines for those with moving difficulty to enable them move around:

- Carried by two helpers, one helpers or carried in wheelbarrow;
- Move on a trolley, by crawling or crouching;
- Walk with one helper, two helpers, using two bars or one bar; and
- Walking with a frame, with two crutches, with two sticks or one stick.

Finally, Ysseldyke and Algozzine, [1995], suggested a list often top tips for teachers or students with health, physical, and multiple disabilities:

- Ask about medical and physical needs;
- Ask questions about ongoing medical and physical intervention [e.g., medications, physical therapy;
- To recognize signs of medical or physical distress;
- Communicate information about needs and distress to al class members;
- Keep classroom and school areas accessible;
- Keep work materials to accommodate medical physical needs;
- Modify assignments to accommodate medical and physical needs;
- Have emergency instructions and telephone numbers readily available;
- Teach emergency procedures to all class members; and
- Recognize limitations but don't be ruled by them hold high expectations for all students.

Activity 36

1. Who you think do not require a lot of physical exercise among children with motor disorders? Why?
2. What sort of support is needed for a child with progressive musclo-skeletal disease?
3. Discuss the different types of adaptation that allow greater participation for children with health problem.
4. What kind of policies or directives should be formulated in your school and community to enhance the participation of students with physical impairment, equally with non-physically disabled students?

5. What should be your role as a teacher and change agent to empower children with physical disability so that they become independent?

Case Study

Age:30

Sex: Male

Impairment: Motor

"I Thought I Couldn't Have a Girl Friend"

He contracted polio during his childhood period which had affected his lower limbs. The informant was born in Addis Ababa. He is playful, sociable and happy and a chairman in an association. He was brought up around "Merkato" [a congested market place] playing with the children of the surrounding.

He was normal in his social interaction of his early childhood days and is still interactive. He has accepted the disability and the limitation it has imposed in his movement. For this attitude his father's contribution was great. His father considered his disability as nothing and encouraged him that he is not different from any other child around.

Besides playing with his friends, he used to make and sell paper bags at 'merkato' He appreciates his childhood social interaction like this – "Since it was a childhood life my social interaction was so pleasant. There was no problem in any aspect. "It is obvious that one of the places where social interaction manifests is at school. With regard to this, he explained stating p that he had faced no serious problems. He has the following to say." I was participating in every kind of social interaction in schools as much as I could. I had many school friends. I also had a girl friend, but during our first meeting she was afraid of other persons' reaction. As our interaction increased and knew each other very well, she got relaxed and gave no attention towards others had to say about us. In this encounter a boy in the school developed a desire for my girl fiend and tried to make her his own. He considered our interaction as a

superficial one. He remarked that it was not necessary for me to get a girl friend and even cautioned me that I couldn't get any of I wanted by all means. Finally, when he understood the truth he was surprised and wondered and gave up his trial." This time, the informant is planning to marry and establish a family in the near future.

In other social phenomenon such as wedding, recreation, burial ceremonies, etc. he does not have much participation. He explained the situations as follows: "This is so because the people's reaction in most of such places is not good. It pushes you away from such social events. People consider us bizarre to find especially in recreational centers. He further stressed that society should know that a person with disability is more like others than different. That is, they have the same biological and social needs as well as rights like any other person. So, I hereby notify that they should give us equal opportunities and full participation."

Addis Ababa, April 1998

Supplementary Readings

Garwood S.G. [1983]. Educating Young Handicapped Children: A Developmental Approach [2nd edition]. London: An Aspen Publication.

Gearheart, Bull R., Weishahn, Mel W., and Gearheart. Carol J. [1988]. The Exceptional Student in the Regular Classroom. Columbus: Merril Publishing Company.

Guralnick M.J. & Bennett F.C. [1987]. Effectiveness of Early Intervention for at-risk and Handicapped Children. New York: Academic Press, INC.

Halliday, Paula [1989]. Special Needs in Ordinary Schools. Children with Physical Disabilities. London: Cassel Educational Limited.

Heward, William L. and Orlansky, Mihcael D. [1988]. Exceptional Children: An introductory Survey of Special Education. Columbus: Merril Publishing company.

Love, H.D., & Walthall, J.E. [1977]. A handbook of medical, educational, and Psychological information for teachers of physically handicapped children. Springfield, lll: Charles C. Thomas.

Nugent, I.M., ivory J.P. and Ross, A.C. [1995]. Key Topics in Orthopaedic Surgery. Oxford: Bias Scientific Publishers Ltd.

Taylor R.L. and Sternberg L. & Richards S.B. [1995]. Exceptional children Research and Teaching. London : Singular publishing Group, Inc. Spring Verlag.

Tirussew Teferra [1998]. Human Disability: Developmental, Educational and Psychosocial Implications. AAU: Addis Ababa University

Vergason, Glenn A. [1990]. Dictionary of special Education and Rehabilitation. Colorado: Love Publishing Cpmpany.

Ysseldyke, James E. and Algozzine, Bob [1995]. Special Education: A Practical Approach for Teachers. Boston Houghton Mifflin Company.

3.9. Giftedness and talents

Introduction

Across time, people living in different periods of history have sometimes exhibited extraordinary levels of particular skills, abilities, or talents. For example, during the time of the ancient Greeks, athletic prowess and excellence in the fine arts reached their peak, obvious in the legacies of their civilization: their philosophical writings, dramas, architecture, and sculpture. During the time of the ancient Chinese, Literary works, architecture, music, and art far surpassed the standards of other cultures. During the second century B.C., the Chinese wrote books, using silk for paper, on topics such as astronomy, medicine, and pharmacology. By the first century B.C., books on mathematics and other topics were produced on paper. Ethiopians were also known for their architects uses paintings, literature and technologies.

Gifted individuals are not handicapped by any lack of ability. Rather, the challenge to educators is to provide a stimulating educational environment and a broad curriculum to help these individuals reach their full potential and develop their talents. Unfortunately, education for the gifted has not received the full commitment of policymakers in Ethiopia.

Of course, some gifted children achieve their potential without the benefits of special education; however, many do not. Data clearly support the need of special services and a differentiated educational experience for these youngsters (Cornell, Delcourt, Goldberg, & Bland, 1995; Pendarvis & Howley, 1996). For example, gifted education approaches, such as acceleration, are powerfully effective but seem to be impossible to implement in general education classes. Also, some instructional interventions purported to help gifted students profit from general education placements – for example, cooperative learning – can obstruct learning for the brightest student. In addition, developing talent that is, translating aptitude into ability, requires special instruction, guidance, and practice. All children need to develop the motivation to grow and expand. For many gifted children, the general education classroom alone cannot provide the challenges they require to remain motivated or learn at an accelerated and comfortable pace.

Contents of the Unit

- Definitions
- Types of gifted and talent
- Causes
- Identification and assessment
- Interventions

Objectives of the unit

After completing this unit the teacher students will be able to:

- Give the meaning of giftedness and classify into category;
- Describe the procedures supporting gifted and talented children;
- Identify and assess gifted and talented children;
- Describe the causes of gifted and talent;
- Explain the developmental characteristics of gifted and talented children;
- Describe the methods of educating gifted and talented children;
- Demonstrate positive attitude towards gifted and talented children; and
- Provide appropriate support for gifted and talented children according to their need and potential.

Definitions and classification of gifted and talent

Let's start by coming to an understanding of how concepts of "gifted" and "talented" have been defined. Such definitions are important because they reflect beliefs about who qualifies and what services they should receive. Across time, the definitions of giftedness have ranged from a narrow view based exclusively on cognition, reasoning, and the score a person receives on a test of intelligence to a multidimensional view of intelligence, aptitudes, abilities, and talent development.

Marland's definition, with minor variations, is still the most widely accepted and is used as the basis for most states' current definitions (Marland, 1972, p. 10):

> Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance.

These are children who require differentiated educational programs and service beyond those normally provided by the regular school program in order to realize their contribution to self and society. Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas singly or in combination:

- General intellectual aptitude.
- Specific academic aptitude.
- Creative or productive thinking.
- Leadership ability.
- Visual and performing arts.

Activity 37

Discus the following points in groups

1. Is there such a thing as giftedness?
2. How do you perceive the definition above about gifted and talented
3. If we can find such children, can we provide them with quality differentiated services?
4. Is it morally right or correct that we put such programs or services into action?
5. What will happen if we cannot provide support for these children?
6. Have you ever come across such students in your life? Can you tell the class of one case

It is also believed that giftedness is multidimensional:

- high academic aptitude or intelligence
- above-average intelligence,
- high creativity, and
- substantial task commitment

Through careful study of human behavior and performance, Gardner (1983) concludes that there are seven dimensions of intelligence and that a person can be gifted in any one or more of these areas.

Geardner's Seven Intelligences

Verbal-linguistic. The ability to use language in a number of ways. The components of ability are syntax, semantics, pragmatics, written and oral language when an adult age of the individual may be novelist, lecturer, lawyer, lyricist

Logical-mathematical. The ability to reason and recognize patterns. The components of the ability are deductive reasoning, inductive reasoning and computation. The adult role will be a mathematician or a physicist

Visual-spatial. The ability to see the world and re-create it. The component is ability to represent and manipulate spatial configurations, interrelationship or parts. The adult role may be architect, engineer, mechanic, navigator, sculpror, or chess player

Body-kinesthetic. The ability to use the body and hands skillfully. It is ability to use all or part of one's body Dancer, athlete, mimeor surgeon

Musical-rhythmic. The ability to perceive the world through its rhythm. Pitch discrimination, ability to hear themes in music, sensitivity to rhythm, texture, and timbre and production of music through performance or composition. When an adult they may be musician, a composer or a singer.

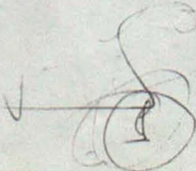
Interpersonal. The ability to notice and respond to other people's needs ability to understand and act productively on others' actions and motivations. They may be a teacher, a therapist, a clergy, a politician, or a salesperson as an adult.

Intrapersonal. The ability to understand one's own feelings. Understanding of self.

*Source "Opportunities to Learn through Multiple intelligences," (p.1) by A.D. Morgan, Fall 1994, School Renewal Update, Effective Schools Unit, New Mexico State Department of Education.

On the other hand, Feldhusen (1992) proposed four basic domains that schools can address: academic, artistic, vocational, and personal-social.

Gagn'e (1996) proposed talent fields relevant to schoolchildren for development:



- academics, games of strategy (chess, puzzles, video games),
- technology,
- arts,
- social action,
- business, and
- athletics.

Van Tassel-Baska (1995), advocated an integrated curriculum for talent development that includes the following dimensions: advanced content knowledge, higher-order thinking and processing skills, learning experiences developed along themes and ideas relevant to real-world issues.

Activity 38

Consider these provocative questions and reach your own conclusions for the following in text questions:

1. Do you agree with the explanation mentioned above? Can you give concrete examples for each of the points mentioned?

The terms giftedness and talent need to be differentiated. Giftedness would be used to describe high natural abilities, but not for a single dimension or trait. Talent would refer to a high level of performance and well-developed skills. Giftedness or aptitude without the work, effort, and unique experiences does not lead to superior mastery or talent development in a particular field of human activity. In other words, for Gagn'e (1996), giftedness refers to measures of potential, to turn aptitude into talent and achievements, require an array of educational services delivered to gifted students by specialist, highly prepared for the responsibility of instructing these students.

2. Are the distinctions between giftedness and talent clear? Can you search additional concepts that make them similar and different?

Individuals who have high levels of intelligence, are high achievers academically, are extremely creative, or have unique talents and are not handicapped in the sense of having a disability. Certainly, they do not face the limitations of the difficulties that most children who

receive special education services do. However, many of these individuals, because of their differences, are handicapped by the society and our educational systems. They can be stifled by educational approaches that do not challenge or develop their cognitive abilities or that do not allow them to learn academic content at an accelerated pace. Sometimes directly and sometimes indirectly, peers, teachers, and parents discourage them from developing their abilities maximally. Some believe that the result is a significant loss to the individuals and to society in general:

> Failure to help handicapped children reach their potential is a personal tragedy for them and their families; failure to help gifted children reach their potential is a societal tragedy, the extent of which is difficult to measure but which is surely great. How can we measure the loss of the sonata unwritten, the curative drug undiscovered, the absence of political insight? They are the difference between what we are and what we could be as a society. (Gallagher, 1985, p.4)

3. Is education for the gifted and the removal of gifted students from the general education classroom for any time during the school day racist? Or, is not providing differentiated services to those students whose families cannot afford private schooling racist?
4. Is education for the gifted merely a form of tracking? Or, is it feasible to expect one setting, one broadly prepared teacher, and one curriculum to accept the primary educational needs of a heterogeneous group of students who have a great disparity of learning styles and achievement performance?
5. Is it necessary to eliminate education services for the gifted to bring quality to general education? Or, can the school reform movement be orchestrated along with such services to blend with general education where appropriate and meet the individual needs of students when such specialization is appropriate?
6. Is education for the gifted (which singles out children of affluence, prepares them for leadership, and provides them with differentiated instruction) morally wrong, a philosophy contributing to inequality, result in evil social outcomes, and societal oppression? Or, are such points of view misplaced interpretations of equity and equality.
7. Is education for the gifted unfair to typical learners making them feel bad because they were not selected as being special or because they were made aware that they could not perform a task (playing a violin, throwing a football, solving calculus problems) as well as someone else?

Or, is it unfair to gifted learners not to challenge and accelerate them through an enriched and diversified instructional program that is deep in content and thinking skills?

8. What might the areas of focus be under this new endeavor toward talent development?

9. Are there concept variations between giftedness and talent? Explain with examples

Causes: Factors That Enhance or Inhibit Giftedness

- Environment and heredity play a great in the development of the intellect (Hunsaker, 1995; Simontion, 1997). Superior abilities are generally recognized as developing from an interrelationship between heredity and the environment.
- Cultural values and expectations, socioeconomic level, birth position (for example, firstborn), and number of children in the family are related to giftedness (Terman, 1925).
- Environmental stimulation also correlates with gifted abilities.

But environmental factors can also diminish giftedness.

- Children whose early experiences are not rich or diverse often do not develop outstanding cognitive skills,
- Children who are not challenged in school do not develop their potential.
- Boredom
- Major environmental factors – wars, famines, social upheavals – can affect the potential of any individual.
- Prenatal malnutrition, isolation, neglect, abuse, insufficient infant stimulation, and poor medical treatment can have devastating effects on the development of the intellect.
- The way children grow up.

Activity 39

1. How do you evaluate the causes mentioned above?
2. Have you ever seen creative children in your environment? What did they do?
3. Is creativity discouraged or encouraged by our society? Why and how?
4. Are teachers in the school able to identify and support gifted and talented children?
5. What are the places of gifted children in todays Ethiopian school?

Common Characteristics of the Gifted Child

Intellectual/Academic

- Reason abstractly
- Conceptualizes and synthesizes
- Manages and processes information
- Quickly and meaningfully
- Solves problems
- Learns quickly
- Shows intellectual curiosity
- Dislikes drill and routine
- May show unevenness
- Generalizes learning
- Remembers great amount of material
- Displays high level of verbal ability
- Prefers learning in a quite environment
- Adapts to new learning situations
- Applies varied reasoning and thinking skills
- Uses nonstandard pools of information
- I highly motivated by academic tasks
- Focuses and concentrates on topic or idea for long periods of time

Activity 40

1. Look at the above intellectual and academic characteristics of gifted and talented students and explain each in group and reflect on them in the class

2. Have you ever observed such cognitive/academic characteristics in your primary/and or/ secondary school?

3. Have you observed something different from the characteristics mentioned above?

Social/Emotional

- Criticizes self
- Empathizes

- Plays with older friends
- Persists
- Is intense
- Exhibits individualism
- Has strength of character
- Demonstrates leadership abilities
- Is concerned about ethical issues
- Takes risks
- Is independent and autonomous
- I highly sensitive to others and self
- Is nonconforming
- Has mature sense of humor
- Uses different modes of expression
- Strives for perfection
- Experiences great stress from failure
- Has wide interests

4. Do you agree with all the above social/emotional characteristics of gifted students? Do you have any experiences?

5. What other special social/emotional behavior have you observed in schools among gifted students?

- Gifted learners are often victims of stereotypes and sometimes of negative descriptors: "thin, nervous, brash, snobbish, difficult to tolerate, and concerned only with books, ideas, and self". Gifted individuals are likely to develop personality problems.
- Current comprehensive research studies consistently show that gifted youngsters are no more likely to exhibit disruptive or problem behaviors in classroom setting than typical learners (Freeman, 1994).
- Gifted students complain about being bored at school, which might explain some of the behavior problems noted by some teachers.

6. Do you agree with the above three statements? Give your detailed explanations from your or others' experiences.

Subgroups Requiring Special Attention

- Females who are gifted,
- Culturally and linguistically diverse students,
- Gifted persons with disabilities, and
- Underachievers who are gifted.

7. Have you ever come across such group of gifted students?

8. How possible is it to be gifted and underachiever? What factors may contribute to becoming an underachiever?

Gifted Females.

Activity 41

1. Are women intellectually inferior to men?
2. It the number of female gifted equal with the number of male? Why?
3. Are there innate differences between the genders that cause giftedness to occur more frequently in men than in women?
4. Are society's expectations for people and the roles they assume the crucial factors in the achievement levels of either gender?
5. Are teachers and parents expectation for male and female differ? Who are in favored? Why?
6. Should education especially organized for female gifted?

Attitudes can be changed through problem-solving activities, math-related career opportunities, and self-esteem issues, gifted girls change their attitudes, becoming more positive about mathematics (Lamb & Daniels, 1993). Given this knowledge, we must actively involve all children in the instructional topics presented in school. Silverman (1995) suggests that gifted girls must be identified early in their schooling, provided with a challenging curriculum, counseled to achieve in areas not traditionally pursued by women, and be given many examples and role models to follow.

Culturally and Linguistically Diverse Gifted Students.

Culturally and linguistically diverse students, particularly the gifted subgroup, face many challenges. They are

- Over represented in disability categories and
- Underrepresented in gifted education programs.

Activity 42

1. Why don't these youngsters frequently qualify for gifted special services?

2. Do you agree with the following categories that give different explanations for these students not being identified as gifted at the rate that should be expected? Why? Give explanations for each category.

- Cultural values at variance with mainstream society
- Barriers presented because of poverty
- Bias in traditional methods used for testing and identification
- Educator's attitudes about culturally and linguistically diverse students

3. Does poverty negatively affect gifted and talented children?

Children who do not get proper nutrition, are not inoculated for disease, or do not get appropriate medical treatment for illness are at risk for impaired mental development.

Another factor associated with poverty is the instability of the home environment.

Finally, under-representation related to poverty may be the result of the poor educational levels of parents, the deficiencies of schools, and lack of exposure to mainstream society.

4. Do you agree with the above three suggestions? Discus each point in group.

Identification and assessment

The following are some of the major ways to identify and assess gifted children and students.

- Standardized tests to level the IQ.
- Portfolio assessments,

- Teacher nominations
- Parent nominations
- Students products or work samples
- Creativity
- Artistic ability
- Leadership skills,

5. Do these identifications help to identify gifted and talented students from others? What are the strength and weaknesses of these techniques?
6. Can you provide your own ways of identification and assessment? Try reading through this text and other relevant materials.
7. What are the standardized instruments developed in the other parts of the world? Find out and present them in the class

Educational Intervention

Learning Modes of Gifted Learners

Selective Strengths and Learning Models	**Responsive Teaching-Learning Methodologies**
Verbal fluency; stylistic, charismatic use of language	Emphasize creative writing, poetry, public speaking, oral discussion, debating, drama, literature
Expressive movement, advanced Kinesthetic ability	Emphasize hands-on learning strategies and allow flexible classroom organization
Advanced aesthetic sensibilities advanced creative abilities	Integration of arts with core instruction
Utilize problem-based learning	Opportunities for experimentation with ideas, and seeking solutions to real problems
Preference for person-to-person (over person-to-object) interactions	Emphasize development of social interaction and leadership skills, attention to world affairs, and current issues
Sensitivity for the interconnectedness of humankind with nature	Focus on science, ecology,outdoor field experience, anthropology, and social sciences
eater Food lover	Take them in coffee cafe
Expressed spirituality related to sense of power of external forces of nature, existence of a supreme being, and a heightened sense of responsibility for others within primary reference group	Use of moral, affective overarching themes as base for instructional experiences: study use of parables and proverbs of varying cultures; examine life experiences of selected leaders (those characterized by intense spirituality, individualization, and moral responsibility)

Source: Effective Education of African American Exceptional Learners: New Perspectives (p. 43) by B.A. Ford, F.E. Obiakor, and J.M.Patton (Eds.), 1995, Austin, TX: Pro-Ed. Reprinted by permission.

8. Can we follow and enhance these methods of teaching and learning?

3* Gifted Individuals with Disabilities.

Despite their severe disabilities, their genius and major contributions to their respective fields have brought them considerable recognition.

Davis and Rimm (1994) believe that this subgroup of gifted learners are under-identified and underserved. Furthermore, people with disabilities are seldom perceived by their families or teachers as possessing gifted abilities. The dilemma is whether to adress their learning disabilities, to their giftedness, or to both. Some of the following are their common psychological conditions:

Distractible,

Highly sensitive to criticism,

Extremely curious and questioning

They have difficulty getting to the point, and they seem to be interested in the whole picture rather than in the details (Nielsen et al., 1993).

Have inefficient learning strategies,

Memory problems

Poor relationship with their peers; and often they experience social rejection and lack friends (Davis & Rimm, 1994) and

Are bright and inquisitive learners who can experience rapid gains in achievement when placed in an educational program that fosters the development of higher-level thinking (Bireley, 1995).

9. How possible is it to become gifted and handicap?

4* Gifted underachievers.

Gifted children who are underachievers demonstrate high intelligence but also low academic achievement. Depending on the discrepancy between these individuals' scores on intelligence and achievement tests, these students may be confused with gifted students who have learning disabilities. Teachers and parents often recognize these students' true capabilities, but the students do not do well in school or perform up to their abilities, sometimes for unexplainable

reasons. They have been described as disorganized, unmotivated, lacking interest in school, having poor study skills, and lacking in self-confidence (Davis & Rimm, 1994).

Educational Interventions

Enrichment of curriculum, rapid progress, rapid promotion

10. What do we mean by enrichment of the curriculum?

11. What are the advantages and disadvantages of Rapid promotion?

Education and the Preschool Child

Activity 43

1. What can we do for the preschool child who is gifted? Discuss what we can do in the Ethiopian context.

- Early stimulation is crucial to the development of all young children.
- Teaching students to classify and organize information or to think critically.

Education for the gifted and the Schoolchild

1. **A differentiated curriculum** provides an instructional program that is flexible enough to meet individual learning needs. This program emphasizes cognitive processing, abstract thinking, reasoning, creative problem solving, and self-monitoring (Young & McIntyre, 1992).

Some researchers believe that three additional dimensions must be included (Van Tassel-Baska, 1995): content mastery, in-depth and independent learning, and the exploration of issues, themes, and ideas across all curriculum areas. Clark (1992) added that the curriculum must be "increasingly difficult, interdisciplinary, broad based, and comprehensive and should provide for any needed acceleration" (p, 258).

2. Enrichment

Enrichment can include the addition of curricular topics or the development of skills not usually included in the traditional curriculum. For example, a group of students might spend a small portion of time each week working with instructional materials that enhance creativity or critical-thinking skills. Or enrichment may be the study of a particular academic subject in more depth and detail. Some teachers, when using enrichment in this way, guide students to

select a character or an event for research and study. The student's product might be an oral or written report that could become part of a class play or short story, or a nonverbal product such as a painting, construction, or mode. Some of the following are the practical aspects of enrichment program:

- Interdisciplinary instruction: Teaching a topic by presenting different disciplines' perspectives about the issues involved.
- Independent study: Examining a topic in more depth than is usual in a general education class.
- Mentorship programs: Pairing students with adults who guide them in applying knowledge to real-life situations.
- Internship: Programs that allow gifted students, usually during their senior year in high school, to be placed in a job setting that matches their career goals.
- Enrichment triad/revolving door model: An inclusive and flexible model for gifted education that changes the entire educational system; exposes students to planned activities that seek to develop thinking skills, problem solving, and creativity.
- Curriculum compacting: Making additional time available for enrichment activities by reducing time spent on traditional instructional topics.

3. Acceleration: Courses that students take during their high school years resulting in college credit.

Advanced placement: A form of ability grouping where gifted and non-gifted students who demonstrate high achievement in a particular subject are placed together in advanced classes

Honors sections: Clustering students in courses where all classmates have comparable achievement and skill levels.

Ability grouping: Instruction delivered on a one-to-one basis, with students moving through the curriculum at their own pace independently.

Individualized instruction: A comprehensive high school curriculum for students that incorporates counseling into the standard program for all students.

4. Eclectic

Eclectic Approaches: Other approaches to the education of gifted students are broader. One example is the Purdue Secondary Model for Gifted and Talented Youth (Feldhusen &

Robinson, 1986).This comprehensive program, intended to meet all the educational needs of high school youngsters who are gifted, has many components. It combines enrichment as well as accelerated features into students' education programs and includes counseling services. Another unique feature of the Purdue model is the use of seminars to expand on topics studied in other classes or to develop library and research skills.

Gallagher (1996) offers some interesting points to consider when individuals formulate their own position:

- Teach a full range of content areas in considerable depth.
- Vary your instructional approaches.
- Encourage students to become independent learners.
- Enrich topics of study with additional activities, such as guest speakers, field trips, demonstration, videotapes, and interest centers.
- Allow students to move through the curriculum at their own pace.
- Watch for sings of boredom.
- Encourage lively class discussions.
- Create a safe environment where novel ideas are accepted.
- Pose important problems to solve
- So that thinking about present and future dilemmas is considered.
- Teach and foster the use of library and research skills.
- Develop instructional activities, and use questions that generate the application of different types of thinking skills.
- Integrate the use of technology into your instruction.

For teachers: Consideration for Twice-Exceptional Children

- Look beyond the student's disability.
- Be flexible and encourage flexibility in your colleagues to ensure that these students' special learning needs are met.
- Involve or develop a support team that includes other educators at your school and other resource personnel from the school district (experts in learning disabilities and in gifted education).

- Find a community mentor to serve as an adult role model for the student.
- Assess whether social skills instruction or strategies to build self-esteem are required by the individual student.
- Consider providing additional structure in scheduling and work space.
- Implement behavior management programs to reduce problem areas that may be the result of attention deficits.
- Encourage independent learning.
- Allow for special arrangements in testing situations.
- Watch for sings of depression.
- Be understanding and sensitive to parental frustration.
- Involve parent as part of the educational team.
- Remember, there is no one answer.
- Direct instruction in areas in need of remediation,
- Fosters their development of critical thinking, reasoning, problem-solving, and compensatory skills.

Activity 44

1. What will be the transition of a gifted person to adult age?

- Those who have got support in their school years
- Those who didn't get support in their school years

Families

The family was prepared to commit whatever time and resources necessary to foster achievement and talent development. These families arranged for instruction, encouraged and supervised practice and study, and were involved in their children's education. Perhaps most importantly, these parents served as role models by living an achieving lifestyle. It should be noted, however, that not all of the eminent adults studied come from stable homes. It is interesting that, in particular, the home backgrounds of some creative talents (writers, composers) were marked by chaos and turbulence (Albert, 1991). Regardless of this last finding, one thing is clear: The support of the family is crucial to the translation of ability (giftedness) to achievement (talent). All parents, and especially parents of gifted children, need to learn what is realistic for their child and to develop appropriate standards and expectations.

Parents of gifted children need to have positive expectations of their children and send clear, consistent, and positive messages about their expectations. Children who are expected to achieve and engage in constructive activates, and are rewarded for those actions, then internalize these expectations. When parents' expectations were low, children can internalize those as well. If parents had a high self-concept about their mathematical abilities, their children did as well. However, those parents who believed that they did not have abilities in this area had children who held similar beliefs. Parents' expectations of themselves and their children are influential. The result can be either high or low achievement depending on the beliefs passed on to children.

Lastly, many gifted children are extremely verbal and have unusual abstract thinking skills; they also seem to be more mature than other children of their age (Davis & Rimm, 1994). Such characteristics can be deceptive. These children, like others of their age, are not capable of making complex decisions of setting their own goals and directions. Of course, their interests and feelings should be considered, but parents and teachers must not abdicate responsibility for guidance. According to Davis and Rimm, successful gifted achievers felt confident throughout their school years that adults were concerned about them and made appropriate decisions about their education. They also felt that it was a wise decision to follow the lead of these adults.

2. Do you think parents may have more than these responsibilities? What are they?

Unit Summery

Gifted individuals do not have a disability that presents obstacles to their learning and participating in society. However, they can be handicapped by our social and educational systems, which present barriers to achieving their potential. Gifted individuals posses unique intellectual abilities that can be developed into talents. One challenge facing educators is to develop and put into place a consistent array of educational options that will facilitate these individuals' development.

Activity 45

1. Regardless of the definition used, what description can be used for gifted and talented individuals?

2. What factors can inhibit giftedness and talent development?

3. Why are educators concerned about issues related to under representation and the various subgroups of gifted learners?

4. What are the four service delivery models often used in education for the gifted and how do they differ from one another?

5. Why, across the history of Ethiopia, lack of commitment to is observed as far as the education for the gifted is concerned?

Supplementary Readings

Cornell, D.G., Delcourt, M.A.B., Goldberg, M.D. AND Bland, L.C. (1995). Achievement and Self Concept of Minority Students in Elementary School Gifted Students. Journal for the Education of the Gifted, 18, 189-209.

Feldhusen, J.F. (1992). TIDE: Talent identification and Development in Education. Sarasota, FL: Center for creative Learning.

Freeman, J. (1994). Some emotional aspects of being Gifted. Journal for the Education of the Gifted, 17, 180-197.

Gagne, F. (1996). From Giftedness to Talent: A developmental Model and its impact on the language of the Field. Roeper Review, 18, 92, 103-111

Gallagher, J.J. (1985). Teaching the Gifted Child (3rd.). Boston: Allyn and Bacon.

Gardner, H. (1983). Frames of Mind: The theory of Multiple Intellegence. New York: Basic Books.

Hunsaker, S.L. (1995). The Gifted Metaphore from the perspective of traditional Civilizations. Journal for the Ediucation of the Gifted, 18, 255-268.

Lamb, J., and Daniels, R. (1993). Gifted Children in the Rural Community: Maths Attitude and Career option. Exceptional Children, 59, 513-517.Silverman, L.K. (1995). Gifted and Talented. Denver: Love.

Marland (1972). Education of the Gifted and Talented. Washington DC: Government Printing House.

Morgan, A.D. (1994). Opportunity to learn through Multiple Intelligences. Santa Fe

Pendavis E. and Howley A. (19960). Playing Fair: The Possibilities of Gifted Education. Journal for the Education of the Gifted, 19, 215-233.

Terman L. (1925). Genetic Study of Genius (Vol. 1) Stand ford CA: Stanford University Press.

Van Tassel-Baska, J. (1995). The Development of Talent through Curriculum. Roeper Review, 18, 98-102.

Unit Four

Mode of Special Needs Education Delivery Systems

Special Needs Education should always be based on the individual needs of the students. Students with special needs should receive appropriate education according to their needs and potentials. Designing an appropriate education requires the combined efforts of educators, related service providers, and the child's family.

Contents

- Residential schools
- Special schools
- Special classes
- Integration
- Inclusion

Objectives of the unit

After completing this unit the teacher students will be able to:

- Identify various educational delivery system for children with special need;
- Describe the advantages and disadvantages of each delivery system;
- Explain which delivery system is suitable to the Ethiopian context; and
- Explain the main goal of inclusive education and possibilities in Ethiopian context.

Residential school

It is a segregated system of educational provision in a separate institution, where the child leaves her/ his parents and the local community and is placed in a new environment.

Special schools

Special schools serve only students with specific category of disability. It is a day school to which children with disability attend their education separately from regular school and spend the whole day in the school. Such educational provisions may help to focus on the collective need of the individuals. They offer education according to the needs and potentials and potentials of the students. On the other hand, as a result of segregation, special schools have disadvantages; they may result in

- Psychological problems;
- Life skill difficulties; and

- Social problems.

Special classes

Special classes refer to separate classroom educational programs in a regular school. Students attend a special class most of the school day that is included in general education activities minimally; they may receive all of their learning in the special classes.

Integration

Used mainly when children with disabilities attend ordinary schools it makes few, if any, changes to accommodate the pupil. Integration can be of four types:

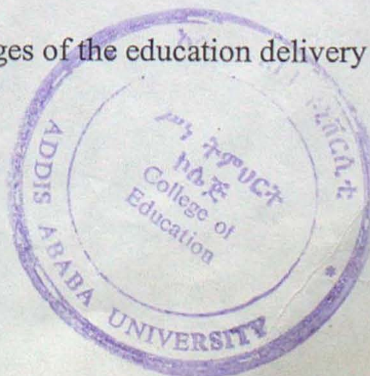
- Physical integration;
- Functional Integration;
- Social Integration; and
- Full integration.

Inclusion

Children who are perceived 'different' because of their impairment, ethnic background, language, poverty, etc. are often excluded from or marginalized in society and local communities. Their inclusion means changing the attitudes and practices of individuals, organizations and associations so that they can fully and equally participate in and contribute to the life of their community and culture. An inclusive society is one in which difference is respected and valued, and where discrimination and prejudice are actively combated in policies and practices. Inclusive schools are centers of learning and educational systems that are open to all children, with appropriate support according the children's needs and potential. For this to happen, teachers, schools, and systems may need to change better accommodate the diversity of needs that pupils have and that they are included in all aspects of school-life. It also means a process of identifying any barrier within and around the school that hinder learning, and then reducing or removing these barriers.

Activity 46

1. Discuss the education provisions and delivery systems for students with special needs in Ethiopia.
2. What are the advantages and disadvantages of the education delivery system: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- Residential School;
- Special school;
- Special classes;
- Integration;
- Inclusive education;

3. Which of the above is convenient for Ethiopia for different children with special needs?

Supplementary Readings

Garwood. S.G. [1983]. Educating Young Handicap Children: A Developmental Approach [2nd Ed.] London: An Aspen Publication.

Gallagher, Kirk [1983]. Educating Exceptional children. Boston: Houghton Mifflin Company.

Gearherart, Bill R., Weihahn, Mel W., and Gearheart, Carol J.{1988]. The Exceptional Student in the Regular Classroom. Columbus: Merril Publishing Company.

Heward, Wiliam L. and Ovlansky, Michall D. [1988]. Exceptional Children: An Introductory Survey of Special Edkucation. Columbus: Merril Publishing Company.

Mitchell, David and Brown, Roy 1. [1991]. Early Intervention: Studies for Young children with Special Needs. London: Champ man and Hall.

Passonella, Ann and Cara B. Valkmar [1981]. Teaching Handicapped Students in the Mainstream: Coming Back or Never Leaving. Columbus: Charles E. Merill Publishing Company.

Smith, D.D. & Luckasson, R. [1995]. Introduction to Special Education:Teaching an Age pf Challenge. USA: Allyn & Bacon.

Webster, Alec and Wood, David [1995]. Special Needs in Ordinary Schools: Children with Hearing Difficulties. London; Macmilan Press Ltd.

Yoseldyke, James E. and Algozzine, BoB [1995]. Special Education: A Practical Approach for Teachers. Boston. Houghton Mifflin Company.

Unit Five

Attitude, Legal and Policy Issues

Introduction

Ordinary schools tend to reject the enrollment of children with special needs. People managing the education system, principals and teachers, are unaware of the universal declarations, conventions and policies that indicate the right to education of children with special needs. Due to this the participation rate of children with special needs in education is insignificant and it seems that these children are denied the right to education that are entitled in international and national laws and policies. The basic interrelated ideas of education included or outlined in international policy documents, declarations, conventions, Frame Work of Actions, Forums, etc., all confirm these rights to education. This unit emphasis on the attitude, laws, conventions and policies that give privilege to children with special needs.

Contents

- Attitudes and education provisions
- Legal and policy issues

Objective of the unit

After completing this unit the teacher students will be able to:

- Mention different types of international convention on children with special needs;
- Explain the Ethiopian laws and policies that focus on children with special needs; and
- Suggest for new thinking in the policies and laws on education of children with special needs.

Attitudes and the Provisions in Ethiopia

It has become a reality, in Ethiopia, that the multiple problems (Social, Psychological, Economic, etc.) of great numbers of children and youth with special needs are left without solution due to lack of appropriate assessment and identification procedures, education and training, that the conditions of the children and youth are requiring great attention to be improved. Moreover, it is also believed to be impossible to achieve the goal of Universal Primary Education for All without appropriate educational provision for children and youth

with special needs. It is apparent that the development of educational provisions with the ultimate aim of raising quality of education (raising participation rates, minimizing number of repeaters and dropouts) and thereby improving the standard of living, quality of life for the citizens needs to give a substantial attention to the aspects of special needs education.

However, the awareness level about special needs education in Ethiopia is still limited. It would have been little or none if the support from the Government of Finland had not changed dynamically from 1994 to1998 and several inputs were made before this period of time.
The concept of Special Needs Education is diverse and it reflects the awareness level of the society. For most people, special needs education is only for children and the youth with disabilities, and a concern of humanitarian groups (organizations). It is only few members of the society who are aware of the diverse needs of all children and the youth, whether disabled or not, and understand special needs education in that sense.

Consequently, the development of special needs education provision in Ethiopia is very low. The school age population (7-16 years) of about 16,000,000 reported in Educational Statistics Annual Abstract, MOE (2001/02), and the 3% prevalence of common disabilities (excluding unobservable disabilities) that has come out of the country wide base line survey made by the Institute of Educational Research, IER (1995) show about 480,000 school age children and youth with common disabilities appealing for school participation.

On the other hand, a look at the achievements in the field of special needs education indicates that only 15 special schools and 203 special classes attached to regular primary schools were functioning throughout the country with the total student population of about 4000 in the year 1998/99 (Mamo Mengesha, 2000). This poorly compares with the estimated sum total of 480,000 children and youth with common disabilities of school age, putting their participation rate at less than 1% (.83%). If we consider WHO's conservative estimation of 10% prevalence, the condition could be perceived as the worst. WHO's estimation raises the number of school age children and young people with disabilities eligible for General Education (1-10) to 1,600,000, making their participation rate .25%.

This is indeed, extremely low when compared to the current participation rate of about 54.9% for the so called 'normal' children and youth in the same age bracket (7-16 years) attending schools for general education (1-10). Compared to the estimated 480,000 (domestic estimate) or 1,600,000 (WHO's estimate) children and youth with common disabilities appealing for the appropriate education and training, the limited educational provision to only about 4000 of them is actually negligible. Besides their limited number and inability to provide appropriate education and training to the vast majority of the children and youth, the adequacy of the existing special schools and classes to meet the educational needs of the enrolled children and youth, let alone the many left out, is questionable at present. Even among the 54.4% 'normal' children and youth attending General Schools (1-10), many are not getting quality education in accordance with their potential and needs, being misunderstood and abused as they might be with hidden disabilities (specific learning disabilities, behavior disorders, environmental deprivation, disadvantage) or outstanding abilities (gifted). This is because of lack of appropriately educated and trained teachers, resourceful special needs education teachers education system, assessment and identification techniques and procedures, and appropriate materials which would assist the education and training of the children.

Legal and policy issues

- **The Universal Declaration of Human Rights (1948):** states that every one has the right to equal access to public services in general and education in particular, and establishes free basic compulsory education for citizens to support the full development of human personality, strengthen respects for human rights, and fundamental freedoms. (Art. 21:2; Art. 26:1,2)
- **The Declaration on the Rights of Disabled Persons (1975):** calls for international and national actions to ensure the rights of the disabled to all services, enable them to develop their capabilities and skills to the maximum possible, and hasten the process of their social integration or reintegration.
- **The Convention on the Rights of the Child (1989):** recognizes special needs. It establishes extended assistance, basic education free of charge, and effective access to basic services education, preparation for employment and recreation opportunities for

and youth with special needs in a manner conducive for the children and ɩo achieve the fullest possible social integration and individual development. 3: 3)

'orld Declaration on Education For All, EFA (1990):** emphasizes the inherent f a child to a full cycle of primary education, equal access to education for all, ding those with special needs, in the same setting; commitment to a child centered agogy where individual differences are accepted as a challenge and not as a blem; improvement of the quality of primary education as well as teacher education; gnition of the wide diversity of needs and patterns of development among primary ol children's individual needs.

e Standard Rules on the Equalization of Opportunities for Persons with isabilities (1993): recognizes the principle of equal primary, secondary and tertiary educational opportunities for children, young people and adults with special needs in an integrated settings, the education of persons with special needs as an integral part of the education system. It establishes appropriate, adequate and accessible support services to accommodate educational provisions for persons with special needs in an inclusive setting.

- **The Salamanca Framework for Action (1994):** reinforces all the principles expressed in the World Declaration on Education For All, and Standard Rules on the Equalization of Opportunities For Persons with Disabilities, all children to be in schools regardless of their abilities and have the most suitable education in inclusive schools with the support of child centered Pedagogy. The Salamanca statement clearly focuses on the right of all children including those with temporary and permanent needs for support and educational adjustment to attend schools in their home community in inclusive classes. Above all, it emphasizes the right of all children to participate in a quality education that is meaningful to all at inclusive schools with the pedagogically sounding learner centered approach, the enrichment and benefits that could be derived through implementation of inclusive education.
- **The World Education Forum (2000):** is about making the right to education a reality as it is enshrined in the 1948 Universal Declaration of Human rights. It is the extension of the education for all movement and aimed of to turn the vision of education for all