

***Communication Building Blocks**

A review of choices in communication

A smile, a cry, a gesture, or a look – all can communicate thoughts or ideas. It can take many repetitions of a gesture, look, word, phrase, or sound before a child begins to “break the code” between communication attempts and real meaning. Communication surrounding the child in his or her natural environment is the basis for a child’s language development. Two-way communication, responding to your child and encouraging your child to respond to you, is the key to your child’s language development. When a child has a hearing loss, one avenue of communication input is impaired.

With a mild hearing loss or hearing loss in just one ear, a child will not hear as well as normal when a person is speaking from another room or in a noisy car. Incidental conversations and snippets of language will not be overheard. The fullness of language and social skills may be affected even though the child appears to “hear”. Hearing aids can help, but not solve all of the child’s difficulties perceiving soft or distant speech. Children with greater degrees of hearing loss will have greater hearing limitations that require more intensive attention if they are to progress in learning language, either through visual or auditory means. No matter what the degree of a child’s hearing loss, parents need to decide how to adapt their normal communication style to meet the needs of their baby with hearing impairment.

There are different ways to communicate and different philosophies about communication. Technological advances have broadened communication choices for young children with hearing loss. Choosing one manner of communication over another is a personal decision made by the family and does not need to be totally dependent upon a child’s amount of hearing loss.

IT’S NOT ABOUT HEARING LOSS, IT’S ABOUT COMMUNICATION

As you think about how your family communicates now and how you would like to communicate with your child in the future, you are thinking about choosing building blocks of communication. The best way to decide which communication features for your family and the child’s caregivers to use consistently throughout each day is to be open about all of the choices available. Ask questions, talk to adults who are Deaf and hard of hearing and other families with children who have hearing loss. Discuss, read, and obtain as much information as you can about the different ways to communicate with a child who has a hearing impairment. For additional information you may want to contact hearing-related organizations or read books describing choices in communication with persons who are deaf or hard of hearing.

Consider the following factors when choosing communication features:

1. Do the communication features chosen enable all of your family members and regular caregivers to communicate with your child?
2. Are using these particular communication features in the best interest of your child? Do they allow your child to have influence over his/her environment, discuss his/her feelings and concerns, and participate in the world of imagination and abstract thought?
3. Do the communication features chosen enhance your relationships with each other as a family? The communication features chosen should promote enjoyable, meaningful communication among all family members and caregivers and enable your child to feel a part of your family and know what is going on.

* Adapted by Karen L. Anderson, Audiology Consultant, Florida EHDI Project (January, 2002) from K. Biernath, MD., (1999), Center for Disease Control and Beginnings website (2000): www.nbegin.com/communication/options/com_options_print.htm

Choosing Communication Building Blocks: Taking the first steps to foster communication development

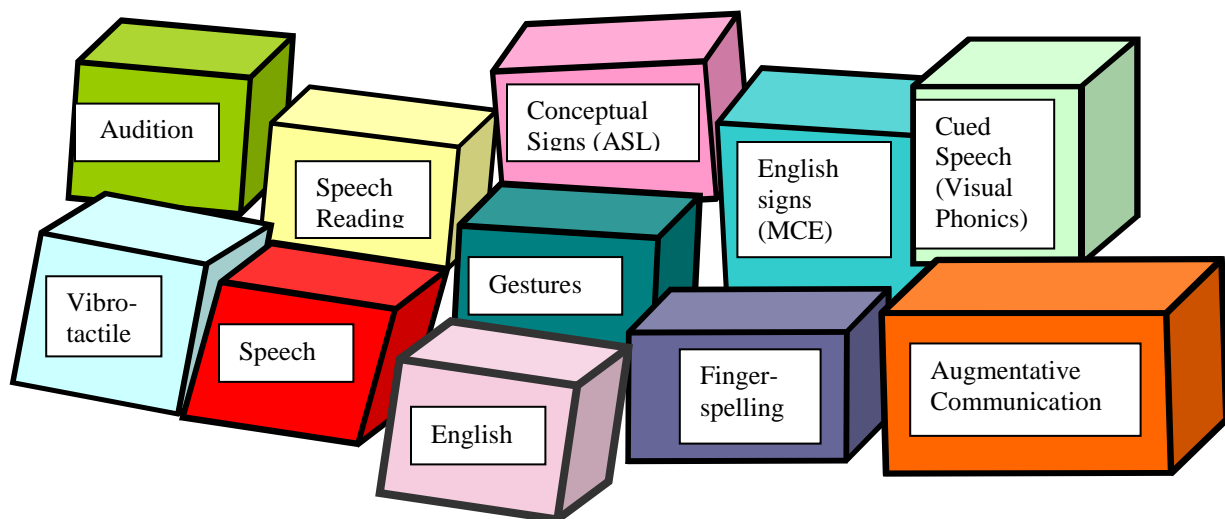
All children develop language skills over time. It is through the daily practice of language in all activities that you should expect children to become effective communicators. Success for young children who have hearing loss is typically measured against the goal of the child gaining one month in language skills for every month of early intervention. Parents are typically asked to complete a check-off list every 6 months that allows communication growth to be monitored. Think about communication building blocks, or features, as doors that lead you and your child on different paths – usually toward success. If there is a bump in the road and your child or family is not progressing forward at the expected rate, you can open another door. Consultation with your child’s team of professionals and other parents of children with hearing loss will help you better understand what some of these paths may be like for your child and all of your child’s caregivers.

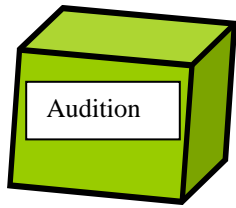
One month of gain in language development for every month of early intervention?

Each child’s hearing loss is unique. When making decisions for interventions for your child, it is important that you understand the nature of his or her hearing loss. Your child’s audiologist or early intervention service provider can help you understand your child’s hearing ability. Intervention options for children can be divided into four categories – educational, audiological, medical, and fostering communication development.

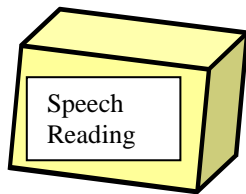
Communication Features

Communication features can be combined into different communication options, or methods. The five communication options that will be described in this paper include American Sign Language (Bilingual), Total (or Simultaneous) Communication, Cued Speech, Auditory-Oral, and Auditory-Verbal. Think of each of these options as stacks blocks made up of combinations of different communication features.





Individuals with hearing loss have varying degrees of residual, or useable, hearing. Some individuals labeled as “deaf” have limited hearing ability that may or may not respond to amplification and may or may not result in meaningful sound. With the use of residual hearing, spoken English may be learned through constant use of spoken language in the home and special attention to providing intensive language and listening experiences. The maximum possible use of audition through optimal is a key to potential success of the Auditory-Oral and Auditory-Verbal options. A strong working relationship with an audiologist is vital. Individuals who are most successful with the Auditory based approach have residual hearing, either through the use of hearing aids or a cochlear implant, that allow an auditory feedback loop to develop (able to perceive speech from others and monitor their own speech auditorily). In auditory training, also called aural habilitation, the family is instructed in how to help the child to learn to listen and to understand what is heard.

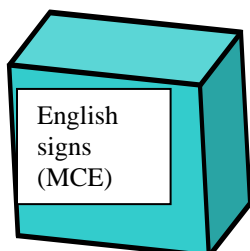


Speech reading, or lipreading, is a technique by which a person attempts to understand speech by watching the speaker’s mouth and facial expressions. Some of the sounds in the English language can be understood by watching the mouth, but many cannot.

In the best environment (good lighting, clear view of the speaker’s face, etc.) only approximately 40% of the English sounds are visible. Thus, on average, a good speech reader may only be able to distinguish 4 to 5 words in a 12-word sentence. Much of the meaning of conversation is deduced through context and educated guessing. Research has shown that the ability to speech read seems to be unrelated to intelligence or motivation. In addition, not all listening environments are conducive to speech reading. Men with facial hair, people who chew on pencils, cover their mouth, or turn away when they talk and people who barely move their mouth when speaking are very difficult to speech read. In addition, during casual conversation among a group of people, the speech reader often finds herself shifting attention back and forth from one person to another. It can be very difficult to keep up with the conversation even for a talented speech reader

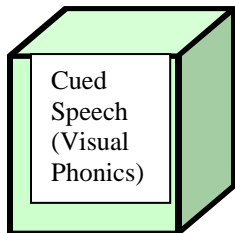


American Sign Language, or ASL, is often thought of as the language of Deaf people. This complete conceptual visual language does not require the use of spoken words or sounds. Contrary to the belief of many hearing individuals, ASL is not a way of using gestures to represent English. ASL has its own vocabulary and all of the language components of a true language, including grammar and sentence structure. It is a completely distinct language from any spoken language, including English. Humor, emotions, philosophical ideas and other abstract concepts can be fully conveyed in American Sign Language.



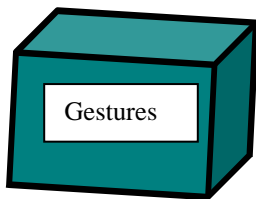
There are a number of communication techniques that code the English language visually. Manually Coded English (MCE) is a system of signs

(many of which are borrowed from ASL) presented in English word order that are based on words as opposed to conceptual meaning. MCE is a visible representation of spoken English and, therefore, it is not a language. There are several manually coded English systems included Seeing Essential English (SEE 1), Signing Exact English (SEE 2), and Signed English. Signs that are used without full coding of the English language or the use of full conceptual ASL signs, are considered to be Pigeon Signed English (PSE).



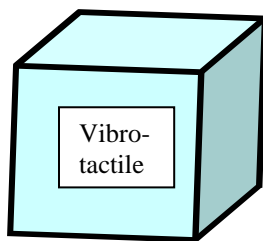
Cued speech is a visual code based on the sounds used within words. A system of hand-shapes visually represent speech sounds. Cued speech is used as a tool to aid speech reading spoken languages. This system is believed to encourage the development of reading or literacy through encouraging a child to learn the spoken language as his first language. Thus, the Cued Speech approach consists of four main components: Cued Speech, speech reading, speech, and use of residual hearing. Cued Speech is not a

language nor is it a representation of a language and cannot stand alone; it must accompany speech. Cued Speech consists of 8 hand-shapes representing consonant and vowel sounds. The parent, teacher, or other person talking with the child uses these codes to represent exact pronunciation of the words they are speaking. Cued Speech thus allows the child to learn to visually recognize pronunciation.



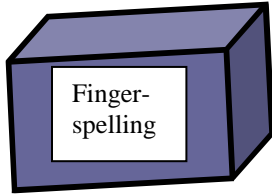
Natural gestures and body language consist of things that you would normally do for a child to help them understand your message. For instance, if you wanted to ask a toddler if he wanted to be picked up, you might stretch your arms toward him and ask "Up?". For an older child you might beckon him as you are calling him to come inside. Likewise, if you are expressing displeasure about a teenager's messy room, you might place your

hands on your hips and show a concerned facial expression as you are delivering your message. These are examples of natural gestures and body language.

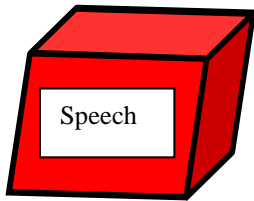


Vibro-tactile uses one of the natural senses – touch – to convey meaning. A child without hearing or who has very little residual hearing will turn to the source of vibration or even air movements in his or her environment. Some children who have little or no hearing can appear to inconsistently be turning to sound, when in fact, they detect vibrations through the floor, furniture, or air movements. Vibro-tactile senses can be heightened through the use of Vibro-tactile aids that convert sound into vibration patterns. These devices are typically worn on a child's

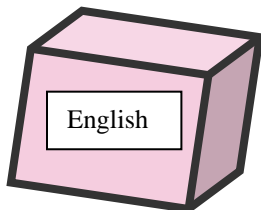
wrist or chest and can have two or more frequency ranges to encode different pitches. For example high pitch sounds may be encoded on a child's right wrist and low pitch sounds encoded on a vibrator attached by Velcro to the child's left wrist. For the word "stop" the child would feel the 'st' sound on the right wrist, the lower pitch vowel on the left wrist, and the ending 'p' sound again on the right wrist. Vibrotactile devices are sometimes used to train children to attend to the presence of sound in their environment. Our sense of touch and sensitivity to vibration is not an efficient replacement for the high discrimination ability of human hearing or sight. Vibrotactile is a technique used in adjunct to other communication features, and not as a stand-alone communication method.



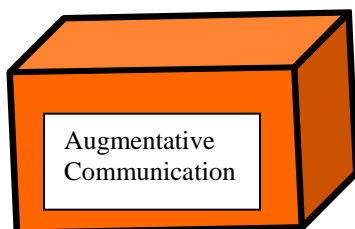
Fingerspelling is also known as a visual alphabet. Each of the letters of the alphabet has a distinct hand-shape. Many of these hand-shapes were formed to look similar to the written form of the alphabet letters. Most persons fingerspell much slower than they can talk, thus slowing down speech and communication in an unnatural manner. Fingerspelling is used mostly as a means to introduce new or unknown vocabulary words to individuals that sign as not all words have defined signs. This is especially true of proper names or specialized vocabulary, such as in the sciences.



Speech is a highly complex method of communication. Normal hearing individuals express much emotion in the intonation patterns of speech. Changing pitch at the end of a spoken statement typically means that a question has just been asked. Pitch, rate, and loudness all vary as we speak and can change depending upon the words preceding and following. These variations may be difficult or not possible to perceive depending upon the ability of the individual with the hearing loss. It can take intensive work and time for a child with hearing loss to be able to discriminate these tiny speech differences through hearing alone or in combination with speech reading. Technological advances in hearing instrumentation may allow many persons who are profoundly hearing impaired to access the speech signal through audition.



English is one of many languages known for having distinctive aspects. Receptive language refers to how many words or how much conceptual language a person understands. Expressive language refers to how a person is able to share ideas or feelings in any method or mode of communication. Factors that may impact expressive language development include pragmatics, content and form. One of the forms of language is how the words are put together to make sentences. This is also called the syntax of a language. English and American Sign Language differ in the order in which words or concepts are placed in a single sentence. Pragmatics refers to the social use of language and how you express yourself appropriately in different social situations. The content of a language refers to meaning. Different languages have different vocabulary words that convey meaning along with the syntax, or form of the language. For example, just as native Eskimos have many different words for snow, English has different words for many kinds of shoes. American Sign Language has movements or identifiers to differentiate between vocabulary words or it can have completely different conceptual signs. Spoken English is somewhat different from written English in the way in which ideas and feelings are presented. Persons who are fluent in English will have a higher probability of becoming fluent readers of the English language.



Augmentative communication refers to use of communication techniques or devices that enhance expression of ideas or understanding. Augmentative communication can refer to how an

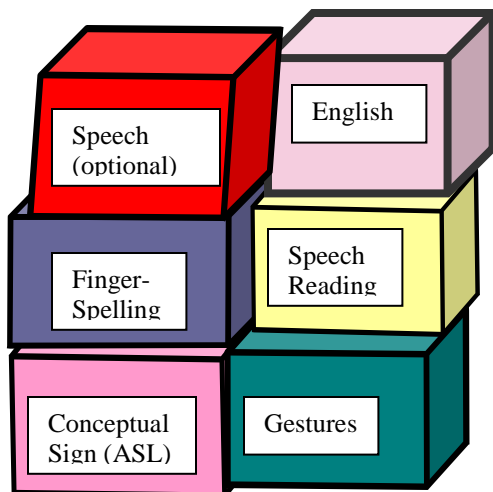
individual looks at a certain symbol to communicate through the use of eye, use of simple switches to turn on lighted toys, or the use of communication boards or electronic voice responders. Individuals with multiple disability conditions may use augmentative communication techniques or devices to enhance two-way communication with others.

Children are “wired” to absorb the language experiences that surround them and develop communication and cognitive skills, with little apparent “teaching” needed from adults. A child with hearing loss is just as “wired” to learn language as the child with normal hearing, however, extra effort is required by family members and caregivers to expose the child to meaningful experiences that will foster early development.

Every child has areas of strength and non-strength, just as every family has different communication dynamics. Only you will know what feels right as you select communication features to match your child’s needs and your family. The child’s personality, learning style, persistence, and motivation all will play an important part in communication growth. These are also qualities that we discover about our children as we interact with them in many situations. Hearing evaluations need to be repeated as your child gets older in order to learn precisely how much residual hearing exists. The communication features you select when your child is very young (i.e. 6 weeks old) may or may not fit well with these qualities and the hearing loss information that becomes apparent when the child is 8 months old. Amplification choices may change as well due to progression of the degree of hearing loss, increasing precision in hearing measurement, or technological advances in hearing instrumentation. Therefore, the need to adjust your choice of communication features or options is a real possibility as you learn more about your child.

Combined Features of Communication Building Blocks: Communication Options

Communication features can be combined into different communication options, or methods. There are many philosophical differences about the superiority of one communication option over another. The bottom line is this – the best communication option for your child is the one that caregivers are willing and able to use comfortably and consistently and that meets the communication development needs of your child. No specific method will result in successful learning outcomes if caregivers and family members do not surround and immerse the child in whatever communication features comprise the method. In contrast, not every communication option will produce a successful developmental outcome, even if all caregivers are highly committed to its consistent use. Consider your initial selection of communication features as building a foundation in which you are supporting your child’s development of communication, cognitive, and social skills. Other blocks, or communication features, can be added to this foundation, or blocks can be substituted as needed.



American Sign Language (Bilingual)

Bilingual/Biculturalism is designed to give children with hearing loss fluency in two languages – American Sign Language (ASL) and English or the family’s native language. It also seeks to provide children with knowledge about and acceptance into two cultures – Deaf and hearing. American Sign Language, or ASL, is the language of the American Deaf Community. This complete visual-spatial language does not require the use of spoken words or sounds. Instead it manipulates space,

movement and signs to efficiently and completely present information. All language universals including humor, emotion, philosophical ideas and abstract concepts can be fully conveyed in American Sign Language. Interest in the Bi/Bi communication option stemmed from the recognition of the age-appropriate language levels typical of deaf children of Deaf parents.

In the Bilingual/Bicultural communication option, also called Bi/Bi, ASL is usually taught as the child’s primary or first language. English or the family’s native language is taught as the child’s second language with emphasis on the written form of the language. This option consists of two main communication features: ASL and the written form (sometimes the spoken form) of a language such as English and is one of the newer education approaches appearing as a recent trend of education for children with hearing loss.

Family Responsibility

The child must have access to deaf and/or hearing adults who are fluent in ASL in order to develop this as a primary language. If the parents choose this option they will need to become fluent to communicate with their child fully.

Parent /Caregiver Training

If parents are not deaf, intensive ASL training and education about Deaf culture is desired in order for the family to become proficient in the language. Immersion in ASL requires that caregivers develop ASL fluency if there is no at-home parent.

Why choose this option?

ASL is considered by some to be the natural language of the Deaf. It was developed and is used by Deaf individuals. Being a visual language that does not rely on speech or sound, it is argued to be the perfect language for an individual with limited or no hearing. As a natural visual language, advocates for the use of ASL point to the ability of very young infants to develop the basics of ASL, just as a hearing child would naturally pick up the basics of a spoken language. This early groundwork of language fosters fluency, literacy, social skills development and later academics.

ASL is associated with the Deaf culture including the history, language and a society of a group of people that see themselves as complete and distinct in their uniqueness. Within the Deaf culture exists Deaf humor, Deaf theater and associations for Deaf athletes to name a few. Many in the Deaf community do not believe they are disabled in anyway. They believe deafness to be a distinct quality of an individual and are proud of it. Some families find it immensely helpful to join together with one or more Deaf adults to introduce ASL and Deaf culture to their child and family.

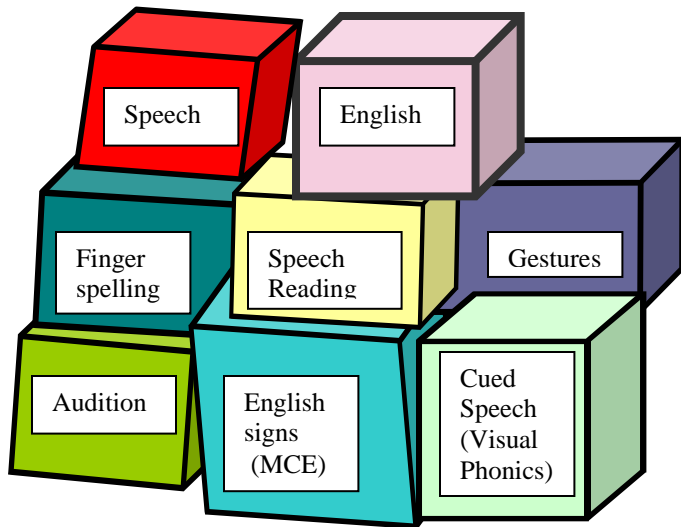
Why not to choose this option?

In order for a deaf child to be accepted in the Deaf community, she or he must be able to communicate in ASL. More than ninety percent of children with a hearing loss are born into families with hearing parents. Thus, the native language in the home of these children is English or another spoken language. In order for a child to become fluent in ASL, he or she must be immersed in a native language and families choosing Bi-Bi must be committed to finding a way to bring ASL into the home. As ASL is a distinct, complex language, the acquisition of fluency in the language can take several years of intense training for adults. The services of such Deaf mentors are not always available to families. Another perceived disadvantage of the use of ASL and the Bi-Bi communication option is that the child is then believed to be set apart from the larger, hearing society. The ability to associate with relatives, neighbors, coworkers – any non-signing person – is thought to be hindered.

Total Communication

Total communication is an approach of communication and education for children with hearing loss that uses a combination of communication options, including oral and manual techniques. In this option, children and families are encouraged to use a spectrum of communication techniques. Manually Coded English (MCE), speech reading, speech and use of residual hearing , cued speech, natural gestures and body language are all encouraged. Personal

amplification (hearing aids, FM systems, cochlear implants) are considered important in most total communication programs as children are encouraged to make maximum use of their



residual hearing. Initially, ASL was not included in total communication programs, as the importance of learning English as the first language was stressed. In recent years, however, as ASL has gained more respect in educational settings, this language is being introduced into more total communication programs as a second language.

Manually Coded English (MCE) is a system of signs (many of which are borrowed from ASL) presented in word order that are based on words as opposed to conceptual meaning. MCE is a visible representation of spoken English and, therefore, it is not a language. Speech reading, a technique by which a person attempts to understand speech

by watching the speaker's mouth and facial expressions, is encouraged in most Total Communication programs. Cued speech is a visual code based on the sounds of words that can be used in TC programs to enhance speech reading or literacy development.

Family Responsibility

Preferably all family members and caregivers should learn the chosen sign language system in order for the child to develop age-appropriate language and communicate fully and naturally with his/her family (and within the child care setting if there is no at-home parent). It should be noted that a parent's acquisition of sign vocabulary and language is a long term, ongoing process. As the child's expressive sign language broadens and becomes more complex, so too should the parents' in order to provide the child with a stimulating language learning environment. The family is also responsible for encouraging consistent use of amplification.

Parent/Caregiver Training

Parents must consistently sign while they speak to their child (simultaneous communication). Sign language courses are routinely offered through many community colleges and other adult education providers. Many books and videos are widely available. To become fully fluent, signing must be used consistently and become a routine part of daily family communication.

Why choose this option?

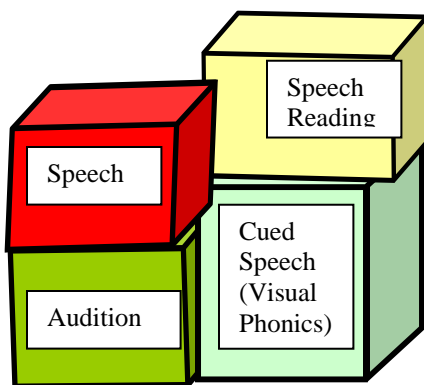
Children with some residual hearing may benefit from the combination of the visual code that closely matches what is being said. Also, MCE systems are generally easier for adults to learn than ASL. This is because the sign systems are not languages, and use the same grammatical structure and rules of spoken English. In addition, the exact visual representation of English has been believed to facilitate the later learning of the English written word. Finally, taking advantage of all possible communication techniques is considered least restrictive by advocates.

Why not choose this option?

One of the disadvantages of the Manually Coded English systems is that as children become proficient in the use of this communication method, they begin to cut corners in an attempt to increase the speed of signing. Many times, the result is something that resembles Pidgin English or a combination of ASL and MCE. Also, as each suffix, prefix, etc. is added, signing can become monotonous and tiresome. Thus opponents will argue that MCE systems emphasize grammar above communication – an emphasis that is not natural for young children. Most adults with hearing loss who grew up with MCE do not continue to use these systems on a daily basis. If they continue to sign, they will often switch to ASL. Also, availability of interpreters and interpreter certification programs for MCE systems can be a problem.

For families that speak a language other than English in their home, (i.e., Spanish, Creole), the use of MCE systems requires the parents to become fluent in a second language (English) at the same time that they are trying to teach their child a visual sign system. Finally, since Total Communication is not a standardized approach, early intervention and school programs using this approach may differ widely in communication features emphasized, goals and objectives of the program, and support services and resources offered.

Cued Speech



Cued Speech is a system of eight hand shapes that represent groups of consonant sounds and four hand placements that represent groups of vowel sounds used in combination with the natural lip movements of the speaker. The hand shapes and placements are grouped in sets that do not look alike on the lips, to make speech visible and clear to the cue-reader. R. Orin Cornett, Ph.D. developed the system in 1965 to make it possible for deaf children to acquire naturally, in their homes, the language they will eventually be expected to read

and write. Cued Speech has been adapted for use in more than 50 spoken languages. Cued Speech is not a language; it conveys the language, including the vocabulary, syntax, and grammar, that is being spoken. Parents of young deaf children are encouraged to use voice when they cue, to take advantage of any residual hearing their children have; however, transliterators who cue for students in the classroom, do not use voice. The system has been used successfully with children who have no residual hearing. Cued speech has also been called Visual Phonics, because of the visual representation of all of the phonetic elements of speech. Cued speech is used as a tool to assist with speech reading spoken languages. This system is believed to encourage the development of reading or literacy through encouraging a child to learn the spoken language as his or her first language. Thus, Cued speech consists of four main communication features: Cued speech hand shapes, speech reading, speech, and the use of residual hearing. Use of personal amplification such as hearing aids, FM systems, or cochlear implants are also important with this approach.

Family Responsibility

Parents are the primary teachers of cued speech to their child. They are expected to cue at all times while they speak. Consequently, at least one parent (and the primary caregiver if there is

not an at-home parent), and preferably all caregivers must learn to cue fluently for the child to develop age-appropriate speech and language.

Parent/Caregiver Training

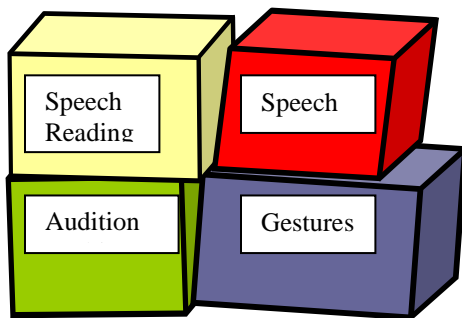
Cued speech can be learned through classes taught by trained teachers or therapists. Although the hand shapes can be learned during a long weekend training session, a significant amount of time must be spent using and practicing cues to become proficient.

Why choose this option?

The advantages of cued speech are many. Many parents find it fairly easy to learn cued speech in a short time as they are not required to learn a completely new language. Intensive 3 to 7 day workshops will equip an individual with enough knowledge to begin to use cued speech. Continued use and practice over several months to a year will often render proficiency with use of this communication option. In learning to read and write, children are able to phonetically sound out words. Cued speech has been adapted to 52 other languages and dialects, thus allowing children to learn a foreign language and to appreciate accents. In addition, the rhyme and rhythm of English, idiomatic expressions and tongue twisters can all be appreciated by individuals who use this technique. And finally, Cued speech seems to help individuals become better speech readers even when cueing is not being used.

Why not to choose this option?

This technique is relatively new (since 1966) and has been slow to capture interest. Thus, in many regions around the country, cued speech services are very difficult to access. Classroom programs are concentrated in select areas of the country and are not widespread. Often, trained Cued speech transliterators (since it is not a language they are not called interpreters) are not available. In addition, some people have great difficulty thinking phonetically and do not become proficient in using this option. Cued speech has no similarities to American Sign Language and, therefore, this option does not prepare children and their families to interact with members of the Deaf community. Finally, the technique looks very different from sign language, causing some users (particularly teens and pre-teens) to be concerned about using Cued speech in public.



Auditory-Oral

The Auditory-Oral option emphasizes maximum use of residual hearing through technology (hearing aids, FM systems, cochlear implants) and auditory training to develop the speech and communication skills necessary for full involvement in the hearing society. The focus of this option is to use the auditory channel to acquire speech and oral language and is based on the assumption that most children with hearing loss can be taught to listen and speak with early intervention and consistent training to develop their hearing potential. Unlike the Auditory-Verbal option, the Auditory-Oral option includes the use of speech reading and natural gestures. Manual forms of communication, such as Manually Coded English and American Sign Language, are not encouraged. Natural gestures and body language are accepted. Thus, the Auditory-Oral option consists of four main communication

features: speech, audition, speech reading, and gestures or body language. The Auditory-Oral option relies on the user to have amplified residual hearing of a sufficient enough degree to allow the development of an auditory feedback loop (perceiving one's own voice which aids in monitoring speech production). The greater the amount of residual hearing an individual has the better the chance for success with the Auditory-Oral option. A very important key to the potential success of Auditory-Oral option is optimal amplification of residual hearing or use of a cochlear implant. Thus, a strong working relationship with an audiologist is vital. Speech reading is an important communication feature in the Auditory-Oral option. In the best environment (good lighting, etc.) only approximately 40% of the English sounds are visible. Much of the meaning of conversation is deduced through context and guessing based on world knowledge and conceptual and syntactic language proficiency. The ability to speech read has been shown to be unrelated to intelligence or motivation. Due to shifting dynamics of conversation between speakers or in a group discussion classroom situation, it can be very difficult to keep up with the conversation, even for a very talented speech reader.

Family Responsibility

Since the family is primarily responsible for the child's language development, parents are expected to incorporate learning techniques (learned from therapists) into the child's daily routine and play activities. Thus, if there is no at-home parent, the primary caregiver will have the responsibility of incorporating these techniques into the child's daily routine. In addition, the family is responsible for ensuring consistent use of optimal amplification. Consistent auditory input is required for a child to develop speech and language skills maximally in the Auditory-Oral option.

Parent/Caregiver Training

Parents need to be highly involved with the child's early interventionist, therapists, or teachers, to carry over learning techniques to the home and create an optimal "oral" learning environment. Every effort must be made to incorporate these activities and environmental requirements into the child care situation if there is no at-home parent. The learning techniques emphasize development of listening and language skills.

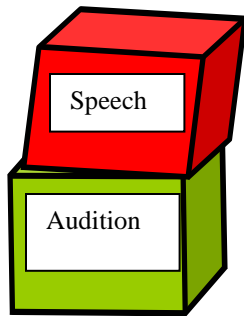
Why choose this option?

The Auditory-Oral option teaches the child to rely on spoken language (such as English or the family's native language) and speech reading. If the child is successfully able to master the Auditory-Oral option, he or she will be able to communicate with the general public, and to blend into the family using the family's native spoken language. With the Auditory-Oral option, the family can continue to use the language that is spoken in the home and is not required to learn a new language, visual system, or code.

Why not choose this option?

Children with certain types and degrees of hearing loss may or may not be successful at using their residual hearing to learn speech depending on their degrees of types of hearing loss and/or styles of learning. The child and family can become frustrated if the child's individual characteristics are found to be incompatible with this approach. Children may undergo hours of speech and language therapy and make slow progress. Careful monitoring of language and speech development is necessary and as with all other communication options, a parental

willingness to add communication features to enable the child to attain success in communication development is needed if a lack of progress in language development becomes evident.



Auditory-Verbal

The primary objective of the Auditory-Verbal option is to “equip the child to integrate into classrooms and society at large.” This communication option uses the child’s residual hearing, hearing technology, and teaching strategies to encourage children to develop listening skills to enable them to understand spoken language through amplified hearing or cochlear

implants in order to communicate through speech. The emphasis is on development of speech and language through auditory pathways, or hearing. Speech reading, signing, and natural gestures and body language are discouraged. Thus, the Auditory-Verbal option consists mainly of two communication features: audition and speech, with the use of residual hearing with technology and amplification being a vital component.

In the Auditory-Verbal option, the child is expected to rely on audition alone during specific teaching times. One to one teaching with a therapist trained in the Auditory-Verbal options with parents present, and then daily one to one instruction time with the parents, is vital. Use of the hand cues during formal teaching times have been used in the Auditory-Verbal option. These hand cues may consist of one or more of the following techniques: the therapist, parent, or caregiver covering his/her mouth when the child is looking directly at the adult’s face; the adult moving his or her hand toward the child’s mouth in a non-threatening and nurturing way as a prompt for vocal imitation or as a signal for turn taking; and the adult “talking through” a stuffed animal or other toy placed in front of the speaker’s mouth. Currently, emphasis is on more subtle signals such as encouraging the child to look at something other than the speaker’s mouth when speaking and naturally covering the mouth when speaking. It is not expected that the parents or caregivers would cover their mouths during all daily living activities outside of the direct instruction time.

Family Responsibility

Since the family is primarily responsible for the child’s language development, parents are expected to incorporate on-going training into the child’s daily routine and play activities. They must provide a language-rich environment, make hearing a meaningful part of all of the child’s experiences, and ensure full-time use of amplification or a cochlear implant.

Parent/Caregiver Training

Parents need to be highly involved with the child’s teacher and/or therapists in order to learn training methods and carry them over to the home environment.

Why choose this option?

As with the Auditory-Oral option, the Auditory-Verbal option teaches the child to rely on listening carefully to spoken language (such as English or the family’s native language) and use of hearing aids or cochlear implants is necessary for a child to be successful in the Auditory-

Verbal option. If the child is successfully able to master learning to listen, and thus develop speech and language, through Auditory-Verbal techniques, he or she will be able to communicate with the general public and blend into the family using the family's native language. With the Auditory-Verbal option, the family can continue to use the language that is spoken in the home and it not called upon to learn a new language, visual system, or code.

Why not choose this option?

The progress of a child with Auditory-Verbal techniques depends on (1) the child's age at diagnosis, (2) the working condition of the amplification, (3) the degree and type of hearing loss, (4) the natural learning style of the child, and (5) the level of the family's commitment to following through on using Auditory-Verbal techniques consistently on a daily basis. The earlier a child can begin to be exposed to Auditory-Verbal techniques, the better the prognosis for developing age-appropriate speech and language skills. In many cases, children with hearing loss using this communication option will not be able to process all language through auditory pathways. The child is expected to learn to fill in missing acoustic and language information from experience and familiarity with the language. In addition, some would say that the limited visual stimulation is unnatural and restrictive for these children.

**No matter which communication
features you select, remember
- it's not about hearing loss -
it's all about COMMUNICATION!**

A BRIEF LIST OF INTERNET RESOURCES ON COMMUNICATION

www2.pair.com/options

Deaf Education option web

www.agbell.org

Alexander Graham Bell Association

www.auditory-verbal.org

Auditory Verbal International

www.handsandvoices.org

Unbiased communication support for families

www.sign2me.net

Benefits of teaching sign language to babies

www.bconnex.net/~randys/

Animated American Sign Language Dictionary

www.jtc.org/index.htm

<http://www.jtc.org/Spanish/spindex.htm>

John Tracy Clinic (free services for Eng + Spanish families)

<http://clerccenter2.gallaudet.edu/KidsWorldDeafNet/e-docs/index.html>

"A Good Start: Suggestions for Visual Conversations with Deaf and Hard of Hearing Infants and Toddlers"

www.listenup.org/index.htm

Keeping hearing aids on young children

www.deafchildren.org

American Society for Deaf Children

www.oraldeaf.org

Oral Deaf Organization

Resources for parents English, Spanish,
French, Chinese

www.cuedspeech.com

Cued Speech Organization

www.nidcd.nih.gov/health/parents/index.htm

Documents to download" go to

"Young Children who are Hard of Hearing
Service Guidelines" "Communication Options"

Children Who Function as Different Types of Communicators

Approximately 30% of children born with hearing loss have another medical or physical condition that can affect the development of a variety of abilities. For these children, additional considerations may be required when determining communication features or styles that will encourage the child to have successful developmental outcomes.

The following chart lists behaviors in developmental order that are typical of children who communicate successfully through speech, sign, augmentative communication devices, coactive signs (signing on the child's hands or body due to a visual deficit), and also the behavior found in informal communication users.

Your audiologist, early intervention service providers, and other parents of children with hearing loss are valuable resources as you explore the advantages and disadvantages of each communication feature and how each feature can assist in the development of your child's communication, cognitive, and social skills.