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*Education of Persons with communication and Language Impairments (SNIE 2051)*

***Reading Material***

*BY*

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1. **Introduction** 
   1. **Communication and communication disorder**

Communication is any interaction that transmits information or the process of sharing /an exchange of ideas, feelings, thought and messages with others in a particular time and place. It is not necessarily spoken or written words to be used; however in order for true communication to exist there must be both a sender and receiver. We observe, and take part in, literally thousands of communication every day. An infant cries, and his/her mother picking him/her up. A dog barks, and its owner responds by let it out of the house. In each of this interaction there has been a message, expressive communication by the sender and receptive communication by receiver.

Communication includes writing and talking, as well as nonverbal communication (such as facial expressions, body language, or gestures), visual communication (the use of images or pictures, such as painting, photography, video, or film), and electronic communication (telephone calls, electronic mail, cable television, or satellite broadcasts). Communication is a vital part of personal life and is also important in education, work, and any other situation where people encounter each other.

Weaseling

However, there are conditions that interfere or inhibit communication we call it communication disorder. The term “communication disorder” refers to a condition that impair a person ability to speak or/ and understand language. It is delays/disorders that interfere with the normal flow of speech/language in the day to day communications. Young children with speech or language problems are often frustrated by the difficulty they experience in asking questions, expressing their needs, or conveying their wishes to other people. When unable to make them understood, some children may resort to physical communication (such as pulling, pushing, or hitting classmates), whereas others become so frustrated that they stop trying to communicate. So, early detection, identification and intervention of communication disorder are essential. Failed to receive professional help may lead to additional problems in education, psychological, socio-emotional and vocational areas.

* 1. **Prevalence of Communication disorder**

Various prevalence studies of school-age populations and concluded that communication disorder serious enough to warrant special attention are present in approximately 5 % of children.

It is reported that speech impairments tend to be more prevalent among males than females. Similarly, the National Center for Health Statistics reported that approximately twice as many boys as girls have speech impairments. Figures on the prevalence of language disorders are less reliable. About 1% of school-age children are considered to have language disorders. Because definitions of learning disabilities emphasize understanding and use of spoken and written language, however, a sizable percentage of students with learning disability could also be regarded as having language disorders.

Some figures are available on the incidence and prevalence of specific types of communication disorders. In the recent past, *articulation disorders*, which involve difficulties in producing speech sounds accurately, were by far the most common type of speech problem found in children. The American Speech Language-Hearing Association (ASHA) estimated that 80% of the school-age population with communication disorders had articulation disor­ders. The prevalence of communication disorders does not remain the same throughout the life span. As Culton (1986) observes, "Age-specific prevalence data are more meaningful than overall prevalence data". The percentage of children with speech and language disorders, although rather high, decreases significantly from the earlier to the later school grades. The overall estimate for speech and language disorders is widely agreed to be 5% of school-aged children.

1. **Types and Causes of Communication Disorders**

There are many recognized types of communication disorders and numerous possible causes. The cause can be divided in to two broad category i.e.

1. Organic/physical/ cause
2. Non-organic or functional cause

***2.1. Organic/physical cause***

Organic causes are causes of communication disorders which have its own specific physical origin i.e., there is anatomical problem which result a problem of communication disorder because of physiological defect. They include physical factors such as:-

* Cleft palate may result from
* genetic inheritance
* abnormalities in chromosomes
* damaged to the embryo during development
* paralysis of speech muscles and absence of teeth
* Crain facial abnormalities
* Neurological impairment(brain damage)
* irritation on the vocal cords,
* infection on the larynx
* scratches on the larynx

Other causes of brain injuries such as physical trauma, oxygen deprivation, poisoning diseases and strokes can also lead to these disorders.

***2.2. Non-organic /functional***

The non-organic or functional disorders cannot be attributable to specific physical conditions and their origin is not clearly known. As Winitiz (1977) points out, decades of research on the causes of many communication disorders have produce uncertainly. A child’s surrounding provide many opportunities for him to learn appropriate and inappropriate communication skills, some specialists believe that functional communication disorder derive mainly from environmental influences. Such as

* Inappropriate parenting style
* Misuse of the vocal mechanisms
* Chronic vocal abuse such as yelling, imitating noises or habitually taking and tension
* Lack of stimulation in early age
* Abuses (physical, verbal, sexual, psychological )

Regardless of whether a communication disorder is considered organic or functional, a child with speech or language that is substantially different from that of others in his age and cultural group requires special training procedures to correct or improve the impairment. The communication disorders can be categorized into two broad categories

1. Language disorder
2. Speech disorder
3. **Language and Language Disorders**
   1. **Definition of Language**

Human language is unique mental entity. It is a system of symbols that greatly enhances the ability of humans to represent aspects of the world, to think, and to communicate with each other. Language is usually viewed as a code that connects certain forms (the sound of words, sentence structure and so on) to meaning. Language is the communication of ideas through an arbitrary system of symbols that are used according to semantic and grammatical rules. According to Bloom and Lahey(1978) as a code where ideas about the world are represented through a conventional system of arbitrary signals used for communication.

Language development starts from birth and continues throughout the lifespan of an individual. A newborn child starts life with the biological means to acquire language through the process of social interaction, participation between the child and its carers and cognitive development (Bernstein & Levey in Bernstein & Tiegerman-Faber 2002 p. 28). There are numerous theories and studies regarding language acquisition and cognitive development, such as Piaget’s stages of cognitive development, Vygotsky’s sociocultural theory and Skinner’s behaviourist perspective theories. However, all concur that language development involves the progression through sequence stages with each stage becoming more complex.

The acquisition of words, their meanings, and the links between them is a process that requires time. During the preschool period, children acquire new words and gradually develop an understanding of the nature of words, sentences, and their relationship. The meanings that children learn are the result of their encounters with the physical and social world and are dependent on their cognitive and social development (Bernstein & Levey in Bernstein & Tiegerman-Farber 2002, p. 59).

Language can be understood in its ‘form’ which include phonology, morphology and syntax , ‘content’ which is referred as semantics and ‘use’ which referred as pragmatics. Understanding of such components of language is an important form of framework for understanding language disorder.

**Phonological process**

Phonology relates to the sounds in a language and rule for connecting them. Each language organizes its sound differently with the smallest linguistic unit of speech called Phonemes. Phonemes (sound) are the basic unit for spoken language that signals a difference in meaning’, for example, the words ‘cat’ and ‘mat’ differ in their first sound and produce two different meanings. As the difference is a ‘meaningful one’, the ‘c’ and ‘m’ are defined as two different phonemes. Every language has a finite number of phonemes and combined in specific rules to form words.

**Morphological** **process**

Morphology determines word formation with one or more phonemes and their structure. Morphemes are words which are the smallest linguistic unit with meaning, for example, ‘boy’, ‘ball’ and ‘cat’ consist of one morpheme and are called free morphemes. In addition, there are bound morphemes such as,‘s’, ‘ed’, ‘un’ which cannot stand alone but are attached to free morphemes, changing the meaning of the word for example, ‘cat’ is pluralized as ‘cats’ (Kuder 1997, p.16).

**Syntactic Process**

Syntax is a system of rules that determines the order and organization of words to construct sentences. These syntactic (grammar) rules specify how words must be combined to structure meaningful sentences. A basic sentence structure can consist of subject, verb and object, for example, ‘The cat (subject) is chasing (verb) a mouse (object)’ (Bernstein in Bernstein & Tiergerman-Faber, 2002, p. 7).

**Semantics Process**

Semantics is concerned with the meaning of words expressed in a language. ‘It maps knowledge about objects, events and people, and the relationship’ between them (Bernstein in Bernstein & Tiergerman-Faber 2002, p. 7).

**Pragmatics Process**

Pragmatics relates to the rules that determine language usage for social interaction and takes into account social contexts. Bernstein (2002) states that the functions of language have to do with the speaker’s purpose, for example to greet, to make and/or give requests, to persuade, to ask and/or answer questions, to bargain, to issue commands, to ask and/or give explanations (In Bernstein & Tiegerman-Faber p. 8). It is deals with appropriate language use in its communicative context. Opening, maintaining and closing of a conversation; turn taking maintaining topics, receiving and giving feedback are examples of pragmatic.

* 1. **Language Disorders and Its Types**

This is the communication problems in comprehending, expressing, or otherwise functionally utilizing spoken language. The child with language impairment may have difficulty in any or all of language component i.e. ‘form’ ‘content/Semantic’ ‘use/pragmatics. Language impairment can be further broken down into receptive and expressive language impairments.

**Receptive Language Disorder**

Receptive language disorder interferes with the understand­ing of language. A child may, for example, be unable to comprehend spoken sentences or to follow a sequence of directions. A receptive language disorder is the difficulty in listening to and/or understanding language. The difficulty may be in the word level [vocabulary/word knowledge] and/or the sentence level [syntax/morphology] (Harris, 1994).

The following characteristics may indicate that the child is having difficulties understanding language. The child has:

* An inadequate attention span, particularly during oral presentations.
* poor listening skills
* difficulty following directions
* poor memory for information presented verbally
* difficulty retaining concepts from one day to the next
* limited receptive vocabulary
* difficulty understanding words with multiple meanings
* difficulty categorizing related words or concepts
* difficulty understanding figurative language
* difficulty with concepts of space, time, and quantity

**Difficulty at Language Form level**

* Difficulty comprehending simple sentences. e.g. Can the child point to pictures or perform an action from a spoken target sentence? e.g. Do they understand Cat vs. Cats?

**Difficulty at Language Content level**

* Difficulty understanding vocabulary used in the grade level curriculum. e.g. If the theme is The Sea, do they comprehend words in this category? Difficulty pointing to a picture or performing an action based on a given target to display comprehension. e.g. Point to the picture that shows “the whale is in the water”.

**Difficulty at Language Use level**

* Difficulty comprehending social language and react age appropriately i.e.
  + difficulty using appropriate eye contact
  + difficulty using turn taking appropriately
  + Difficulty displaying comprehension of social greetings.

**Expressive Language Disorder**

An expressive language disorder interferes with production of language.

The child may have a very limited vocabulary, may use incorrect words and phrases, or may not even speak at all, communicating only through gestures. A child may have good receptive language when an expressive disorder is present or may have both expressive and receptive disorders in combination.

An expressive language disorder is difficulty with the production of language that adequately represents the child’s/youth’s intended message and may include problems with word retrieval, word use, sentence formulation, and/or conversational skills (Harris, 1994).

The following characteristics may indicate difficulties in producing language. The child:

* speaks in words, phrases, incomplete or inaccurate sentences
* relies upon gesture to supplement or substitute for oral language
* uses pronouns, plurals, and possessives incorrectly
* has difficulty with the agreement of subjects and verbs
* has difficulty telling a story or describing an event or procedure in a logical sequence
* uses run-on sentences
* has limited expressive vocabulary
* has difficulty finding the appropriate word (s) to express meaning overuses filler words such as “ah” or “um”
* avoids speaking in class
* has difficulty interacting with peers or adults

**Difficulty at Language Form level**

English grammatical morphemes (e.g., plural-s, past-ed) develop in a more or less predictable sequence. Present progressive usually develops first and third person irregular is one of the last to develop. The reason for this sequence of development lies in the linguistic complexity of the morpheme. Impairment in language form may show a child developing these morphemes in an unusual order or an inability to use grammatical morphemes appropriately.

**Difficulty at Language Content level**

Children who have expressive language disorders/delays in language content often give grammatically correct responses that do not make sense. They correctly use all the grammatical morphemes but give inappropriate responses (Lahey, 1988). These children are sometimes described as hyper verbal. They have appropriate articulation, intonation and stress patterns but are weak in content. (Lahey, 1988). They may be the hardest to identify with the specific problem as they sound like everyone else except they lack appropriate vocabulary in their communication.

**Difficulty at Language Use level**

Children who have expressive language use delays/disorders have learned how to use language to code ideas but have not learned to use it to communicate. Ask whether the child:

* Responds appropriately to social greetings?
* Maintains the topic of conversation?
* initiates conversation with peers
* Uses non-verbal communication appropriately?

The above classification is based on function of language but it can also be classified based on causal factors mainly

* Damage in the central nerves system
* Environmental deprivation
* Associated disabilities like Intellectual disability, learning disability, autism etc.

**Aphasia or Dysphasia**

Some severe disorders in expressive and receptive language result from impairments of the brain. Aphasia is a loss or impairment of language secondary to brain damage. The term aphasia is frequently used to describe a "breakdown in the ability to formulate, or to retrieve, and to decode the arbitrary symbols of language" (Holland & Reinmuth, 1982). Aphasia is one of the most prevalent causes of language disorders in adults, most often occurring suddenly, following a cardiovascular accident (stroke). Head injury is considered a significant cause of aphasia in children. Aphasia may be either expressive or, less commonly, receptive. Children with mild aphasia have language patterns that are close to normal but may have difficulty retrieving certain words and tend to need more time than usual to communicate (Linebaugh, 1986). Aphasia is somewhat fuzzily distinguished from dysarthria, which designates a motor speech disturbance (e.g. weakness of the tongue or lips, cerebellar disorder causing slurred speech). Aphasia is of many types such as-

1. ***Expressive aphasia*** *(Broca’s aphasia****).*** It is characterized by non-fluent, effortful speech with dysarthria. In this case comprehension usually found good. No para-phasic errors are found. It is typically caused by frontal lobe lesion. Typical task on examination that they fail is to repeat sentence "no ifs, ands or buts about it". These patients may only have (for example), a single word left in their vocabulary. *Aphemia* means mute but writes fluently.
2. ***Receptive aphasia*** *(Wernicke's aphasia)*. A fluent effortless speech with frequent use of wrong or non-existent words and improper word usage. Poor comprehension and repetitions are found due to typically dominant temporal lobe lesion. Patients may "jam" meaning understand several words than then understand no more.
3. ***Conduction aphasia***: The child unable to repeat anything due to this type of aphasia due to typically lesions at Posterior temporal or inferior parietal lobe of the brain. The prevalence of this type is about 10% of all aphasia.
4. ***Anomic aphasia***: In this type child unable to name anything due to lesions or problem in inferior temporal or posterior angular gyrus, it is nonspecific aphasia as that of others.
5. ***Mixed* *aphasia (****Global aphasia*); It is a combination of Broca's and Wernickes aphasia. It is a Mild form is called "". It is due to large prerolandic or large deep lesions.

**Dyslexia/Reading Difficulty/**

It is difficulty in reading or inability to read. Specific problems range from failure to recognize that individual letters in certain orders make up the words on the printed page, to being able to read all material with having difficulty in fully comprehending it. Problems demonstrated by children with this difficulty like reading the word ‘saw’ for the word the word ‘was’ , reading the word ‘Chair’ for table.

**Dysgraphia/ writing Difficulty/**

It is the difficulty in writing or inability to write. Specific problems are to occasional spelling error or an inappropriate selection of word to write and inability to write meaningful statements.

**Linguistic Deprivation**

Environmental influences (deprivation) are thought to play an important part in delayed, language disorder, or absent language. Some children are rewarded for their efforts at communication, whereas others, unfortunately, are punished for talking, gesturing, or otherwise attempting to communicate. A child who has little stimulation at home and has few chances to speak, listen, explore, and interact with others will probably have little motivation for communication and may well develop disordered patterns of language. Children who have had little exposure to words and experiences may need the teacher's help in encouraging communication. Active participation in experiences gives children the opportu­nityto learn and use appropriate vocabulary.

**Secondary Language Disorders**

A language disorder that is caused by another disorder or disability, such as intellectual disability, learning disability, hearing impairment, Autism

**Associated language and communication disorders**

*Group Assignment*- *finds out the association of language disorder and disabilities listed below*

Mental disabilities and language disorders

Learning disabilities and language disorders

Autism and Language disorders

Hearing impairment & Language disorders

Physical disability & Communication disorder

*Intellectual* disability Learning disabilities

Physical disability

Autism Hearing impairment

**4. Speech Disorder**

**4. 1. Definition**

According to Taylor and Sternberg, 1989 cited in Tirrusew 2000 Speech disorders are disorders characterized by abnormal production of sounds and sound quality of speech. In addition Speech is abnormal when it deviates so far from the speech of other people. That it calls attention to itself, interferes with communication, or cause the speaker or his listeners to be distressed (Van Riper and Emerick, 1984 cited in Tirrusew 2000).

Speech disorder influence the individuals transmission of message, his or/and her economy, academic achievement and socio-emotional condition (Emerick and Haynes 1986, cited in Tirrusew 2000).

* 1. **Characteristics of Speech disorder**

According to Alemayahu Taklamariam (2005) People with speech disorder are characterized by abnormal production of sounds, abnormal sound quality of speech. The child’s speech is considered to be impaired if it is unintelligible, abuse the speech mechanism and culturally or personally unsatisfactory.

It is also characterized by

* An interruption in the flow or rhythm of speech such as stuttering.
* Problems with the way sounds are formed.
* Difficulties with the pitch, volume or quality of voice.
* Poor or unpleasant voice quality
* Breathiness, harshness, nasality (hyper nasality ,hypo nasality)
* Cluttering:-a condition in which speech is very rapid and clipped
* Disrupt the smooth flow of speech include repetition, prolongations, and pauses.
* Repetition: - occurs when a unit of speech, such as a phrase, word, or syllable, is superfluously repeated.
* Prolongations are one of the least typical behaviors exhibited by stutters. Prolongations normally happen with child stutters and any other fricative consonant or vowel with stutters, prolonging a sound sometimes leads to a pitch and volume increase.
* Pauses are also a common source of disfluency in both stutters and non-stutters. Most pauses can be divided into two categories filled pauses and unfilled pauses.
  + Unfilled pauses are extraneous portions of silence in the ongoing stream of speech. They are used to add a particular rhythm or codence to speech.
  + Filled pauses are interjections typical in normal speech like “un”, “uh”, “er” and so on.

They also cognitively characterized by poor performance on intelligence tests particularly on verbal intelligence tests. Persons with speech disorder frequently play a passive role in communication. They may show little tendency to initiate conversation. When a student’s speech is obviously different, his or her peers, teachers, or adults, find to peers behave differently toward him or her. They may pay more attention to the way in which the students say something than to what he or she says. Other may ridicule an individual whose speech is noticeably different and this can cause emotional problems. As a result, students who have speech difficulties may withdraw from social situations, be rejected in social situation and may ultimately suffer from a loss of self-confidence.

* 1. **Associated Disorders with Speech**

Chaney and Frodyma (1982) cited in Alemyehu Teklamariam ( ) list several associated problems with speech disorders includes

* cognitive limitation or developmental delay
* Delayed cognitive functioning typically shows delay in speech and communication skills:
* Articulation (omissions, substitutions, additions and distortions), voice and stuttering problems are the most common.
* Hearing impairment

A child with hearing loss is affected both in language and speech development.

* Physical disability
* Structural abnormalities of the speech mechanism
* Athetoid (extra pyramidal) uncontrolled movement result in (e.g., to pick up a pencil waving arms, facial grimaces and an extension of tongue) unable to control the muscle of their lips, tongue, throat and drool.
* Autism
* A tendency to speak near monotone
* Behavioral and emotional disorder
* Low self concept
* Stage phobia
* Shyness
  1. **Types of Speech Disorder**

Basically there are three types of speech disorder. These are;

1. **4.1 Articulation Disorder (Phonetic disorder)**

It is a form of mispronunciation involving a part or all of the word or words. It is based on difficulty learning to physically produce the intended phonemes. It is characterized by;

* **Omission**
* Certain speech sounds are not produced.
* Entire syllables or classes of sounds may be deleted.

e.g., fi’ for fish

‘At for cat

Po-y for pony

* **Addition**
* An extra sound or sounds are added to the intended word.

e.g., bookee for book

* **Distortion**
* Sounds are changed slightly so that the intended sound may be recognized but sound “wrong” or may not sound like any sound in the language.
* **Substitution**
* One or more sounds are substituted for another.

e.g., Wabbit for rabbit

tow for caw

**4.4.2 Voice Disorder**

* It occurs when the quality, loudness, or pitch of the voice is abnormal.

It may consider abnormal if it differ markedly from what is customary/usual in the voice of others of the same age, sex, ad cultural background.

* **The five basic characteristics of voice disorder**
* **Pitch-** is perceived too high or too low voice. If the receiver of communication pays more attention to the voice than to the message, then, communication is impaired.
* **Loudness: -** is the strength or weakness of the voice and is related to the amount of energy or volume used. A too loud voice can be disturbing. A too weak voice can interfere with communication.
* **Voice flexibility:** is the variability of pitch and loudness. It is a good tool for meanings. Many subtle meanings of emotional states are expressed by flexible voice. When the voice is monotonous, the message lacks precision.
* **Quality:** the characteristics of voice and of pitch and loudness that provides the spice for differentiating two voices.

Ex. Breathiness- a whisper

Harshness:-discordant, raspy, law pitched and louder than normal.

Nasality: - too much of the sound passes through the nasal cavity and out through the nose.

* **Duration:** refers to the total length of time the phonation exists. Disorder occurs when phonation periods are either too long or too short. Speech sounds, especially vowels, may be distorted.

**4.4.3 Fluency Disorder**

It is an interruption with the natural and smooth flow of speech with inappropriate pause/break in prolongation, hesitation, or repetition.

It is characterized by;

* **Stuttering:** is interruption of a person’s ability to speak fluently.

Excessive prolongations and repetitions of sounds and hesitations in the general speech pattern are the main characteristics of stuttering. Repetition can occur with sounds, syllables, words or sentences. It is a developmental phenomenon- the problem increase with age. The disorder is situational, which means in certain situations, such as talking on the telephone, the stuttering might be more severe or less depending on the anxiety level connected with that activity.

**Generally Stutterers**

* Are very aware of their disorder
* Perform worse when speaking under stress
* Have a hard time fluently giving short answer
* Have inhibited, neat handwriting
* Know exactly what they want to say but cannot say it
* Therapy focuses on relaxation techniques, calling attention away from speech
* **Cluttering:-** is a fluency disorder characterized by a rate that is perceived to be abnormally rapid, irregular. These rate abnormalities further are manifest in one or more of the following symptoms.
  1. An excessive number of diffluent.
  2. The frequent placement of pauses
  3. Inappropriate (usually excessive) degree of co-articulation among sounds.

It displays erratic/inconsistence rhythm, and producing wards or groups of wards unrelated to the sentences.

**Generally Clatterers**

* Are very unaware of their disorder
* Perform better when speaking under stress
* Have a hard time fluently giving long answers
* Have hasty, repetitions, uninhibited, messy handwriting
* Therapy focuses on calling attention to speech details
* Do not know exactly what they want to say, but say it anyway.

**Educational Implications of Communication Disorders**

Many speech problems are developmental rather than physiological, and as such they respond to remedial instruction. Language experiences are central to a young child's development. In the past, children with communication disorders were routinely removed from the regular class for individual speech and language therapy. This is still the case in severe instances, but the trend is toward keeping the child in the mainstream as much as possible. In order to accomplish this goal, teamwork among the teacher, speech and language therapist, audiologist, and parents is essential. Speech improvement and correction are blended into the regular classroom curriculum and the child's natural environment.

1. **Assessment**

* Most professional speech and language assessment begin with the collection of case history information from the child and the parent.
* **Articulation Test**

The speech errors the child is making are assessed and the record is kept of the sounds that are defective, the way in which they are being mispronounced and the number of error made.

* **Hearing test**

Hearing generally is tested to determine whether a hearing problem is the cause of the speech disorder

* **Auditory discrimination test**

This test is given to determine whether the child is hearing sounds correctly. If he/she is unable to recognize the specific characteristics of a given sound he will not have a good model to imitate. The Wepman auditory discrimination test and the Templin speech sound discrimination test are two examples

* ***Speech and language difficulties***: this section of the test explores the aphasic’s difficulties in expressing himself in oral language. Speech movements and articulates patterns are checked and the presence or absence of dysarthria and dyspraxia are conformed.
* **A thorough case history**

Typically, the following topics are explored from parents

* The mothers pregnancy and the child’s birth and neonatal history
* History and composition of the family
* The child’s medical history
* The child’s developmental history, including motor self-care and communicative skills
* How the child uses receptive and expressive language at home
* How the family has attempted to help

1. **Intervention** 
   1. **Educational Intervention for Children with Speech Disorder**

* Teacher is alert to the presence of speech impairment.
* Remember that children with speech impairments have difficulty in communicating with others
* Incorporate activities in class that allow children to practice skills mastered in therapy.
* Talk more slowly
* Give students more time to finish assignments and test
* Shorten assignments and make them less complex
* Provide tutors
* Give students extra help with assignments
* Give students credit for effort
* 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
* Be responsible to attempts at communication
* Teach skills that are useful outside the classroom
* Vary the events and objects used in speech training
* Reduce the rate of reinforcement and as skill is improve
* Provide good models of appropriate speech

**7.2 Social intervention for children with speech disorder**

* Provide opportunities for practice
* Create a supportive environment in which children are encouraged to communicate with one another
* Encourage them freely exchange ideas
* Set good conversational rules whereby people do not interrupt each other
* Give the person enough time and opportunity to talk. Because it may take longer for the individual to transmit message.

**7.3 Psychological intervention for children with speech disorder**

* Maintain eye contact with the person
* Listen more carefully
* Focus on what the person is saying rather than how he/she is saying it, or focus the idea of message than its form
* Never fill in a word or assist an individual unless he/she ask for help
* Encourage the child to relax and avoid fear
* Build self confidence in all children
* Reduce the probability of failure and increase the probability of success

**7.4 Medical intervention for children with speech disorder**

* Correcting varying shapes of tongue in the acoustic patterns
* Auditory stimulation: listening and repeating or prolonging it
* Phonetic placement: watching the clinician’s tongue movement and to duplicate them
* Fluency shaping therapy: train stutterers to speak fluently by relaxing their breathing, vocal folds, (lips, jaw and tongues)

1. **Developmental effect of communication Disorder** 
   1. **Cognitive characteristics**
   2. **Academic Characteristics**
   3. **Physical Characteristics**
   4. **Social /Emotional Characteristics**