Chapter 1

Introduction

Background to the Language Situation

Prior to Malaysia's independence from the British in 1957and the immediate post independent years, the English Language was widely used throughout the country. It was the language of power and social prestige and a common medium of communication among the nation's multi-racial educated elite (Thiyaga Rajah, 1989). English, then, was the undisputed to academic, social and economic mobility for school leavers (Datuk Abdul Aziz, 1989).

This situation changed after the year 1970. The seat of power and prestige was replaced by Bahasa Malaysia, the national language as the main medium of instruction and English medium schools were then phased out (Datuk Amar Dr. Sulaiman, 1992). However, the English Language was kept as a second language because the value of English as an international language continued to be recognized. It was still much needed for higher education, science and technology, for research and communication with the world, intellectual community; and for maintenance of trade and diplomatic relations (Thiyaga Rajah, 1989).

In the Malaysia context, English as a second language is not a second language in the true linguistic sense. Instead it means that English is second only to Bahasa Malaysia in importance for all official purposes (Thiyaga Rajah, 1989). In reality, English is a foreign language. It is taught as a compulsory subject in the national school curriculum. It is, however, not compulsory for students who face public examinations in Primary Year 6 to pass the English Language paper (Datuk Abdul Aziz, 1989). This has

therefore, resulted in a lack of interest for students to master the language. The context of learning English has changed too.

Previously, students viewed English as enabling them to learn other subjects and to communicate with their peers and teachers. Now, the majority of students have little access to the language outside the formal classroom situation. Hence, there is an absence of a supportive learning-teaching environment. Thus, the process of language acquisition has been affected by the constraints faced by students and teachers in terms of lack of an incentive for mastering the language and the absence of an overall supportive learning-teaching environment (Thiyaga Rajah, 1989).

Successive revisions in school curricula have also taken this situation and current developments world-wide in the teaching and learning of English as a second language into consideration and have tried to make language learning more relevant and more accessible to learners (Datuk Abdul Aziz, 1989 and Datuk Amar Dr. Sulaiman, 1992). Thus, the previous structural syllabus has been replaced by the communicative-functional syllabus. This has since been replaced by a more flexible skills-based syllabus: Kurikulum Baru Sekolah Rendah (KBSR) or The New Primary School Curriculum.

The KBSR English Language Programme (Phase I and Phase II) emphasizes the acquisition of the four basic language skills, namely: listening, speaking, reading and writing, and lastly communicative ability. The language contents include the sound system, grammar and vocabulary in an integrated manner.

In Phase I, the emphasis is on aural-oral skills which enable the students to listen to English and speak it. After the students have acquired sufficient aural-oral skills, they are then taught reading and writing. The reading skills are taught through word recognition, phonics and comprehension exercises. Phase II of the English Language Programme consolidates the teaching of the four basic skills, gearing them for communicative ability. Aural-oral work introduces them to new words, new sentence patterns and language forms which are essential for communicative interaction. The reading component helps to develop students' reading skills and also inculcates in them a reading habit (Syllabus Specification, 1990).

Language and the Hearing-impaired Pupil

All children have the innate ability to learn the use of language. They are able to do this entirely on their own, merely from experiencing language being used with them, without having it specially to be taught to them. All normal children have the potential for acquiring language during their first five years (Dale, 1972). They learn not by direct teaching but by exposure to the use of language. As parents talk with their children, they are intuitively offering a model from which the children gradually identify basic structures and rules of grammar. In fact, most children in this country are not learning only one language but are also able to learn more than one language at the same time.

Language learning begins in infancy by listening to what is being said to them. By
the time children are five years old, those who have normal hearing are usually able to
speak their mother tongue quite well. On the other hand, unlike children with normal
hearing, hearing-impaired children are unable to hear spoken language clearly and this
will affect their speech production which later hinders their language ability. It is,
therefore, only to be expected that they will become correspondingly worse with
increasing levels of hearing loss.

Although most deaf children can become aware of speech when wearing hearingaids, they are nevertheless unable to identify most of what they do hear because the
words heard by them are most often badly distorted. Thus, they consequently require
special help to learn verbal language. For example, those children who have severe to
profound hearing losses, will find it very difficult and in some cases impossible even to
identify spoken words, let alone speak them, even with aided hearing. However, those
children with only slight to moderate levels of hearing loss, and with aided hearing, can
be expected to develop good skills in spoken language. But in cases where children are
classified as either severely or profoundly deaf, they will not be able to learn the use of
spoken language without special help.

Clearly, hearing-impaired children require some kind of special help to develop their use of language. This should be done as early as possible, not only because language learning seems to be more easily accomplished by young children, but because the ability to use language for the purpose of thinking plays an important role in their mental development (Tough, 1980).

Language as a Process of Communication

Language permeates all of school life, encompassing the entire school curriculum, for both hearing and hearing-impaired children. Language is the resource that each child encounters daily in the classroom and has become a part of communication and thinking. In particular, it is the skill a child must possess to the act of reading, which is the key to school learning.

Communication

Communication development is closely linked to other aspects of development in young children. As infants, toddlers and preschoolers develop cognitively, they improve in communication skills. Recognizing this interrelationship, communication is meant by the expression and reception of meaning, which may occur either through speech or hearing, reading or writing, signing or seeing, gestures or other means (Owens, 1992). In the U.S. House of Representative Report in 1991, IDEA Amendments, (Individuals with Disabilities Education Act, formerly known as the Education for All Handicapped Children Act, due to the reauthorization of the Public law 94-142, in 1990, ensures that "all eligible school-aged children and youth with disabilities are entitled to receive a free appropriate public education. It is a federal law that supports special education and related service programming for children and youth with disabilities (NICHCY, News Digest, 1993), the term 'communication development' is intended to include speech, language and hearing. This also includes oral-motor development. Related to hearing, communication development includes development of auditory awareness, auditory, visual, tactile and kinesthetic skills and auditory processing for speech or language development (Owens, 1992).

Language

Language is easily as well as rapidly acquired by very young children, especially during the first few years of life (McAnally, Rose and Quigley, 1987). Language development during early children, then, produces both mastery of the structure of the language and knowledge of many hundreds of words. Children's vocabularies grow at an

astonishing rate, with an average of two to four new words being acquired each day, during the ages of two-and-a-half to four-and-a-half years (Smith, 1926 in McAnally, Rose and Quigley, 1987). Normal language development assumes intact hearing, normal intelligence, and an environment rich in linguistic stimulation. However, these conditions are not always present. For example, children who are hearing-impaired will not hear the many thousands of words and sentences that children with normal hearing use. As such, they do not develop functional language, they will not be able to master the native language without incentive or extensive intervention. Though most hearing-impaired children manage to acquire good communication skills, they consistently fail to develop competence in the use of English as a language.

Speech

Speech is the means of communication used by almost all members of society. Without it, a person is severely limited in the extent and quality of his human contact. To deprive a child of speech is to deprive him of a basic personal-social tool, impair his potential for independence, restrict his opportunity for a wide range of human experiences, and possibly limit his employment and earning capacity as an adult (Ling, 1979).

Speech is not simply an expressive language that needs to be taught, but a means of communication to be established which enables the child to acquire language. Speech is an oral expression of meaning, usually, but not always, with symbols or words. Infants will babble or coo when spoken to or smile at. In babbling, simple sounds such as single consonant, or a single vowel is elicited. From phonemes, repeated syllable sounds are produced, morphemes and later production of single words, which later lead to two-three

word utterances at about age two (Owens, 1992). The more clearly one is able to speak, the more adequately are the words and the structures of spoken language differentiated, identified and understood. Speech is also an aid to reading. Since the printed words is a representation of the spoken form, children who have speech can develop normal word attack strategies (Ling, 1979).

All of this development assumes intact hearing in particular as well as good fine motor control of voluntary muscles. Because hearing-impaired children are unable to hear the communication of others well, this relates to their impaired ability to communicate with others. According to their teachers, as reported by Wolk & Schildroth (1986) in Smith & Luckasson, (1995, p.472), only less than 45 percent of students who are deaf have intelligible speech, and of those students who are profoundly deaf, only 25 percent have intelligible speech, even though it might sound different from the speech of individuals without hearing-impairment.

Both speech and language are parts of the larger process of communication. In fact, communication is the primary function of language, where Owens (1992, p.7), defines communications as "the process of exchanging information and ideas between participants. This process is an active one that involves encoding, transmitting and decoding the intended message".

Effects of Deafness on Young Children

The greatest handicap of deafness is not as much as the simple loss of hearing, but the way in which this loss affects a person's ability to develop language, to produce understandable speech and to communicate with those around him. Deafness, or a child born with some degree of hearing loss, is accepted as being established condition, usually resulting in severe speech and language delay, if intervention is not accomplished quickly and effectively.

The evidence from work with young children who are hearing-impaired, is that, the longer first language acquisition is delayed, the harder it becomes for the child to demonstrates fluency (Proctor, 1983). The Commission on Education of the Deaf in 1988, reported that "children with hearing losses, who learn some language, such as, American Sign Language (ASL), early in life are known to learn English much better and much more easily than do children who do not master any language before they begin their schooling".

The academic achievement levels of students who are deaf are substantially lower than those of their peers without disabilities, as reported by Trybus & Karchmer (1977). Smith and Luckasson, (1995), agreed that "by age 20, half of the students tested read below the mid-fourth grade level. Trybus & Karchmer (1977 p. 471), further state that, "...at best, only 10 percent of hearing-impaired eighteen-years olds nationally can read at or above an eighth grade level." He added that only a few of these students continued to make academic progress once they reached beyond the age of 15.

According to data, regarding the academic achievement of students who are hearing-impaired, most of the students have specific problems during their adolescent years (Luchner, 1992). Reports from Crandall (1974) whose demographic studies indicated that deaf students attending special schools or classes demonstrates little growth in reading achievement between the ages of 13 and 20 years.

One of the findings indicated that on the Standard Achievement Test for the Hearing-Impaired (SAT-HI), there were large discrepancies between secondary students who were hearing and whose who were hearing-impaired on reading comprehension and vocabulary. This is because many academic skills draw on a student's general awareness of language. Individuals who are hearing-impaired are at risk for reading and writing difficulties because the hearing loss affects their ability to construct accurate representation of sound-letter correspondences (Flexer, Wray & Leavitt, 1993). And because of this conceptual limitations, these individuals usually face problems interpreting the language and also expressing themselves in both oral and written modes.

Then, the question of vocalization arises. This is not to say that speech development is the top priority. Speech is not language. Speech is one mode, obviously the most commonly used mode, of expressing language, but language is a system of rules and symbols independent of speech. That is, one can have language without speech, for example, silent reading without talking. Speech, by contrast, is largely a motor function, involving fine coordination of many hundreds of muscles. It is extremely hard and frustrating to learn for many children who are born deaf.

Parents of young children who are hearing-impaired may not see it the same as children with speech impediment who can be trained to speak well. More often than not, they hope that hearing-impaired children may learn to speak well. To them, often, the most obvious need of the child is to speak. While speech delays are immediately noticed by parents of children who are hearing-impaired, language delays are less obvious, though in the long run is much more important. This is because language is necessary, while speech really is not, for children to learn academic subjects in school and to perform gainful work later on.

Parents must realized the difference of language and speech and understand why language acquisition is more urgent a task for the early childhood years than is speech. As important as speech is, this is given priority at the expense of language learning. Language, whether read or written, signed or spoken – is the vehicle through which most learning takes place. Only when a child requires a working knowledge of language, will he later be able to learn virtually all academic learning, like Mathematics and Science.

The role of hearing plays in language acquisition is undebatable. The brain appears to function in such a way that it will generate the rules of language, by means of presenting the spoken language and allowed it to create the patterns of rules or parts of speech. The brain will record this information and store it as rote memory. Then, the individual will attempt to apply these rules when requested to generate language, and often they will usually fail to do so.

This is exactly what happened to children who were deaf or severely hearing-impaired. They were taught language, not helped to learn it. The United States Congress Commission on Education of the Deaf reported in 1988, that "the present status of education for persons who are deaf in the United States is unsatisfactory." In his statement, he commented that "the educational system has not been successful in assisting the majority of students who are deaf to achieve reading skills commensurate with those of their hearing peers." The commission added that "the reading comprehension scores of these children plateau at just third-grade levels, even after fifteen to eighteen years of schooling."

Purpose of Study

The delay in language development in children who have significant hearing loss has rightly caused concern to most parents and professionals involved. As a result, it has become established that these children have very special needs, both linguistic and consequently educational. Unfortunately, all too often, these special needs have been interpreted as needs that are different from those of children with normal hearing. This, in turn, has resulted in a vastly differently language learning environment for children known to have hearing loss.

All parents want their children to become good readers and want to know how they can facilitate learning to read. The psycholinguistic view of the reading process recognizes that speaking, listening, reading and writing are related abilities that rest on the common bases of linguistic competence and conceptual skills. The purpose of this study, then, is to look at a tool which can help very young hearing-impaired children to become literate, skilled readers as well as to enjoy reading. The study looks into a special tool teachers can adopt when teaching hearing-impaired children to read, spell and write. This approach has implications for the teaching of reading to hearing-impaired children that may improve comprehension of written language including spelling and contribute to the development of language in its most global sense.

Several principles of language development are critical to the understanding of the reading process for the hearing-impaired and hearing children. Foremost is the finding that hearing children are not explicitly taught the rules of oral language. Nor do hearing-impaired children who learn sign or oral language attain basic skills in these areas by learning formal rules. Since hearing children master oral language "by

progressively improving and modifying rules which work for them", Hart, Walker & Gray (1977), therefore expressed that hearing-impaired children must also learn language through meaningful and purposeful interaction with the people around them. Young children apparently possess innate ability to reduce and restructure adult language in a highly systematic manner. Brown & Bellugi (1964), described this progressive differentiation in terms of word usage and syntactic structures used as children mature. Halliday (1973), views on various models on child language and states that it would be more useful to speak of a child learning or 'making' a language rather than 'acquiring a language'. One of the models reviewed by him is the representational model where the content or messages are the essence of communication and only gains prominence in the later stages of a child's linguistic development. As such, Halliday (1973), regrets that this model is the only one used by many adults.

Clay (1970), states that pre-reading is not just a "reading-readiness" activity, but rather, it is a developmental process. She also recognizes abilities that are early steps along the road to independent reading. She reports that parents should provide their children with the rich experiences that promotes learning to read.

So how can parents and teachers provide this rich environment to motivate children to read? Parents often wonder how their hearing-impaired children will learn to read even if they read aloud to them. Listening comprehension must come before reading comprehension. Oral vocabulary feeds the reading process (Clay, 1970). Children hear words over and over. Children have not heard a lot of word do not say a lot of words and would not be able to read a lot of words (Power, 1984). As such, it is not always easy to read a child with a hearing loss. Thus, difficult sentences or vocabulary may

interfere with enjoyment. The child sitting on the parents' lap can be a problem if the child does not have sufficient aided hearing. Nonetheless, reading is important, and even more important for a child with severe impaired hearing.

In this instance, educators of the deaf need to set their goal giving young children who are deaf or severely hearing-impaired linguistic input, of the same types and amounts as hearing children get – visually as well as auditorilly. Most of these young children do have a certain amount of residual hearing but this is not enough to serve as a primary tool for language acquisition. At the most, the hearing of these children is a supplement to visual input. Whether the words and structures of the language are presented in signs, fingerspelling, or reading and spelling, this auditory input should consist of the same kinds of sentences hearing children receive (Van Uden, 1977).

The form of communication a hearing-impaired pupil uses has important implications for the classroom. Although there is some debate about some advantageous approach, consideration is given to teaching the two forms of manual communication.

Because each child is individual, each child communicates in a different way and is more comfortable in the method he chooses. Regardless of the means of communication used, surveys published by Gallaudet College of the Deaf, showed that the linguistic and academic performance of students who are hearing-impaired to be appallingly low (Ling. 1984a in Smith and Luckasson, 1995).

Therefore, the question on the type of communication modes often placed parents in a dilemma. A range of communication modes is available. However, the choice of mode is a highly-individualized one, being a personal and parental preferences, and more often than not, an emotional one as well. And most important, the type of

communication mode chosen, will greatly determine the child's success in acquiring language competency (reading and writing skills).

Hence, this study addresses 4 questions:

- 1) Can profoundly hearing-impaired pupils produce intelligible speech to enable them to talk?
- 2) Can Cued Speech help hearing-impaired pupils to develop adequate speech skills in order to communicate with others?
- 3) Can Cued Speech help hearing-impaired pupils to acquire reading skills at age appropriate level?
- 4) Is Cued Speech a useful tool to adopt for developing reading skills of the hearing-impaired?

Significance of Study

One factor that can determine intelligible speech or how well an individual speaks is the manner of communication they use. For example, in Smith & Luckasson (1995, p.475), it was stated that "about 90 percent of those who use oral speech as their primary mode of communication have intelligible speech: only 7 percent of those who use sign language have intelligible speech: while 40 percent of those who rely on both speaking and signing in the classroom have intelligible speech." In addition, an interesting research study by Wolk & Shildroth (1986), showed that students with profound hearing loss, that is, greater than 91 dB loss, had a greater probability of having intelligible speech, about 73 percent if their communication mode was speaking only. They also found that students who received some amount of integration, as opposed to those

schooled in totally segregated settings, had better expressive communication skills, regardless of their degree of hearing loss (Wolk & Schildroth 1986). However, it should be cautious that teaching speech to hearing-impaired children works for only a handful of children. Possibly, intelligible speech is a function of the individual's ability to acquire it, and those who find speech too difficult become proficient in other methods (New York Times, 1992 in Smith & Luckasson, 1995).

Educators of the deaf generally identify two major educational goals for children who are hearing-impaired. These educational goals, according to Moores (1987), are: one, to reduce the achievement gap between students without disabilities and students who are deaf and two, to develop the speech and language skills to these individuals' potential. These goals are, however, often in competition with each other. For example, programmes for the hearing-impaired spend a good deal of time developing speech and language and less time is spent on academic subjects, which later contributes to the lower achievement performance. On the other hand, should academic subjects be given a higher priority and should more time be devoted to these topics, thereby reducing the time spent on speech and language. Because these is a high relationship between instructional time and academic, this issue is still often unresolved.

We know that now, if hearing-impaired children are able to hear each syllable of a spoken language clearly, they will be able to learn the spoken language without any need of special help. Can we therefore, conclude that hearing-impaired children will be able to learn a language in the same natural way from using Cued Speech as hearing children do from normal speech? If children are to succeed in doing this, then teachers and parents must at least be able to cue the target language as fluently in grammatically correct form

as they can speak it. Thus, it is hoped that this study may raise parents' and teachers' awareness on the type of communication method they choose for interaction with their hearing-impaired children.

Perhaps, the significance of this study is to draw attention on how best on the development of reading and writing skills can be achieved through using Cued Speech. Hearing-impaired children who have undergone language intervention through Cued Speech in the pre-school years have started using this tool to assist them in developing literacy (reading and writing) skills before admission into formal schooling. Thus, it is hoped that the suggestions given at the end of this report may help contribute towards the debate on future actions undertaken by teachers and parents in their mode of communication.

Definition of Terms

Hearing-impairment

Hearing-impairment is a term that encompasses all degrees of deafness, from the transient mild hearing loss to permanent total deafness. This generic term includes all disorders of hearing regardless of their nature, cause or severity.

By the late 1960s, many American educators had become convinced that a very substantial proportion of hearing-impaired children needed help in the form of some visual supplement to learn verbal language, that is, through the practice of Total Communication. This eventually led to the classification of so-call 'deaf' children into the following two categories, as defined by the Conference of Executives of American Schools for the Deaf in 1974.

"A deaf person is one whose hearing is disabled to an extent (usually 70db ISO or greater) that precludes the understanding of speech through the ear alone, with or without the use of a hearing-aid."

and

"A hard-of-hearing person is one whose hearing is disabled to an extend (usually 35 to 69 dB ISO) that makes difficult, but does not preclude the understanding of speech through the ear alone, without or with a hearing-aid."

Very simply, the terms frequently used, 'deaf' or 'hard-of-hearing', as defined by PL 94-142, are generally known as 'hearing-impaired' whether permanent or fluctuating, which adversely affects a child's educational performance. According to Boone (1987, p.160), "the term hearing loss is used for individuals who experience a loss of sensitivity in the speech range greater than 25 dB." Sometimes even a loss of 15dB can be educationally significant, affecting speech, language and communication (Northern & Downs, 1984). Therefore, it seemed more accurate to use the term 'hearing-impaired' for the entire group of children and to restrict the word 'deaf' only to those who had no usable hearing at all.

Although the degree of hearing loss is important, the age when the hearing loss occurs is also important. Individuals who become deaf before they learn to speak and understand language are referred to as prelingually deaf. They are either born deaf or lost their hearing as infants. According to data, gathered by the Commission on the Education of the Deaf (1988), approximately 95 percent of all children and youth who are deaf are prelingually deaf.

Hearing-impairment is a low incidence handicapping condition. Only 1 child in 1000 is deaf and only 3 to 4 children are severely hard-of- hearing (Kirk & Gallagher,

1989). That is why not much attention is given to this group of people as it is not a noticeable handicap as compared to the blind. For the purpose of writing this report, firstly, the term 'hearing-impaired' or 'deaf' is used to encompass degrees of hearing loss from severe to profound. Refer to Appendix 1 for an overall picture of how hearing-impaired children are broadly categorized nowadays. Secondly, the generic term 'he' is used for the convenience of writing, regardless of the subject being male or female, and does not whatsoever being sexist.

Intelligible speech

When hearing is impaired, impaired speech will result. A child born with severe hearing loss does not acquire speech naturally or adequately. The greater the hearing impairment, the poorer the child's speech and the harder it is for him to acquire or develop it (Calvert, 1984). With severe hearing loss, deviations will occur in articulation, voice quality and speech rhythm and rate of utterance which have been found to be of critical importance in achieving intelligible speech as marked by Subtelny (1979), cited in Dale (1982). A child is said to have intelligible speech when his speech is understandable and meaningful to others who hears it. As Gold (1980), remarks that one will only achieve a level of speech competence when one can make himself understood to the 'person-on-the-street'.

Speech skills

Speech is an invaluable asset for the hearing-impaired children and hence its development merits high priority. Thus, speech acquisition by the hearing-impaired child is one of the major considerations in the education of the deaf which includes speech perception and speech production. Spoken words are made up of one or more

syllables, which comprise combinations of vowels and consonants. A person's ability to understand speech depends upon how well he can identify these vowels and consonants in the language which is being spoken. Educators involved in teaching speech are concerned with the child's capacity to produce the required sound patterns at the phonetic level while at the phonologic level, they are concerned with the systematic and meaningful use of these sound patterns (Ling, 1976). Effective teaching and adequate experience are two of the main prerequisites for the development of speech communication skills in hearing-impaired children.

Reading skills at age appropriate

Young children are expected to become skilled readers when they enter school. They are expected to be able to read books appropriate to their age. A large group of children enter school at age five to six and with remarkable confidence take to the business of reading almost immediately. These children were not deliberately taught but learn in natural, developmental ways, according to Clay (1972). As such, children within the same age group are expected to read similar levels of book given to them. Similarly, children with impaired-hearing would also like to acquire a competence in reading skills, at the most having an equivalent reading age with their hearing peers. This reading age is measured against their chronological age and the pupil will be considered reading at age appropriate if his reading age is similar to his chronological age. A number used on the report will indicates the pupil's reading performance compares to normal developing children. The number is measured in years and months. For example, a child who

scored an age equivalency of 9-7 on a test performed as a 9 year 7 month old typical child would have been expected to perform.

Characteristics of Hearing-impairment

The characteristics of pupils with hearing-impairments are related to three important factors:

- the nature of the impairment
- the degree of hearing loss, and
- the age which it occurred

It is important to know these characteristics as they will provide better understanding of how they will affect the acquisition and development of language of the hearing-impaired child.

Nature of the hearing-impairment

The nature of hearing impairment refers to a person's hearing pattern as it relates to frequency and intensity. It is influenced by the type of hearing loss and by the part of the ear that is affected.

A 'conductive hearing loss', which occurs in the middle ear, reduces the intensity sound reaching the inner ear, where hearing occurs. This is the most common type of hearing loss in school-age children and frequently is transient.

A 'sensorineural hearing loss' results from damage to the cochlear or auditory nerve and is usually greater than conductive loss. This type of hearing loss can Be caused by virus, or hereditary factors and cannot be medically or surgically treated, though some can be corrected through cochlear implants with advance technology nowadays.

The degree of hearing impairment

Students who are hard of hearing can be described as having mild, moderate or moderately severe hearing losses. Students who are deaf are described as either severely or profoundly deaf. A person who is severely deaf can only hear loud sounds close up and will probably need intensive special instruction, hearing-aids and language training. According to Kirk & Gallagher (1989), a person who is profoundly deaf may be aware of loud sounds and vibrations but relies on vision rather than hearing for instruction.

The age of onset

The age at which the hearing loss is a critical factor, particularly because hearing influences the acquisition of language. A hearing impairment creates more significant educational handicaps when it is congenital, that is, present from birth or when it occurs in the first or second year of development.

Children with deafness are at the receiving end of the parents' and professionals' attention. The most important thing to recognize is their individuality and the need to provide them with optimal opportunities to fulfill their potential as human being throughout childhood and into adulthood.