Illinois State Board of Education

Special Education Department

Illinois Best Practices Guide For the Education of Students Who Are Deaf/Hard of Hearing/Deaf-Blind

This document is intended to provide non-regulatory guidance on the subject matter listed above. For specific questions, please contact the Illinois State Board of Education.

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Illinois Best Practices Guide For the Education of Students Who Are Deaf/Hard of Hearing/Deaf-Blind

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Introduction

Everything an individual does or a society accomplishes has communication at its foundation. When a child's ability to communicate is compromised by a hearing impairment, every effort must be expended to bridge that communication gap. This advisory offers an overview of the response to the needs of deaf and hard of hearing (DHH) students, from diagnosis to the provision of programs and services tailored to each DHH student's specific needs.

"Deaf and hard of hearing students have one thing in common: their universal need for communication, from which all…educational determinations should flow" (Siegel, 2000). This includes complete auditory and/or visual access in all educational environments. When making educational decisions, the communication needs of a student who is DHH need to be identified and strongly considered. Access to related services, technology, accommodations, and modifications in the educational setting, however, does not guarantee successful access to all aspects of communication and language to foster social, emotional, and academic development.

Students who are DHH need to be able to communicate with their school peers and the school personnel to whom they are assigned. This concept of "direct communication" with peers and school personnel was incorporated into the Individuals with Disabilities Education Act (IDEA) to ensure greater opportunities for successful peer and personnel interaction. Per 34 CFR 300.324(a)(2)(iv),

> "Consider the communication needs of the child, and in the case of a child who is deaf or hard of hearing, consider the child's language and communication needs, opportunities for direct communications with peers and professional personnel in the child's language and communication mode, academic level, and full range of needs, including opportunities for direct instruction in the child's language and communication mode."

The U. S. Department of Education published guidance (1992) for policies regarding the education of students who are DHH. This policy guidance explained that children who are DHH need "direct and meaningful communication with peers and teachers." Without direct communication, the policy states, the educational program is not providing the Free Appropriate Public Education (FAPE) required by law. For children who communicate using American Sign Language or Cued Speech, this means that best practice is the ability of their peers, teachers, speech and language pathologists, counselors, social workers, and psychologists to be proficient in American Sign Language (ASL) or Cued Speech. It is also beneficial for the student's peers to be proficient in ASL. Support for each student's language and communication development is paramount to the student's success with consideration for the student's preferred mode of communication.

A. Identification of Hearing Loss

The Child Vision and Hearing Test Act regulations, 77 Illinois Administrative Code (IAC) 675.110, administered by the Illinois Department of Public Health (IDPH), requires that hearing screening services be provided annually for all preschool children three years of age or older in any public or private educational program or licensed child care facility. Hearing screening services in public, private, and parochial schools are to be provided annually for all students in kindergarten, and grades 1, 2, and 3 as well as all special education students. After grade 3, hearing screening services are provided annually for teacher referrals and transfer students who have not been previously screened. Hearing screening is recommended in grades 4, 6, 8, 10 and 12.

To assure a comprehensive "child-find" follow-up system, case findings of the IDPH, in conjunction with local special education programs, should adhere to specific and consistent procedures. Information from the point of identification (hearing screening failures) should be appropriately transferred to the supervisor of programs for students who are DHH. This information is usually provided via a copy of the IDPH audiogram form completed by an IDPH certified audiometric technician. The educational screening should take place as soon as possible in the follow-up process. Educational screening is defined in 77 IAC 675.20 as -

> "… a review of the student's current grade placement; classroom functioning level; achievement scores; teachers' ratings of classroom performance regarding attention and concentration, reading, arithmetic, spelling, oral language and written language skills; and teachers' descriptions of oral and written language performance, ability to hear in the classroom, and speech development."

After a student is diagnosed as DHH, a specialized team comprised of professionals with expertise in hearing loss and communication with students who are DHH, should conduct all initial case studies and re-evaluations. This diagnostic process should include information from an educational audiologist, a social worker, a psychologist, a speech and language pathologist, an educator of students who are DHH, and other professionals deemed necessary by the individual situation of the student.

B. Types of Hearing Loss

Hearing loss can happen in any part of the ear. This includes the outer ear, middle ear and the inner ear. Hearing loss can occur in one of these places or in more than one place. Each type of hearing loss has a different name and has different possible treatments.

Conductive Hearing Loss
A conductive hearing loss involves the outer and/or middle ear. A conductive loss prevents sound from moving effectively through the outer and/or middle ear to the inner ear. Sounds that normally enter the canals are reduced.

Causes of conductive hearing loss:

- Atresia – absence of the opening to the ear canal
- Malformations of the middle ear – including otosclerosis, which is a bone growth disorder
- Middle ear infections (otitis media) or fluid in the middle ear
- Obstruction of the ear canal by ear wax or foreign objects
- Microtia – underdeveloped pinna

Treatment of conductive hearing loss:
Most conductive hearing losses can be treated and corrected with medication, surgery, or by amplifying sound through a hearing aid (conventional or osseointegrated implant (e.g., BAHA or Ponto). Hearing aids can be very effective in compensating for a conductive hearing loss when surgical or medical treatment is not an option.

Sensorineural Hearing Loss
This type of hearing loss is the most common permanent hearing loss in students and involves the inner ear or the auditory nerve. Sensorineural hearing loss results when tiny hair cells inside the cochlea are not fully formed or they are damaged. It may also occur when the auditory nerve does not function properly, though this is less common.

Some causes of sensorineural hearing loss:

- Abnormal development of the inner ear structures during gestation
- Genetic or family history of hearing loss
- Damage to the inner ear or auditory nerve from illness before birth
- Maternal Rubella
- Toxoplasmosis
- Cytomegalovirus (CMV)
- Meningitis
- Lack of oxygen at birth
- Treatment with ototoxic medications
- Quinine that reaches toxic levels
- Premature birth with NICU admission
- Noise induced
- Head injuries
- Rh incompatibility
- Measles

Treatment of sensorineural hearing loss:
Sensorineural hearing loss is generally permanent and cannot be treated by medication or corrective surgery; however, the most effective way to compensate for this type of hearing loss is utilization of hearing aids or cochlear implants.

Several factors (social, emotional, or audiological) affect the decision for a student to use hearing aids or get a cochlear implant. Some do neither. Depending on the degree of hearing loss, hearing aids can be very effective in providing students improved sound awareness; however, students with severe to profound hearing loss typically do not understand speech clearly, even with amplification. There are standard audiological considerations for choosing between hearing aids or cochlear implants.

Auditory Neuropathy
Auditory neuropathy, also known as auditory dyssynchrony or auditory neuropathy spectrum disorder (ANSD), is a type of hearing loss in which the outer hair cells in the cochlea are present and functional, but sound is not transmitted effectively via the auditory nerve to the auditory cortex of the brain.

Mixed Hearing Loss
A mixed hearing loss occurs in both the outer/middle ear and in the inner ear. It is a combination of a conductive hearing loss and sensorineural hearing loss.

Unilateral Hearing Loss
A unilateral hearing loss occurs in only one ear. It can be conductive, sensorineural, or mixed. Although a student with this loss has good hearing in one ear, he or she may have difficulty knowing where sound is coming from hearing in noisy environments and hearing on the affected side. Any degree of hearing loss is an educational concern. Oyler, Oyler, and Matkin (1987) reported unilateral losses are generally identified at a later age, and the educational impact of this type of hearing loss is often overlooked.

Students with a unilateral hearing loss can process speech and generally will develop near normal speech and language skills. They may exhibit poor localization and poor speech discrimination abilities, particularly in environments with adverse listening conditions (typical classroom settings). They may also demonstrate below average receptive language skills.

A student with unilateral hearing loss has a higher risk for academic failure than the general school population. This is especially true for students who experienced their hearing loss at an early age. Preferential seating may help; however, additional efforts/supports may be needed to overcome the listening difficulties they encounter in the educational setting.

Progressive Hearing Loss

A progressive hearing loss occurs when a student loses his or her hearing over time. A baby may be able to hear at birth but may gradually lose hearing over time. If a baby passes the newborn hearing screening, this does not ensure that he or she will always have normal hearing. Gradual conductive, sensorineural, or mixed hearing loss may occur any time after birth.

Fluctuating Hearing Loss

This type of hearing loss refers to hearing levels that change or fluctuate. A student may have better hearing on some days and poorer hearing on other days. A common cause of fluctuating hearing loss is otitis media, or a middle ear infection with fluid. There are also some conditions such as Enlarged Vestibular Aqueduct that cause hearing fluctuations.

Occluding Wax

Occluding wax can cause a fluctuating hearing loss. Wax can build up in the ear canal and block sound from reaching the inner ear, causing a drop in hearing. Hearing is usually worse when the ear is completely occluded with wax. This hearing loss can fluctuate from day to day or week to week as even a small opening in the wax can allow some sound to pass through. Once the wax has been removed, hearing is restored to normal as this is not a permanent type of hearing loss.

A student with a hearing loss due to occluding wax can miss up to 25-40 percent of the speech signal on any given day. The degree of difficulty experienced will depend on the noise level in the room, distance from the speaker, and the configuration of the hearing loss on that day. When the ear becomes totally occluded, the student may miss 50 percent or more of classroom directions and discussions, especially when voices are faint or the speaker is not in the line of vision. The student may begin to experience a reduction in self-esteem and may be perceived as "hearing when he/she wants to," "daydreaming," or "not paying attention." The student may begin to have increasing difficulty suppressing background noise which makes the learning environment stressful. This student may be more fatigued than his or her peers due to the listening effort required.

C. Auditory Processing Disorder

Auditory Processing Disorder (APD) is an auditory deficit that is <u>not</u> the result of a hearing loss or other higher order cognitive, language, or related disorder. In its very broadest sense, APD refers to how the central nervous system uses auditory information.

Students with APD may exhibit a variety of listening and related complaints. For example, they may have difficulty understanding speech in noisy environments, following directions, and discriminating among similar sounding speech sounds. Sometimes they may behave as if a hearing loss is present, often asking for repetition or clarification. In school, students with APD

may have difficulty with spelling, reading, and understanding information presented verbally in the classroom. Not all language and learning problems are due to APD, and all cases of APD do not lead to language and learning problems. APD cannot be diagnosed from a checklist of symptoms. No matter how many symptoms of APD a student may have, only careful and accurate diagnostics can determine the underlying cause.

The actual diagnosis of APD must be made by an audiologist. Most of the tests for APD require that a student be at least seven or eight years of age because the variability in brain function is so marked in younger children that test interpretation may not be possible. APD may manifest itself in a variety of ways; therefore, it is necessary to determine the type of auditory deficit a given student exhibits so that individualized management and treatment activities may be recommended that address specific areas of difficulty.

Treatment of APD must be highly individualized and deficit-specific. It generally focuses on three primary areas: changing the learning or communication environment, recruiting higher order skills to help compensate for the disorder, and remediation of the auditory deficit itself. There is no one treatment approach that is appropriate for all children with APD; the degree to which an individual child's auditory deficits will improve with therapy cannot be determined in advance according to the American Speech-Language-Hearing Association (ASHA). For more information on APD, please use the following link to the ASHA website: Understanding Auditory Processing Disorders in Children

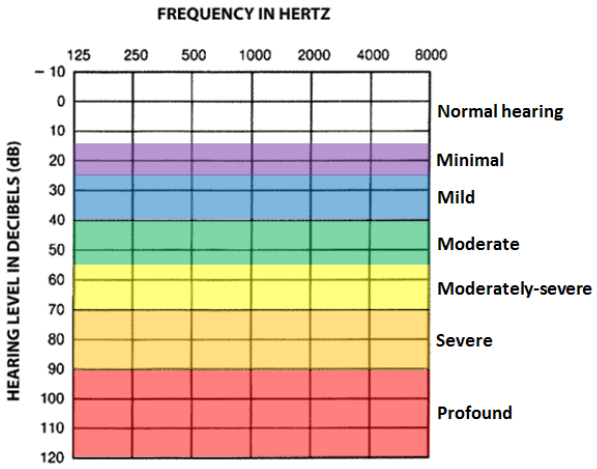
D. Range of Hearing Loss and Potential Effects

The following charts were created by Karen Anderson and Noel Matkin and help to explain what sounds a student may or may not hear without amplification based on the degree of hearing loss. It identifies how amplification may help a student and the potential effects the hearing loss might have on a student's ability to hear and recognize spoken conversation and environmental sounds. This is only a guide**.**

Degree of Loss	Decibels	Potential Effects
Minimal	16 - 25 dB	A minimal loss of some sounds. May have difficulty hearing quiet or distant conversations, especially in noisy environments.
Mild	26 - 40 dB	Without amplification, the student can hear most conversations up close and in quiet environments but is likely to miss parts of words. The student may appear to be "hearing when he or she wants to." Amplification and lip-reading may supplement

		understanding of what is said. The student may require support services to develop language.
Moderate	41 - 55 dB	Without amplification, the student will have difficulty hearing spoken conversation. 50 – 100 percent of spoken conversation may be missed. Proper amplification and intervention should enable the student to hear and recognize all sounds. The student will require support services to develop language.
Moderately Severe	56-70 dB	Without amplification, only loud speech is audible. Early identification, early amplification, and intervention are necessary to develop speech and language. The student will require support services to develop language.
Severe	71 - 90 dB	Without amplification, the student may hear loud voices and sounds close to the ear. With early and consistent use of hearing devices, many students will be able to detect sounds such as speech. The student will require support services to develop language.
Profound	91 dB +	Without amplification, the student may perceive sounds as vibrations. The student will require support services to develop language.
Unilateral	One side	May have difficulty hearing faint or distant spoken conversations. Will usually have difficulty knowing where sounds are coming from. May have difficulty understanding spoken conversations occurring near the ear with the hearing loss.

Audiogram of Ranges of Hearing Loss

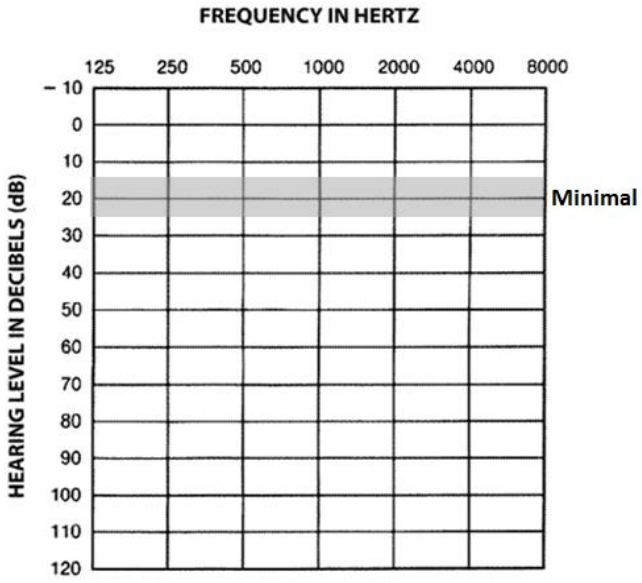


Minimal Hearing Loss

MINIMAL (16-25 dB) HEARING LOSS		
Possible Impact on the Understanding of Language and Speech	**Possible Social Impact**	**Potential Educational Accommodations and Services**
• Impact of a hearing loss that is approximately 20 dB can be compared to ability to hear when index fingers are placed in one's ears. • Student may have difficulty hearing faint or distant speech. At 16 dB, student can miss up to 10 percent of speech signal when teacher is at a distance greater than three feet. • A 20 dB or greater, hearing loss in the better ear can result in absent, inconsistent, or distorted parts of speech, especially word endings (s, ed) and sounds that are not emphasized. • Percent of speech signal missed will be greater whenever there is background noise in the classroom, especially in the elementary grades when instruction is primarily verbal and younger students have greater difficulty listening above the noise. • Young students have the tendency to watch and copy	• May be unaware of subtle conversational cues which could cause student to be viewed as inappropriate or awkward. • May miss portions of fast-paced peer interactions that could begin to have an impact on socialization and self-concept. • Behavior may be confused with immaturity or inattention. • May be more fatigued due to extra effort needed to understand speech.	• Noise in typical classroom environments impede student from having full access to teacher instruction. Will benefit from improved acoustic treatment of classroom and sound-field amplification. • Favorable seating necessary. • May often have difficulty with sound/letter associations and subtle auditory discrimination skills necessary for reading. •May need attention to vocabulary or speech, especially when there has been a long history of middle ear fluid. •Depending on loss configuration, may benefit from low power hearing aid with personal FM system. •Medical management necessary for conductive losses. •In-service on the impact of a "minimal" 16 – 25 dB hearing loss on language development,

the movements of other students rather than attending to auditorily fragmented teacher directions.		listening in noise and learning, required for teacher.

Audiogram of a Minimal Hearing Loss

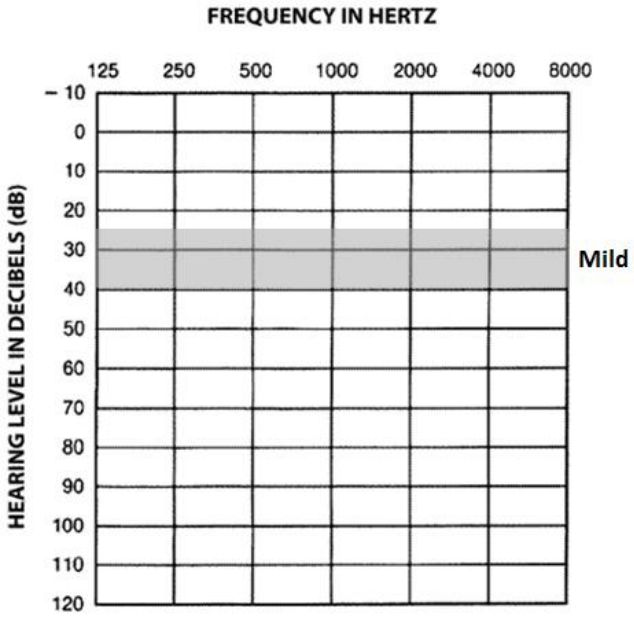


Mild Hearing Loss

MILD (26-40 Db) HEARING LOSS		
Possible Impact on the Understanding of Language and Speech	**Possible Social Impact**	**Potential Educational Accommodations and Services**
• A 26 – 40 dB hearing loss causes greater listening difficulties than a "plugged ear" loss. • Student can "hear" but misses fragments of speech leading to misunderstanding.	• Barriers begin to build with negative impact on self-esteem as student is accused of "hearing when he or she wants to," "daydreaming," or "not paying attention."	• Noise in typical class will impede student from full access to teacher instruction. • Will benefit from hearing aids and use of a desktop or ear level FM system in the classroom.

• Degree of difficulty experienced in school will depend upon noise level in the classroom, distance from the teacher, and configuration of the hearing loss, even with hearing aids. • At 30 dB, student can miss 25-40 percent of the speech signal. • At 40 dB, student may miss 50 percent of class discussions, especially when voices are faint, or the speaker is not in line of vision. • Will miss words that are not emphasized and consonants, especially when a high frequency hearing loss is present. • Often experiences difficulty learning early reading skills such as letter/sound associations. • Student's ability to understand and succeed in the classroom will be substantially diminished by speaker distance and background noise, especially in the elementary grades.	• May believe he or she is less capable due to difficulties with understanding in class. • Student begins to lose ability for selective listening and has increasing difficulty suppressing background noise, causing the learning environment to be more stressful. • Student is more fatigued due to effort needed to listen.	• Needs favorable acoustics, seating, and lighting. • May need attention to auditory skills, speech, language development, speech reading, and/or support in reading and self-esteem. • Amount of attention needed is typically related to the degree of success of an intervention provided prior to six months of age to prevent language and early learning delays. • Teacher in-service on impact of a 26 – 40 dB hearing loss on listening and learning should convey that it is often greater than expected.

Audiogram of a Mild Hearing Loss

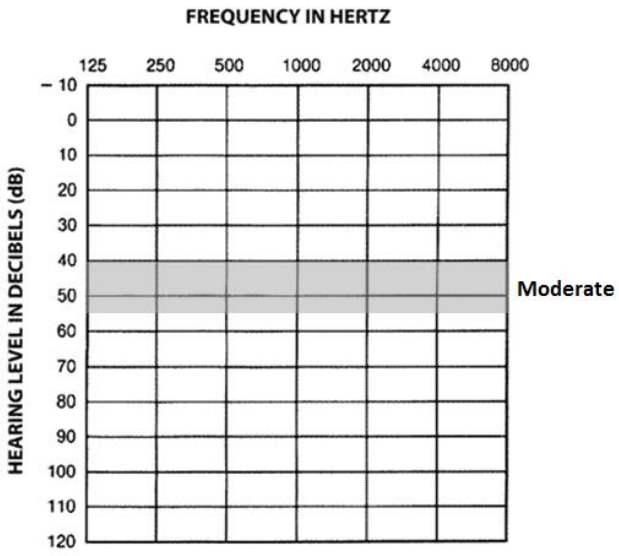


Moderate Hearing Loss

MODERATE (41-55 dB) HEARING LOSS		
Possible Impact on the Understanding of Language and Speech	**Possible Social Impact**	**Potential Educational Accommodations and Services**
• Consistent use of amplification and language intervention prior to age six months increases the probability that the student's speech, language, and learning will develop at a normal rate. • Without amplification, student may understand conversation at a distance of 3-5 feet, if sentence structure and vocabulary are known.	• Barriers build with negative impact on self-esteem as student is accused of "hearing when he/she wants to," "daydreaming," or "not paying attention." • Communication will be significantly compromised with this degree of hearing loss if hearing aids are not worn. • Socialization with peers can be difficult, especially in	• Consistent use of amplification (hearing aids and FM) is essential. • Needs favorable classroom acoustics, seating, and lighting. • Consultation/program supervision by a specialist in childhood hearing impairment to coordinate services is important.

• The amount of speech signal missed can be 50 percent or more with 40 dB loss and 80% or more with 50 dB loss. • Without early amplification the student is likely to have delayed or disordered syntax, limited vocabulary, imperfect speech production, and flat voice quality. • Addition of a visual communication system to supplement audition may be indicated, especially if language delays and/or additional disabilities are present. • Even with hearing aids, student can "hear" but may miss much of what is said if classroom is noisy or reverberant. • With personal hearing aids alone, ability to perceive speech and learn effectively in the classroom is at high risk. • A personal FM system to overcome classroom noise and distance is typically necessary.	noisy settings such as cooperative learning situations, lunch, or recess. • May be more fatigued than classmates due to effort needed to listen.	• Depending on early intervention success in preventing language delays, special academic support will be necessary if language and educational delays are present. • Attention to growth of oral communication, reading, written language skills, auditory skill development, speech therapy, and self-esteem likely. • Teacher in-service required regarding communication access and peer acceptance.

Audiogram of a Moderate Hearing Loss

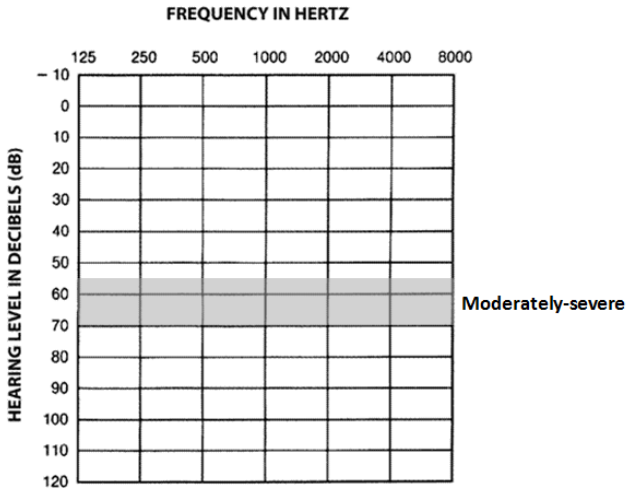


Moderately Severe Hearing Loss

MODERATELY SEVERE (56-70 dB) HEARING LOSS		
Possible Impact on the Understanding of Language and Speech	**Possible Social Impact**	**Potential Educational Accommodations and Services**
• With use of amplification, can usually "hear" people talking around him or her, but will miss fragments of what is said resulting in difficulty in situations requiring verbal communications in both one-to-one and groups. • Without amplification, conversation must be very loud to be understood; a 55 dB loss can result in missing up to 100 percent of	• Communication will be significantly affected, and socialization with peers can be difficult. • Greater difficulty socializing, especially in noisy settings such as lunch, cooperative learning situations, or recess. • Tendency for reduced self-concept and social immaturity may contribute to a sense of	• Consistent use of amplification (hearing aids, FM) is essential. • May benefit from frequency transposition hearing aids depending on loss configuration. • May require intense support in language skills, speech, auditory skill development, reading, and writing.

speech information without working amplification. • If hearing loss is not early identified and appropriately addressed, delayed spoken language, syntax, reduced speech intelligibility, and flat voice likely. • Age when amplified, consistency of hearing aid use, and success of early language intervention strongly tied to speech, language, and learning development. • Use of visual communication system often indicates if language delays and/or additional disabilities are present. • Use of a personal FM system will reduce the effects of noise and distance to allow increased auditory access to verbal instruction. With hearing aids alone, ability to understand in the classroom is greatly impacted by distance and noise.	rejection; peer in-service helpful.	• Consultation/supervision by a specialist in hearing impairment important. • Use of sign language or a visual communication system by children with substantial language delays or additional learning needs may be useful to access linguistically complex instruction. • Note-taking, captioned films, etc. are needed accommodations. • Teacher in-service required.

Audiogram of a Moderately Severe Hearing Loss



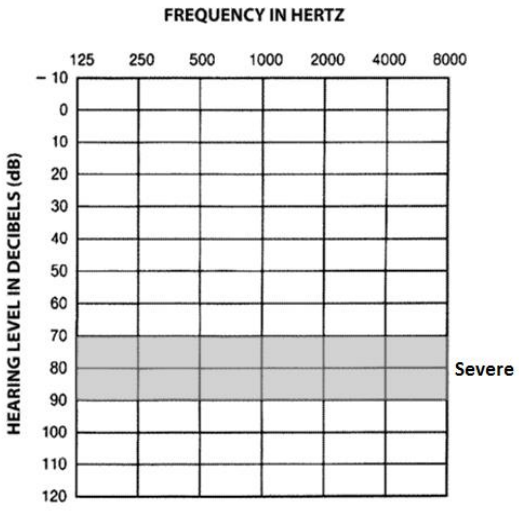
Severe and Profound Hearing Loss

SEVERE HEARING LOSS (71-90 dB)		
PROFOUND HEARING LOSS (91+ dB)		
Possible Impact on the Understanding of Language and Speech	**Possible Social Impact**	**Potential Educational Accommodations and Services**
• The younger the child is when he or she wears amplification consistently and a concentrated effort is made by parents and caregivers to provide rich language opportunities, the greater probability that speech, language, and learning will develop at a relatively normal rate.	• Communication may be minimally or significantly affected. • Socialization with hearing peers may be difficult. • Children in mainstream classroom may develop greater dependence on adults due to difficulty	• Whether a visual or auditory/oral communication approach is used, early and extensive language intervention, full-time consistent amplification use, and constant integration of the communication practices into the family will highly increase the probability that the student will become a successful learner.

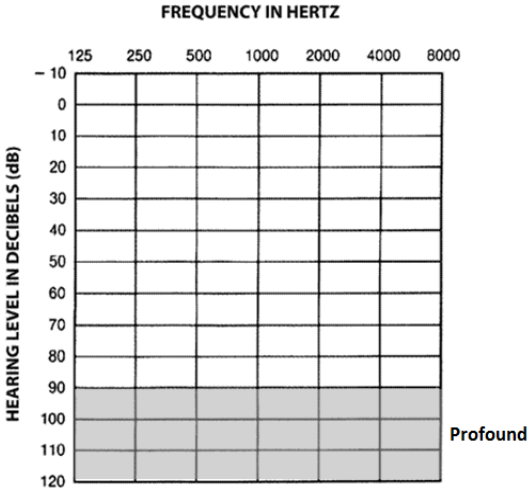
• Without amplification, may only hear loud noises within a distance of one foot from ear. • When amplified optimally, should detect many sounds of speech if presented from close distance or via FM. • Individual ability and early intensive intervention will determine the degree that sounds detected will be discriminated and processed by the brain into meaningful input. • Even with hearing aids, children with severe loss are typically unable to perceive all high-pitched speech sounds sufficiently to discriminate them, especially without the use of an FM. • May be a candidate for cochlear implants. The child with a profound loss will not be able to perceive most speech sounds without cochlear implants. Full access to language to be available visually through sign language or cued speech. • Full access to language to be available visually through sign language or cued	perceiving or comprehending oral communication. • Child may be more comfortable interacting with DHH peers due to ease of communication. • Relationships with peers and adults who have hearing loss can make positive contributions toward the development of a healthy self-concept and a sense of cultural identity.	• A child with a hearing loss that was identified late will have delayed language. This language gap is difficult to overcome and the educational program of a child with hearing loss, especially one with language and learning delays secondary to hearing loss, requires the involvement of a consultant or teacher with expertise in teaching children with hearing loss. • Depending on hearing loss, frequency transposition aids or cochlear implantation may be options for better access to speech. • If an auditory/oral approach is used, early training is needed on auditory skills, speech reading, concept development, and speech. • If culturally deaf emphasis is used, frequent exposure to deaf, ASL users is important. • Self-contained educational placement with other signing deaf or hard of hearing students (special school or classes) may be a least restrictive option due to

speech. Family members must be involved in child's communication mode from a very young age.		access to free-flowing communication. • Support services and the continual appraisal of access to communication and verbal instruction are required. • Note-taking, captioned films necessary; training in communication repair strategies helpful. • In-service training of mainstream teachers is essential.

Audiogram of a Severe Hearing Loss



Audiogram of a Profound Hearing Loss



E. Types of Hearing Tests

Working with an experienced pediatric audiologist is critical in getting valid test results of a young student's hearing. Assessment of hearing function in students can be easily accomplished with the broad range of testing types and techniques available to pediatric audiologists.

Hearing testing is done to find out how well a student can hear. Usually an audiologist will administer the testing. If a student does have a hearing loss, the audiologist and/or otolaryngologist may administer other tests to find out more specific information about -

- The **type of hearing loss**: Conductive, Sensorineural, or Mixed
- The **severity of the hearing loss**: Mild, Moderately Severe, Severe or Profound
- The **reason for the hearing loss**

The audiologist or otolaryngologist may discuss with the family the option of referral for genetic testing. The otolaryngologist may complete additional lab or imaging tests.

Pediatric audiologists employ multiple tests (described below) to assess hearing sensitivity. Some procedures are better suited for a particular student based on age, ability to participate in the testing, medical condition of the student, etc. A typical method of pediatric hearing assessment employs the "cross-check principle." That is, the results of a single test are cross-checked by one or more independent test measures. The audiologist chooses and performs different tests to get the most accurate determination of a student's hearing. First proposed by Drs. James Jerger and Deborah Hayes, two well respected audiology researchers, the "cross-check principle" is particularly useful in pediatric evaluations as cross-checks of behavioral test results and auditory evoked potentials (Hall, 2016).

Otoacoustic Emissions (OAE) Testing (Also known as DPOAE or TEOAE)
A small probe is placed in the student's ear canal. A sound generated by the testing equipment is sent to the cochlea (located in the inner ear). If the hair cells in the cochlea are normal, an otoacoustic emission is generated and measured by the equipment. This test is not used if there is significant middle ear dysfunction (e.g. fluid or infection). If an emission is present, it suggests normal cochlear function and at worst, a mild hearing loss. If an emission is not present, then further testing is indicated.

This test is used for infants, for students who cannot respond to other types of hearing tests, and for students with severe disabilities. OAEs can be used regardless of a client's age at testing, as another way to cross-check test results, to help diagnose auditory neuropathy and to monitor hearing when an individual has had noise exposure

Auditory Evoked Potentials (AEPs) (Also known as Brainstem Audiometry Evoked Response or BAER, BSER, ABR, ASSR)
This test evaluates hearing status from the level of the outer ear through the lower brainstem. This test can be done if the student is quiet, sedated, or asleep. Electrodes are attached to the

student's head and sound is transmitted either through supra-aural headphones, insert earphones, or a bone oscillator. Sounds are presented and the electrodes measure how the student's brain responds. This test gathers specific information about the student's hearing at different pitches and loudness levels.

This test gives an approximation of the student's hearing sensitivity and is used for infants, for students who cannot respond to other types of hearing tests, and for students with additional severe disabilities.

Behavioral Observation Audiometry (BOA)
An audiologist observes the student's reaction to different sounds (e.g., speech or music) and loudness levels. Reactions may include a sucking reflex or behavioral change such as smiling, eye widening, or pausing. The test relies heavily on parent and provider interpretation; therefore, the test may only give an approximation of the degree of hearing loss.

This test can be used with some infants, for children who cannot respond to other types of hearing tests, and for children with additional severe disabilities.

Visual Reinforced Audiometry (VRA)
The child will either sit in a chair or on the lap of an adult in the sound booth. When the sound is introduced and the child turns his or her head in response, a visual reinforcement is used (e.g., a toy will light up). The child will learn to turn his or her head toward the toy in response to the sound, and this can be more of a reflex or intentional. Children naturally turn to the sound source and VRA uses that tendency. Earphones or insert phones may or may not be used for this test and is often done through sound field speakers. This test will give information about how a student hears different pitches at different loudness levels. Earphones or insert earphones are used to collect individual ear information. If sounds are presented through the sound field speakers, the information will reflect the better ear.

This test is used for infants, young children, and children who will not tolerate headphones or insert earphones.

Play Audiometry
This test is used with young children who will perform a task in response to when they hear a sound. The child may be rewarded for a correct response as motivation to continue. Examples of some of these tasks include stringing beads, building block towers, putting pegs into a peg board, putting pennies in a bank, or doing a puzzle. Earphones, insert earphones, or a bone oscillator are usually used with this test, but this can also be done through sound field speakers.

This test can provide information about how a child hears different pitches at different loudness levels. Earphones or insert earphones are used to collect individual ear information. If sound field speakers are used, the information will reflect the better ear.

Conventional Pure Tone Audiometry
Tones of different pitch and loudness levels are introduced to a student. The student will indicate if he or she heard the tone, usually by raising his or her hand. The tones are presented through earphones, insert earphones, or through a bone conduction oscillatory that works by sending signals through vibrations in the skull to the inner ear.

This test will give information about how a student hears different pitches at different loudness levels. Earphones or insert phones are used to collect individual ear information. If sound field speakers are used, the information will reflect the better ear.

This test is used with students (approximately 4-5 years of age and older) as well as adults.

Acoustic Immittance
Acoustic immittance is also known as impedance testing or tympanometry and may include acoustic reflexes. A probe is placed in the student's ear and a signal is presented. The signal can be a measured response to sound or change in pressure depending on what information the audiologist is trying to gather. The signal bounces off the eardrum and back to the probe and takes between 3-30 seconds per ear.

Tympanometry will chart the way the eardrum is moving which shows how the middle ear is functioning. It can help determine if there is a hole in the ear drum as well as help determine if there is fluid. This is part of one test that audiologists use to assess eardrum movement but is not always precise.

This test may be used with any student.

The information in this section was taken from "Children and Hearing Loss: Resource Notebook for Illinois Families" in Section 3, "Facts about Hearing Levels" found at https://www.choicesforparents.org/notebook

Real Ear Measurements (REM)

Audiology best practice guidelines state that probe microphone verification measures should be done to ensure that hearing aid gain and output characteristics meet prescribed targets for the individual (American Academy of Audiology, 2013).

The pediatric audiologist will place a small microphone via a probe in the ear canal with the same tip that is used to measure your student's hearing (a foam tip or an earmold). This generates an RECD (which stands for Real Ear to Coupler Difference) which measures the ear canal to ensure that the hearing aids do not overamplify sounds. Every time a student gets new earmolds, the RECD is measured to ensure that the hearing aids are always appropriately amplifying sounds.

Audiograms

An audiogram is a graph of the softest levels at which a student responds to sound. It is a picture of the results of a test that is administered by an audiologist. A student's audiogram will often be used to describe his or her hearing loss.

The audiogram shows two things: intensity and frequency. Intensity (loudness) is measured in decibels (dB). Loudness levels are located along the lines on the audiogram that are drawn up and down. Intensities usually go from -10 dB to 120 dB, with -10 dB being very quiet and 120 dB being very loud. Frequency, which is another word for pitch, is measured in Hertz (Hz). The different pitches are found along the lines drawn left to right on the audiogram. Pitches range from 125 Hz to 8000 Hz; 125 Hz is a very low-pitched sound and 8000 Hz is a very high-pitched sound.

As the audiologist tests a student's hearing, he or she will make marks using different symbols on the audiogram that represent the softest levels at which a student consistently responds. This level of sound is called the threshold. Looking at the point where the pitch and loudness lines cross reveals what loudness levels the student can detect at various pitches.

If the student is tested with earphones or insert phones, it is called Air Conduction Testing. Because sound is presented to each individual ear, information can be gathered about hearing in each ear separately. The symbols used to represent Air Conduction testing are an X for the left ear and an O for the right ear. Sometimes colors are used for all the different symbols: red for right and blue for left. If the student does not hear the sound at the loudest level of the audiometer (the machine used to test hearing), it may be indicated several different ways, with a NR (no response), a squiggly downward line or an arrow downward from the X or O.

If a student is tested using a bone conduction oscillator, it is placed behind the ear rather than in it. Different symbols will be used; the symbol ">" is used to show the left ear results and the symbol "<" indicates right ear results.

After the audiologist has information about various pitches, he or she will connect the symbols to make a line on the graph for each ear. This line is the configuration of the audiogram. Configurations vary due to each student's individual hearing loss. Sometimes configurations go somewhat straight across. These are called flat hearing losses. Some configurations will angle downward, either gently or sharply. These are called sloping losses. Professionals may use configurations to describe a student's hearing loss.

Due to the relationship of hearing and speech, an audiologist may try to get some additional information and may try to find out the softest level at which a student can perceive speech. This is called a speech detection threshold.

The audiologist may also try to find out the softest level at which a student understands speech. This is the speech reception threshold and is typically used in students older than 30 months. The audiologist may read a list of two syllable spondee words (such as baseball, hot dog, ice cream)

to the student and have the student repeat the words or point to a picture. This is usually recorded in decibels.

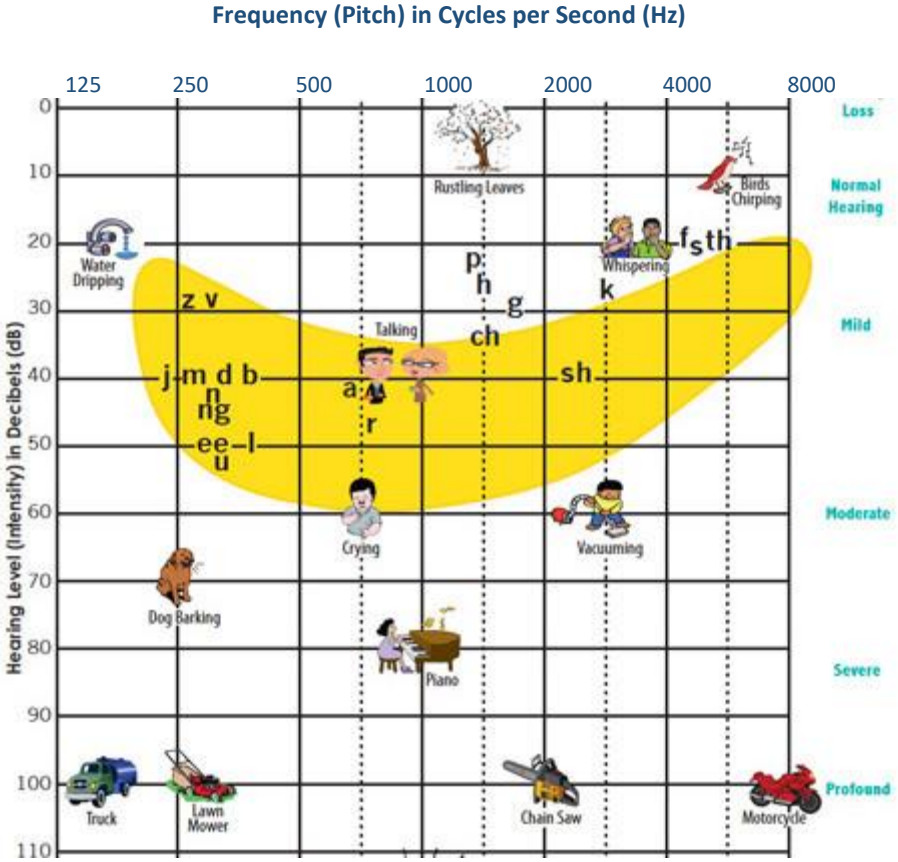
An audiologist may also test for word recognition and speech discrimination in simulated listening environments. It can also be done using the person's hearing aids or cochlear implants or hearing assistive technology (e.g., FM system) while listening to speech in a quiet or slightly noisy setting. A variety of stimuli are used with this type of test and it is usually recorded in percentages (how many words are repeated correctly).

Many of the speech sounds are made in the pitches between 250 and 4000 Hz and are spoken at a loudness of 20 to 60 dB. Sometimes an audiogram will have shading on it that resembles the shape of a banana and falls in between pitch and loudness levels (this is called the "speech banana"). This is put on the audiogram to show where speech sounds typically occur. If the audiologist fits a hearing aid on a student, she or he will try to make sure that the student can hear sounds in this area.

The audiologist may also use the audiogram to chart what sounds a student can hear with hearing aids or with his or her implants on. The softest sounds a student can hear while amplified is called the aided threshold. Many times, the letter A (hearing aids) or C (cochlear implants) will be the symbol used to represent aided thresholds. Ideally, these A's or C's will be within the banana lines.

Although a student's audiogram will be referred to often through the years and may even be used to describe a student's hearing loss, it is not a predictive measure. An audiogram can be compared to a growth chart. A growth chart will give some indication as to how tall the student may become as an adult, but it is not a precise indicator of eventual height. An audiogram can give an idea of what that student's usable (residual) hearing is but is not a precise indicator of how the student will use his or her hearing to learn speech or how the student will process sound ("Children and Hearing Loss: Resource Notebook for Illinois Families" found at https://www.choicesforparents.org/notebook).

Audiogram of Familiar Sounds



John Tracy Center https://www.jtc.org/audiogram-of-familiar-sounds/

F. Early Intervention Service Guidelines

Language is a complex system of communication relating symbols, rules, and experiences resulting in an indefinite number of possibilities. Most students who are DHH enter school with a significant language and vocabulary deficiency. Regardless of the student's language modality (spoken or signed), early intervention in language development is essential. Since language development is essential during early childhood, it is critical that children and parents receive intervention as soon as the hearing loss is diagnosed. A natural language, in an accessible mode, develops normally through age six, is compromised until puberty, and is rare thereafter. Language intervention and amplification (if possible) are essential services that ideally begin as soon as possible after identification of the hearing loss.

Early Hearing Detection and Intervention (EDHI)

EDHI is the practice of screening babies for hearing loss in the hospital after birth or no later than one month of age. All infants who do not pass their hearing screening should receive a diagnostic

evaluation no later than three months of age, and all infants with a hearing loss should be enrolled in early intervention services no later than six months of age (http://illinoissoundbeginnings.org/).

The Illinois Early Intervention (EI) Clearinghouse

The Illinois Early Intervention (EI) Clearinghouse identifies and collects research-based and best-practice early intervention information to share with families (https://eiclearinghouse.org/).

Child and Family Connections (CFC)

The CFC website explains that they are the regional intake agencies for children and families to enter the Illinois Early Intervention System. Families can determine which CFC they should access by looking up their zip code on the CFC listing (WIU Child and Family Connections http://www.wiu.edu/coehs/provider_connections/links/index.php).

Eligibility Criteria for Illinois Early Intervention

A child can be determined eligible for early intervention based upon developmental delay, a diagnosed physical or mental condition that typically results in developmental delay or is at risk of substantial delay based upon defined criteria. The criteria for early intervention due to an identified medical condition related to hearing loss resulting in high probability of developmental delay took effect January 23, 2008 with implementation of the 89 IAC 500. Appendix E.8. It states--

> "Hearing loss of 30 decibels (dB) or greater at any two of the following frequencies: 500, 1000, 2000, 4000, and 8000 Hertz (Hz) involving one or both ears, or hearing loss of 35 dB or greater at any one of the following frequencies: 500, 1000, and 2000 Hz involving one or both ears."

Early intervention CFC offices should ensure that evaluation is completed in all five developmental domain areas. The area of physical development includes vision and hearing. Screening results from Universal Newborn Hearing Screening can be considered for children less than six months of age. Hearing loss can be progressive or be acquired after birth. If the child is older than six months and has not had a hearing screening within the last six months, an effort should be made to determine if that child needs a hearing screening/evaluation completed by an audiologist.

Important Facts on Hearing Loss and Effects on Education

- The IDEA states in 34 CFR 300.324(a)(2)(iv), "Consider the communication needs of the child, and in the case of a child who is deaf or hard of hearing, consider the child's language and communication needs, opportunities for direct communications with peers and professional personnel in the child's language and communication mode, academic level, and full range of needs, including opportunities for direct instruction in the child's language and communication mode;…"
- Hearing screening procedures identify less than 50 percent of the students who are DHH.

- Medically, a student is not considered to have abnormal hearing until his or her hearing is below 25 decibels (dB). School screenings are conducted at 20-25 dB.
- The typical ear infection causes a mild hearing loss. Two-thirds of preschoolers have at least one episode of an ear infection and 16 percent of preschoolers have six or more episodes. One-half of all episodes of ear infections go undetected by parents or teachers. Despite good medical follow up, 10 percent of preschoolers continue to have chronic ear infections during critical language development years.
- Sufficient data are available to suggest that students with early recurrent ear infections are at risk for developing delays in auditory, language, and academic skills.
- Students whose hearing loss is 30 dB or greater in only one ear (unilateral hearing loss) have 10 times the risk for academic concerns. Almost 50 percent of students with a unilateral hearing loss are receiving support services in school.
- In the presence of typical levels of classroom noise, a student's ability to understand may drop to 60 percent or even as low as 27 percent if the room does not have carpeting. The noisy classroom also reduces the effectiveness of a student's amplification in the regular education setting.

G. Early Childhood Transition

Transitioning from Early Intervention

By the time a child in Early Intervention (EI) is 30 months old, the EI team, the Individualized Family Service Plan (IFSP) team, will begin planning for the child's transition from the EI Program to other services. Transition means a change in services. The Illinois EI Program ends for families when their child turns three. To ensure that the child and family continue to receive appropriate services and supports, the Child and Family Connections (CFC) service coordinator will work with the family to look at options for the soon-to-be 3-year-old. If the family feels that they need more time, they can begin the process earlier than six months before the child turns three.

If the child is eligible for specialized services after his or her third birthday, a special education team will develop an IEP for these services. The local school district will be responsible for determining the child's eligibility for continued services and for developing the plan with the family. ISBE and the Bureau of Early Intervention at the Illinois Department of Human Services (IDHS) have provided a workbook to assist families, EI providers, and preschool service providers called "When I Am 3, Where Will I Be?" The contents of this workbook can be found on the Department of Human Services Early Intervention website and on the ISBE website (Early Childhood Prevention Initiative) under "Resources" in the middle of the page. https://www.childfind-idea-il.us/Materials/transition_workbook.pdf for English
https://www.childfind-idea-il.us/Materials/transition_workbook_sp.pdf for Spanish

"When I Am 3, Where Will I Be?" outlines the steps in planning for services that follow EI and describes the transition planning conference, the eligibility evaluation for new services, and the IEP meeting to identify goals for the child and services appropriate for meeting those goals. There will be a transition planning meeting at least 90 days before the child's third birthday.

If the child is not eligible for specialized services, the CFC coordinator will help the family consider their options.

Early Childhood Transition at a Glance for Families

At every IFSP meeting, families will have the chance to talk about any transition questions or concerns.

When the child is 2 years 6 months, the service coordinator will work with families to develop a referral packet. Families will be asked to sign consent to send the child's referral packet to the school district or special education cooperative.

When the child is between 2 years 6 months and 2 years 9 months, the service coordinator will arrange for a Transition Planning Conference.

When the child is 2 years 9 months, a Transition Planning Conference will occur which includes the family, a service coordinator, and one person representing the local school district.

When the child is between 2 years 9 months and 3 years, the local school district or special education cooperative may arrange to evaluate the child. The information in the child's referral packet plus any new evaluations will be used to determine if the child is eligible for special education and related services.

On or before the child's third birthday, an Individualized Education Program (IEP) will be written by the IEP team if the child is eligible for special education and related services.

If the child is not eligible for special education and related services, the service coordinator will help find other opportunities for young children in the community.

H. Deaf-Blind

The following three sections of this advisory provide information on developing an IEP for students who are DHH and the consideration of a variety of factors in designing their educational programming, their placement, and their eventual transition from school to work and career possibilities. Included within the DHH population, however, are students who also have visual impairments, and this group of students presents unique needs for special education programming and services. An overview of this disability group is provided below to assist

educators in understanding the complexity of need and some of the appropriate responses for services.

Our nation's special education law, the IDEA, defines "deaf-blindness" as a "…concomitant [simultaneous] hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness" [34 CFR 300.8(c)(2)] .

The term deaf-blind covers a wide range of hearing and vision loss, from complete deafness and blindness to functional vision loss in the better eye (corrected) combined with mild hearing loss in the better ear (aided). Since the combination of vision and hearing loss compounds the disability, the term deaf-blind is used, and students must receive services based on both vision and hearing needs. While IDEA specifically uses the hyphenated word "deaf-blind," other words are also used, including dual sensory impaired and DeafBlind. In educational systems, the word "deaf-blind" or "deaf-blindness" is used.

Like students who are DHH, students with deaf-blindness often have additional disabilities including intellectual disabilities, physical disabilities, and other health impairments. Project Reach, the agency that completes the required national count of students with deaf-blindness for ISBE, notes that annually there are at least 300 - 400 Illinois students, age birth – 21, that meet Project Reach eligibility, and of these students at least 70 percent have additional disabilities. For information about the National Child Count, please visit the National Center on Deaf-Blindness via this link: https://nationaldb.org/library/page/2199

A variety of causes of deaf-blindness have impacted Illinois students. The majority have no known cause or a variety of unusual genetic causes. The most common single cause of deaf-blindness in Illinois are CHARGE syndrome, Usher Syndrome, and complications of prematurity.

A student who is deaf-blind may use many of the oral/aural or visual/sign modes described for persons who are deaf depending on their vision loss, onset, and progression of sensory losses and any additional intellectual/educational challenges. If the vision and hearing losses are severe, the addition of tactile modes may be necessary. Students who are deaf-blind with intellectual disabilities may require pre-linguistic communication instruction and supports as well. Those communication systems may include the use of whole or partial objects, pictures, body language, gestures, and other receptive and expressive forms. Non-standardized assessments, such as the Communication Matrix, might be useful to plan instruction for beginning communicators and lead to speech or sign language. For more information on the Communication Matrix, please visit the site at https://communicationmatrix.org/Matrix/About

With any of the sign systems, the student may use either tracking or tactile sign language. If the student has tunnel vision or needs the speaker near, tracking may be used. With tracking, the student holds onto the signer's wrists to feel where the signer's hands are, and in that way, the student can see what is signed. The student can also help move the signer's hands into the best

area within the student's visual field. With tactile sign, the student's hands are placed over the speaker's hands to feel the signs. If this technique is used, all information which is normally visual (facial expressions and body language) will need to be expressed on the hands. If fingerspelling is used, the student's hand is placed over the speller's hand to read the fingerspelling. Articles on deaf-blind interpreting and modifications to sign language for tactile sign can be found at the following sites:

- https://www.nationaldb.org/info-center/
- http://www.deafblind.com/slmorgan.html
- www.ProTactile.org

Pro-Tactile is a movement within the deaf-blind community that incorporates language, awareness, and empowerment. The three tenets are philosophy, method, and attitude. Of particular notice to most adopters of the Pro-Tactile movement is the fact that method incorporates tactual techniques to provide information, such as backchanneling, Tactile ASL (TASL), and mapping. These methods provide the deaf-blind receiver with information that enables the receiver to make informed awareness and decision-making choices.

For example, backchanneling may provide information about activities occurring in a room such as group laughter and other visual cues that a sighted person may incorporate in how they react interpersonally and in group settings. Mapping is a method where the layout of a room is drawn on the deaf-blind person's body (arm, back, etc.). TASL establishes a mode of communication where VASL (Visual ASL) may not be adequate when used with tactile signing.

All of these methods provide the awareness and information that supports the philosophy and attitude tenets. When a deaf-blind person is empowered with information, the deaf-blind person is then able to make independent decisions and take charge in ways that affect them both immediately and long-term.

Videos that explain much of the method can be found at www.ProTactile.org.

If the student has lost vision and hearing after being able to read, Print on Palm may be used for communication. Using the student's hand as a base, the speaker draws in capital block letters on the student's palm with an index finger. The use of a raised alphabet card or an alphabet glove may aid in communication if the student knows no sign language. Information on these systems is available at https://www.helenkeller.org/hknc/lesson/alternative-methods-communication

Braille may become an important tool in communication if the student lost vision first and later experienced hearing loss. The knowledge of braille would be important not only for literacy in accessing the curriculum but as an option to use various low-tech and high-tech communication devices in order to communicate with others. Examples include no-tech Braille/Print Alphabet Cards available from the American Printing House for the Blind, a deaf-blind pocket communicator (https://www.aph.org/product/deafblind-pocket-communicator/), and high tech refreshable braille devices that can be paired through blue tooth to phones and tablets so that

peers who use print can converse with students who use braille. A teacher of students with visual impairments can provide information on braille instruction and devices.

Students may also be eligible to receive telecommunications equipment through the iCanConnect program. This federal program provides individual assessments that determine which equipment (smartphones, tablets, screen readers, braille displays, and other items) would help overcome a student's telecommunication challenges. There are both disability and income requirements. Information is at http://www.icanconnect.org/

Students with deaf-blindness often benefit from the support of an intervener. More information on interveners can be found in the section of this document titled "Direct Personnel for Students Who Are Deaf or Hard of Hearing" on page 53.

For information on any aspect of deaf-blindness contact the Philip J. Rock Center and School, 818 DuPage Boulevard in Glen Ellyn, Illinois 60137. The center can also be reached via telephone at (630)790-2474 and via email at prc@philiprockcenter.org.

An overview of deaf-blindness is available at https://nationaldb.org/library/page/1934

I. Educational Programming and Related Services

IDEA/504 Comparison

When working with students who are DHH, districts should evaluate student needs carefully. It is often difficult to determine how these students are impacted. Some example areas to consider are academics, vocabulary, social emotional, incidental learning, communication, language development, processing, concept development, and self-advocacy.

	IDEA	**504**
Purpose	Is a federal statute whose purpose is to ensure free and appropriate public education services for children with disabilities who fall within one of the specific disability categories as defined by the law.	Is a broad civil rights law which protects the rights of individuals with disabilities in any agency, school, or institution receiving federal funds to provide persons with disabilities an opportunity to fully participate with their peers to the greatest extent possible.

504 plans are regulated by the Office of Civil Rights. More information can be found at the following link: https://www2.ed.gov/about/offices/list/ocr/504faq.html

A more detailed comparison between IDEA and Section 504 can be found at the following link from the Educational Law Association Entitled "An Updated Comprehensive Comparison of the IDEA and Section 504/ADA" (Zirkel, 2018).
https://www.educationlaw.org/images/pdf/2018/ELIP_Articles/Jul2018_3_15-26.pdf

Individualized Education Program (IEP) Considerations

Evaluation data is collected and presented by educational professionals at the IEP meeting. Goals and objectives in all deficit areas are written by teachers and related service providers who have knowledge about the student's current achievement and functioning levels and will be providing instruction and related services to the student who is DHH. If necessary, these teachers and providers will work in collaboration and consultation with professionals that specialize in services for the DHH population. Parents are a critical part of the IEP team.

Strengths and Needs

The IEP for students who are DHH must include the strengths of the individual student and the concerns of the parents for enhancing the education of their student. Parents/families may share academic, behavioral, and/or social strengths and areas of need as well as any goals the parents/family may have for the student. District and school personnel also provide evaluation results and teacher anecdotals to demonstrate the various strengths and needs of the student in areas of academic achievement, functional performance, cognitive functioning, communicative status, English learners (EL) status, health, hearing, vision, motor abilities, and social/emotional status/social functioning. The adverse effects of the student's disability are noted as well as the extent to which the student will require special education and related services.

Two particular functioning levels merit special consideration due to the effects of deafness and hearing impairments:

- **Language and Communication**
  If a student is DHH, the IEP team is required to consider language and communication needs, including the need to communicate with school personnel and peers, and the need for direct instruction in the preferred language and communication mode.

  Many students who are DHH have intelligible speech but may experience great difficulty understanding others who speak to them. Although a student may speak well, it doesn't mean he or she hears or comprehends well. A student may be able to understand very well in one-to-one situations but may experience difficulty understanding/learning in the classroom setting due to background noises, etc. The student may have patterns of errors and experience difficulties with vocabulary, grammar, phonology, syntax,

pragmatics, and semantics. Because a student who is DHH does not acquire language naturally, an appropriately licensed teacher of the deaf must provide instruction in the English language. This teacher's specialized skills are essential in the education of students who are DHH.

Since deafness is a disability which profoundly affects the natural acquisition of spoken language, language experiences, whether in American Sign Language, Auditory/Oral, Cued Speech, Speech Generated Device, Tactile, Signed English, or other should be directly provided throughout the school day in a natural manner based on the needs established in the IEP. Attention must be given to receptive and expressive language development including vocabulary, syntax, and pragmatics. A consistent, comprehensive language-based program must be established for a student who is DHH beginning in early infancy and continuing throughout the student's educational experience. For more information, or a copy of the ISBE IEP form, see the following link: https://www.isbe.net/Documents/34-54N-Educational-Accommodations%20-Supports.pdf

The use of ASL has been documented to promote linguistic, communication, cognitive, academic, and literacy development as well as social emotional growth and identity formation in Baker, 2011; Cummins, 2006; Grosjean, 2008; Morford & Mayberry, 2000; Yoshinaga-Itano, 2006 (as cited in Nussbaum, Scott and Simms 2012).

Whether the student has a cochlear implant, uses sign language, is oral, comes to school with abundant prior experiences, or has been sheltered with minimal world exposure, the IEP team should look for strategies that are research-based and are proven effective in providing positive educational outcomes.

- **Social and Emotional Considerations**
  It is important to know if the student identifies as part of the Deaf culture (See Section O) and how this identity will be supported. It is additionally important to discuss the degree to which the student is comfortable with peers and personnel who are not DHH and the degree to which the student will be able to communicate with peers and staff. This discussion should include whether an interpreter is necessary to facilitate communication between the student and staff.

Curricula and Standards

All curricula and standards, as measured by benchmark grades for regular education, should also be the standard for students who are DHH, as appropriate. Instructional programs should follow curricula requirements for general education students in the state of Illinois and the LEA, where appropriate, with special accommodations per the student's IEP. The curricula should be developmental, sequential, goal-directed, and subject to continual evaluation and revision. Areas which require special curricula for DHH programming may include, but need not be limited to, language acquisition, reading, and communication skills. Some students may benefit from specialized instruction in Deaf culture, coping strategies, social skills, and independent living skills. All curricula and standards should hold high expectations and be appropriate for these students. Illinois currently uses the Common Core Standards for English/Language Arts and for Mathematics as well as the Next Generation Science Standards. Illinois continues to use the Illinois Learning Standards for other school subjects as listed on the ISBE website: https://www.isbe.net/Pages/Learning-Standards.aspx

Best practices for teaching reading to students who are DHH include the five essential components of reading instruction as well as materials and strategies that have been scientifically researched as ones that will provide results. Best practices must include teachers who are knowledgeable both in the sequence of reading acquisition and the use of materials and strategies for students who are DHH. An effective teacher will understand the use and analysis of appropriate assessments to build a systematic and explicit reading program.

The five essential components are outlined below:

1. **Phonemic Awareness** is the ability to notice, think about, and work with the individual sounds in spoken words.
2. **Phonics** instruction teaches children the relationships between the letters (graphemes) of written language and individual sounds of spoken language. According to Trezek, Wang, & Paul (2010), although still controversial, substantial research has suggested that deaf readers, particularly skilled readers, have access to phonological information. Phonology refers to the sound structure of speech in spoken languages. It is related to the perception, representation, and production of speech sounds. Alternative means of acquiring phonology for students who are deaf or hard of hearing include speech reading, articulatory feedback, Cued Speech, and Visual Phonics.
3. **Fluency**, according to the National Reading Panel, is the ability to read text accurately and quickly with proper expression. Fluency is an important reading skill because it provides the critical reading bridge between reading and comprehension (Trezek, Wang, & Paul, 2010, p. 36.)
4. **Vocabulary** refers to the words we must know to comprehend and communicate effectively. There are four different types of vocabulary: listening, speaking, reading, and writing vocabulary. Vocabulary is very important to reading comprehension; therefore, if a reader does not know word meaning he or she cannot comprehend the meaning of

the text (Armbruster, Lehr, & Osborn, 2001, p. 29). Some words are learned indirectly as students go through their day. Other words are learned directly through instruction and word-learning strategies.

5. **Comprehension** is the reason for reading. Good readers are both purposeful and active. Students who are good at monitoring their comprehension are aware of what they do and do not understand.

When children who are deaf or hard of hearing enter school with limited language and vocabulary, this puts them at risk of struggling to learn to read (Williams, C. 2012).

Additionally, good readers use metacognition - the thinking about thinking - to comprehend and have control over their reading (Armbruster, Lehr, & Osborn, 2001 pp. 41-42).

Educational Accommodations and Supports

Students who are DHH may require accommodations in their classroom environment to gain optimal benefit from their IEPs. Teachers and other personnel can communicate directly with the student in the student's preferred mode of communication or communicate via modality listed in the Cultural and Linguistic/Communication section(s) of the IEP (ASL, Total Communication, Cued Speech, oral, etc.). Good lighting (natural lighting is preferred), reduced noise, and a variety of visual aids can significantly improve the learning environment. Preferential seating may be indicated. Supplementary services such as note-takers, educational interpreters, and job coaches may also be required. Examples of accommodations and modifications for students who are DHH can be found at the following link:
"IEP/504 Checklist: Accommodations and Modifications for Students Who Are Deaf and Hard of Hearing" http://www.handsandvoices.org/pdf/IEP_Checklist.pdf.

Educational accommodations and supports for students who are DHH may include, but are not limited to, the following:

- Amplification and audiological monitoring of amplification including Hearing Assistive Technology Systems (HATS) (See ASHA HATS Definition)
- Speech and language evaluations/services
- Acoustic treatment of the classroom (See below.)
- Modification of classroom activities
- Preferential seating in the classroom
- Monitoring of educational progress
- Accommodations or modifications to the curriculum and assessments

Cochlear implants may provide students who are deaf with access to auditory signals previously inaccessible through traditional amplification. Students with cochlear implants can be educated in a variety of educational settings, from mainstream classes to residential schools, utilizing a variety of communication methodologies. Regardless of the setting, it is important the child's educational program include a strong auditory instructional component to maximize use of the

implant. A collaborative approach, including the clinic that implanted the device, the educational team servicing the child, and the family are all necessary to maximize the benefits of an implant. It is critical to focus on the total student rather than on his or her audiogram when developing an educational program.

- **Linguistic and Cultural Accommodations**
  The sense of hearing is developed while a child is in the womb. A newborn baby with no hearing loss recognizes the mother's voice and has a beginning understanding of his or her native language; hence, a child with a hearing loss begins life with a language deficit. Most of what a child learns is through the auditory mode, so when a child who is DHH turns three years of age, there may be considerable areas of vulnerability in one or more of the following areas:
    - incidental learning
    - receptive language
    - expressive language
    - vocabulary development
    - articulation
    - concept development
    - pragmatics
    - listening skills/auditory discrimination
    - oral motor

  If a student with hearing loss presents with one of the above areas of concern, that student may require speech/language related services on the IEP. It is recommended that the speech language pathologist (SLP) has knowledge of developing these skills for students with a hearing loss and is also able to communicate in the student's mode of communication. The SLP assesses the student and is a member of the IEP team to determine the amount of services needed. The SLP writes goals to address the areas of deficits identified during the assessment.

- **Supplementary Aids, Accommodations, and Modifications**

    - ***Assistive Technology***
      The IEP team will decide what hearing assistive technology the student will need, who will be responsible for meeting the federal obligation to check and maintain amplification equipment on a regular basis, and who will provide audiological evaluations to determine eligibility, change in hearing needs, or assess assistive listening device efficacy.

      Assistive technology is available for students who are deaf or hard of hearing via the following sites:

- http://ISRC.us/library - Equipment and materials may be borrowed via the "Library" page.
- https://www.isrc.us/node/466 - FM Training Module (equals three CPDUs)
- https://www.iltech.org/ - Illinois Assistive Technology Program

- ***Acoustics***
  Background noise like fans, air conditioners, and sound coming in from open windows can be sources of distraction. A DHH student's hearing aid or other listening device may pick up sound in the environment indiscriminately which makes it hard for students to separate necessary auditory information from distractions. As a result, DHH students may require teachers to give special attention to possible visual and auditory distractions in the environment.

  Discussion of the student's needs in determining educational supports in the IEP should include an understanding of the effect classroom acoustics have on the student's access to instruction and classroom activities. Acoustic characteristics of the environment can be altered through the use of carpet, tennis balls on the chairs, adjustments to surfaces and textures, and the use of classroom dividers. The ISBE advisory mentioned in the preceding paragraph can provide more information on the topic of the classroom environment for DHH students.

- ***Note Taking***
  Students who are DHH may not be able to watch the teacher and/or interpreter and take notes at the same time and may require note taking options. The teacher may provide a printed copy of instructions, assignments, his or her own notes, and/or accessible electronic notes. Students could also be given a detailed outline of the material to be covered during the class period and a syllabus at the beginning of each grading period.

- **Supports for School Personnel**
  This section outlines which factors of the student's needs require training or collaboration for all who interact with the student. For example, the teacher of the DHH students may provide training for general education teachers on how to use assistive listening devices (ALD) systems and manage other technology.

State and Local Assessments

State and locally mandated standardized assessments are designed for students who can hear and speak English. Due to the language deficits that are common in students with a hearing loss, such instruments must be used with great caution since they may be discriminatory for students with a disability. Standardized tests may not permit students who are DHH to demonstrate their true capabilities and educational progress. The IEP team determines whether the student will

take the state standard assessment and what accommodations may be needed. IEP teams are responsible for assigning and setting up appropriate accommodations for testing regarding access and test participation. An IEP/504 Checklist: Accommodations and Modifications for Students Who are Deaf and Hard of Hearing can be found at http://www.handsandvoices.org/pdf/IEP_Checklist.pdf.

Though alternate assessment may appear to be an academic match for a student, only those with the most significant disabilities are eligible to take an alternate assessment. Typically, this includes students with severe cognitive or intellectual disabilities or traumatic brain injury. The Every Student Succeeds Act (ESSA) mandates that states must test only one percent or less of students using the alternate assessment. Guidelines for participation in the alternate assessment can be found at this link:
https://www.isbe.net/Documents/Session-15-DLM-Participation-Guidelines.pdf#search=dynamic 20learning%20maps%20participation%20guidance

Some students who are DHH are most appropriately assessed by local and alternative assessments based on the students' IEPs. These assessments measure what the students have learned. Test items match the knowledge and skills that the students acquire in the classroom. The use of portfolio and performance-based assessments has been quite successful in tracking the performance of students with a hearing loss.

The Pearson Assessments Company publishes the Stanford Achievement Test-10 (SAT). This is an assessment that is specifically designed to address the language deficits of students who have a hearing loss. It is a good measure of student academic achievement. For over 80 years, the SAT-10 series has been a valid and reliable assessment for objective measurement of achievement and evaluation of progress toward high academic standards.

Related Services

- ***Audiology***
  Students with any degree or type of hearing impairment, including auditory neuropathy, unilateral or fluctuating hearing loss, or an auditory processing disorder, may receive audiology services if deemed necessary by the IEP team. In addition, students with learning disabilities, reading/literacy difficulties, and attention problems in addition to those struggling with English as a second language benefit from the audiologist's knowledge of how listening and learning is impacted by noise and classroom acoustics. Audiologists may support these students whether they receive special education and related services under the IDEA or services under Section 504 of the Rehabilitation Act. Audiologists may interact directly with parents, as well as teachers, nurses, and other related service personnel, as part of the educational team.

According to ISBE's Special Education Personnel: Data Collection and Approval Instructions for the 2020-2021 school year, school-based audiologists have the following responsibilities:

- Identify students with hearing loss.
- Determine the range, nature, and degrees of hearing loss, including referral for medical or other professional attention for the habilitation of hearing.
- Provide habilitative activities, such as language habilitation, auditory training, speech reading (lip reading), hearing evaluation, and speech conservation.
- Create and administer programs for prevention of hearing loss.
- Provide counseling and guidance for students, parents, and teachers regarding hearing loss.
- Determine the student's needs (for group and individual amplification), select and fit an appropriate aid, and evaluate the effectiveness of amplification. https://www.isbe.net/Documents/50-44_sped_personnel.pdf

- ***Educational Interpreter***

  Students who are DHH may require the use of an educational interpreter who must comply with 23 IAC 25.550 and be approved by ISBE.

  A list of interpreter programs in Illinois is available via the following link to the Illinois Deaf and Hard of Hearing Commission (IDHHC): https://www2.illinois.gov/idhhc/licensure/Pages/DirectoryHome.aspx

  In classes where students who are DHH are mainstreamed, they may require the services of interpreters for consumers who are oral/aural, use sign language or cued speech, or are deaf-blind to understand the instructional material presented by the teacher and the class discussions involving other students.

  The educational interpreter must interpret all communication which occurs to enable students who are DHH to fully and freely participate in academic and extracurricular school activities. Students who are DHH should be provided instruction on how to effectively use an interpreter's services.

  Refer to the section on deaf-blindness for information on interpreting for students who have dual sensory impairments.

- ***Speech Language Pathologist***

  The sense of hearing is developed while a child is in the womb. A newborn baby recognizes the mother's voice and has a beginning understanding of his or her native language; hence, a child with a hearing loss begins life with a language deficit. Most of what a child learns is through the auditory mode; therefore, when a child who is

deaf/hard of hearing turns three years of age, there are usually deficits in one or more of the following areas:

- incidental learning
- receptive language
- expressive language
- vocabulary development
- articulation
- concept development
- pragmatics
- listening skills/auditory discrimination
- oral motor

Because of these deficits, a student with a hearing loss requires speech/language related service on the IEP. It is imperative that the SLP has knowledge of developing these skills for students with a hearing loss and is also able to communicate in the student's mode of communication. The SLP assesses the student and is a member of the IEP team to determine the amount of services needed. The SLP writes goals to address the areas of deficits identified during the assessment.

Additional Concerns

- ***Secondary Disabling Conditions***

  According to data collected by ISBE from the IEPs of students with deafness, hearing impairment, or deaf-blind primary eligibilities, there were a total of 3,769 students served under the eligibilities as of December 2019. Of those students, 1,055 students were also eligible under a secondary disability (28 percent). Students with secondary disabilities were recorded as follows: 27 percent of students under the primary eligibility hearing impairment, 31 percent of students under the primary eligibility deafness, and 50 percent of students under the primary eligibility deaf-blindness. The four most common secondary disabilities identified were speech and language impairment, other health impairment, specific learning disability, and developmental delay. The least common secondary eligibilities were traumatic brain injury and multiple disabilities. Other secondary disabilities recorded included autism, visual Impairment, intellectual disability, emotional disability, and orthopedic impairment.

  The combined effect of hearing loss and an additional disability presents a unique and complex challenge to professionals and parents. A review of the literature yields little specific information on successful educational strategies and programs. It seems that the most important factor in student success is early identification and early placement in an appropriate program.

The needs of students with disabilities vary greatly. They have different accompanying disabilities, function at different levels, and have different ways of learning. Some factors affecting each child's needs include the following:

- The configuration of the hearing loss
- The type and severity of the additional disability
- The age of onset of each disability
- The age when the student starts receiving appropriate educational interventions

Characteristics of successful programs include the following components:

- A high level of structure
- Specific, clearly stated objectives
- A focus on the individual needs of each child
- Instruction that is step-by-step in nature
- Practical experiences in natural environments
- Consistent routines
- Age-appropriate materials
- A focus on motivating the student
- Provision of successful experiences
- An emphasis on the student's skills in given situations, not on his or her limitations
- Over-learning (going over a skill after it seems to be mastered)
- Planning for the transfer of instruction to real life situations

Successful transition strategies for students who are deaf or hard of hearing and have additional disabilities are future-oriented; the goal is to prepare students to function as independently as possible once they leave school.

Additional information on accommodations for students who are DHH can be found at the following link: https://successforkidswithhearingloss.com/accommodations-for-the-child-with-unilateral-hearing-loss/

- ***Other Special Factors***

  The Consideration of Special Factors section of the IEP also includes other factors that should be noted that would warrant additional supports such as whether the student is DHH as this disability presents with the need for additional linguistic and cultural supports and accommodations. Other special factors noted include the following areas:

  - English learner
  - Blindness or visual impairment
  - Behavior that impedes learning for student or others

J. Considerations for Placement Options and Related Services

Current year and observational data are extremely important in making placement decisions. Population of the program and the program itself is fluid. The following topics are outlined with guiding questions a team should consider when making placement decisions for a student who is DHH. The following also includes reference to sections of this document to support the content of placement discussions.

The U. S. Department of Education advises service considerations for students who are DHH which include the following:

- Opportunities for direct instruction and communication in the student's language and communication mode
- Linguistic needs
- Severity of the hearing loss and potential for using residual hearing
- Academic level
- Social, emotional, and cultural needs, including opportunities for direct peer interaction and communication in academic and nonacademic areas

Placement options as required by IDEA (34 CFR 300.115) for students with disabilities, including students who are DHH include:

- Regular classroom with or without specialized services such as consultation, monitoring, interpreting, resource, or augmentative devices
- Itinerant services (part-time instructional services, direct services, consultation)
- Resource room (part-time instructional services and partial mainstreaming or full-time instructional services)
- Special classes (part-time instructional services and partial mainstreaming or full-time instructional services)
- Special schools therapeutic (part-time instructional services and partial mainstreaming or full-time instructional services)
- Residential schools (part-time instructional services and partial mainstreaming or full-time instructional services
- Homebound instructional program
- Hospital instructional program

All placement options must be available to each student who is deaf or hard of hearing to serve the changing needs of the student.

The 1988 Commission on the Education of the Deaf (COED) report to the congress stated the following:

"The educational process occurs through human interaction for the purpose of transmitting knowledge. Interaction is active; students are not passive in transmitting knowledge, but rather, participants in complex interactive behaviors…" This statement is still relevant today.

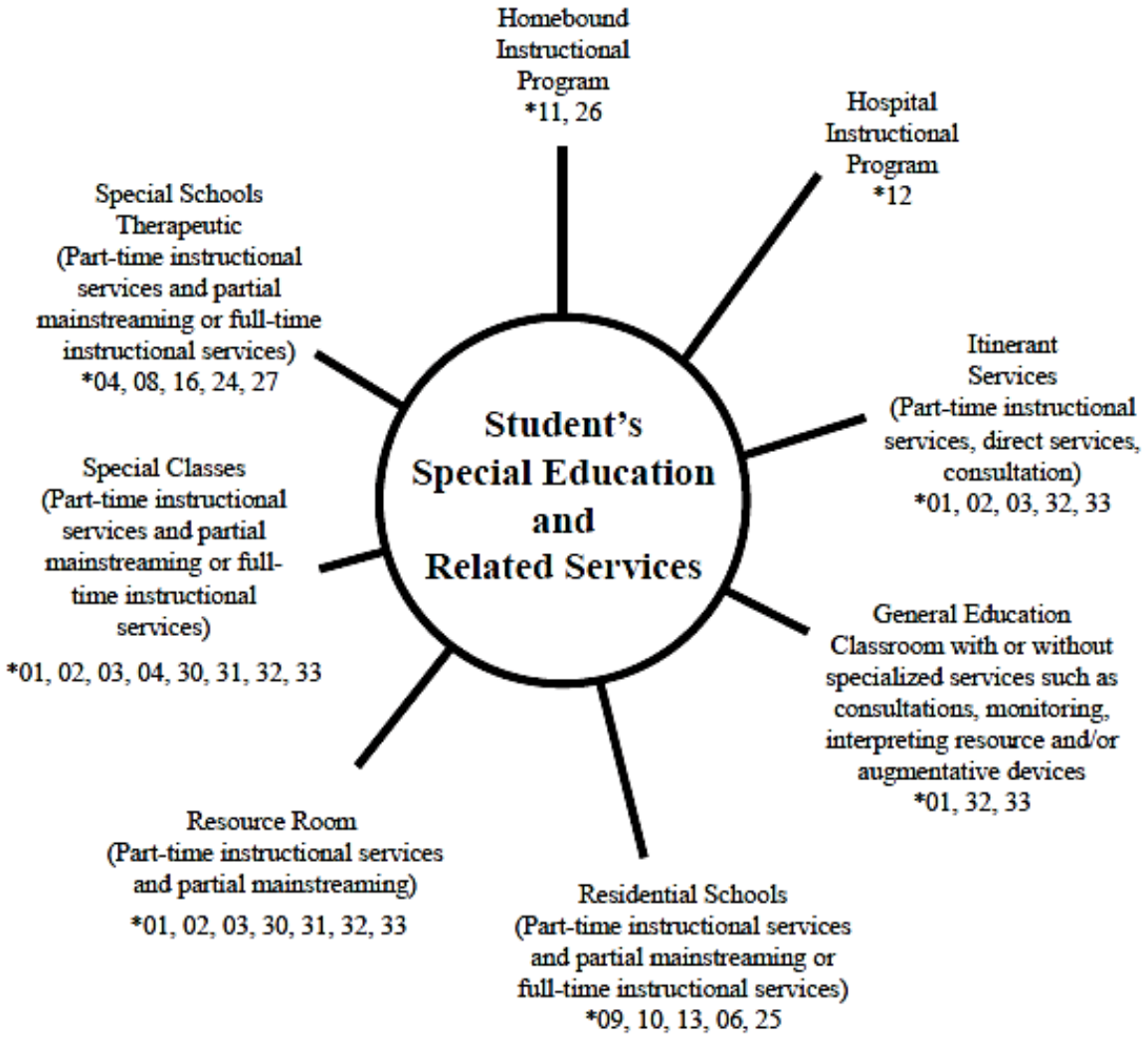
A positive self-concept created through symbolic human interaction enhances learning and is crucial for each child, disabled or not. When the child, however, has a disability which profoundly impacts communication, interaction with others and learning in the classroom will be affected. A student's emotional stability and self-identity are at risk if the student is unable to communicate directly with peers and educational personnel. If a child has low self-esteem, tends to withdraw, or exhibits inappropriate behavior, the IEP should address the child's emotional well-being. Such a child needs direct communication in a language and mode shared by peers and adults who are DHH. Once the child is directly able to participate in complex interactions both in and out of the classroom, self-esteem is heightened, and learning takes place.

It is for these reasons that a critical mass of students who are DHH may benefit from the development of social skills, language and communication skills, emotional well-being, and cultural identity. Critical masses are generally available at cluster sites, special schools, and residential schools for the DHH. For a listing/map of Illinois programs, go to https://www.ishi-il.org/programs

Least Restrictive Environment (LRE) considerations in the IEP must include a discussion of all the placement options for students across the full continuum of services. The typical definition of the LRE for a student with a disability is in a general education classroom in their home district among nondisabled peers with necessary supports. Due to the unique communication needs of students who are DHH, however, this type of an environment may limit social and academic interaction and be isolating and more restrictive, resulting in it not being the LRE.

The continuum of placement options must be made available to all students who are DHH with the recognition that a natural environment and the LRE are intricately tied to communication and language. Placement decisions should be based on the needs and services identified in the IEP. The severity of the hearing loss of the student as well as the language and communication needs should be considered in making placement decisions. IEP teams should annually review current services needed to determine if each student is appropriately placed. As children mature and change, so do their educational and emotional needs.

Placement options for students ages 3-21 who are deaf or hard of hearing include:



All placement options must be available to students who are deaf or hard of hearing in order to serve the changing needs of students.

*Numbers represent codes of the ISBE Funding and Child Tracking System (FACTS) and are NOT a ranking.

Language and Communication Considerations: FAQs

Question #1: What language and communication considerations should the IEP team consider?

The IEP team should consider some of the following questions:

- What is the student's primary mode of communication and how will that affect the student's language acquisition?
- How will the placement address all modes of communication (i.e., providing sign support while supporting their development of speech and language)?
- What will be the effect of limited exposure to communication partners?
- Will the student have access to other students who have a hearing loss?
- Will the student have an opportunity to communicate directly with other students who have a hearing loss?
- How will the student/family preference for communication mode be addressed?
- What linguistic and cultural accommodations are needed for the student?
- How will the student access auditory information in all settings?
- Will there be opportunities for direct communication in the student's primary or secondary language without the use of an interpreter?
- Are there multiple communication partners which allow and support a language rich environment?
- How will the placement remediate language deprivation?

Social and Emotional Considerations

Question #2: What social and emotional considerations should be discussed prior to the decision about placement for a DHH student?

Responses to the following questions should be incorporated in the decision about placement:

- How will the student's social-emotional skills be addressed regarding relationships, behavior supports, and the development of interpersonal and social skills?
- Will the child have authentic and direct contact with peers and access to peer language?
- Who will address the social and emotional needs specific to DHH?

- Does the student identify as part of the Deaf Culture?
- How will the student's Deaf identity be supported?

Curricula and Standards

Question #3: What considerations should the IEP team discuss regarding the curricula, particularly reading, and the appropriate placement for a student who is DHH?

The following questions should be asked during the discussion of placement for a DHH student:

- How will the student access phonics instruction?
- Is the educational level of the student vs. the educational level of the students within the classroom comparable?
- Is there access to visual information?
- What is the student's current vocabulary level and vocabulary goals compared to the curriculum?
- Does the curriculum allow for flexibility in instructional level?
- Does the curriculum allow for targeting of literacy skills emphasized for students who are DHH? (e.g. figurative language/idioms, pronouns, vocabulary building, incidental information, inferencing, predictions)
- How will the curriculum be accessed by all service providers such as the hearing itinerant and/or interpreter?
- Does the curriculum include access to quality captions or text highlighting/tracking for audio media like videos and read-alouds?

Educational Accommodations and Supports

Question #4: What discussion should occur around classroom acoustics in deciding the placement of a student who is DHH?

The following questions should be discussed to provide a suitable learning environment from the standpoint of acoustics for a student who is DHH:

- What are the student's needs and how would the acoustic environment impact meeting the student's needs?
- How might an acoustic environment create a barrier to listening?
- How might the acoustic environment change throughout the day?
- What is the instructional design of the classroom and how does this impact the acoustic environment?
- Would the student benefit from small group instruction?
- Is there a need for environmental restructure and design?

- Will placement allow for the implementation of the accommodations and strategies listed in the student's IEP?
- Should the provision of assistive technology be a consideration in the placement of a student who is DHH?

K. Postsecondary Transition

Transition Planning

Transition programming for DHH students has become even more important under the Every Student Succeeds Act with its emphasis on postsecondary education and training and career planning options for students. The IDEA defines transition services as "a coordinated set of activities for a child with a disability that is designed within a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation..." (34 CFR 300.43).

Although 34 CFR 300.320 advises beginning postsecondary planning no later than the first IEP that will be in effect during the year a student turns 16 years of age, Illinois regulation stipulates that postsecondary transition planning should begin no later than the first IEP that will be in effect when a student turns 14½ according to 23 IAC 226.230(c).

The following items should be included in the IEP's Transition Plan:

- Measurable postsecondary goals based on age-appropriate transition assessments
- Annual goals and short-term objectives to help move the student toward postsecondary goals
- Each student age 14½ and older should have a transition goal, including an independent living goal and objectives. An independent living goal is now required for every student and is no longer considered on an "as appropriate" basis.
- Course of study that aligns with the student's postsecondary goals
- Transition service both in the school program (such as speech and language) and outside agencies (such as DHS' Department of Rehabilitation Services) as active participants in the transition process
- The deaf student as an active member of the IEP team. Self-advocacy skills are a vital part of the transition planning process each year.

School-to-Work Programming

Preparing students for a career must be part of the school program. Many students, including those who are DHH, may be interested in pursuing vocational training rather than college

preparatory coursework. College-bound students could benefit from the opportunity to acquire firsthand knowledge of a job related to their career interests. Vocational standards and career programs should be in place for students who are DHH to provide organized instructional and training experiences from elementary school through high school.

The purpose of school-to-work programming is to give students a more in-depth view of the world of work, identify specific occupational skills, and ease the transition from school to the real world. Partnerships that are created among schools, employers, parents, students, postsecondary education, and community organizations benefit school-to-work initiatives. Students learn from real life experiences that are provided through these partnerships. Activities for elementary students may include field trips related to career awareness and job shadowing experiences. Activities for high school students may include job shadowing, mock interviews, career-technical courses, assistance with developing resumes, and volunteer and paid work experiences. A job shadowing experience allows a student to explore a specific career of interest by observing an employee perform his or her work duties at his or her place of employment. The experience should provide realistic career information that will aid the student in making career choices (https://successforkidswithhearingloss.com/accommodations-for-the-child-with-unilateral-hearing-loss/).

Programs may include, but are not limited to the following, according to the National Center on Secondary Education and Transition:

- Career assessment and planning
- Community work experiences for secondary students
- Educational credit for student work experience programs
- Support services such as interpreters, note-takers, tutors, and job coaches
- Area vocational centers for prevocational and vocational education
- Advocacy training
- Job shadowing and deaf role models and presenters.
- Real-life experiences
- Mock interviews
- Resume development

More information about transition planning is available at https://www.isbe.net/Pages/SPP-APR-Indicator-13.aspx.

For additional information, please refer to the IPATH website for information about resources and programming for DHH students planning postsecondary career and vocational pursuits. The National Deaf Center also provides more information and resources regarding transition.

Programs must adhere to the Rehabilitation Act, the Americans with Disabilities Act (ADA), and IDEA which outlines nondiscriminatory requirements for all programs or activities serving persons who are disabled.

L. Direct Personnel for Students Who Are Deaf or Hard of Hearing

Professional personnel who provide direct service to students who are DHH should include a licensed Supervisor/Coordinator of students who are DHH and licensed Teacher(s) endorsed in DHH**.**

In 23 IAC 226.800 the rules for supervisory personnel of special education services are delineated. The rules require each district or cooperative to employ a sufficient number of supervisory personnel to provide consultation and coordination of special education services.

Supervisors/Coordinators of Programs for Students Who Are Deaf and Hard of Hearing
Supervisors of the programs for students who are DHH must hold either a Professional Educator License with a special preschool-age to 21 or K-21 endorsement in DHH plus an endorsement for Supervision specifically in DHH with two years teaching experience with students who are DHH; a Professional Educator License with a school support personnel endorsement and a supervisory endorsement issued specifically in DHH, with two years' experience in DHH; or a Professional Educator License with an administrative endorsement plus a special preschool-age to 21 or K-21 endorsement in DHH. (The general supervisory endorsement is no longer issued, but those who have already received these endorsements may continue to be employed with these endorsements.)

The supervisor/coordinator of students who are DHH should meet the required teaching experience teaching students who are DHH. Supervisors should demonstrate the ability to promote teacher effectiveness and student achievement, facilitate and monitor the development or adaptation of curriculum, oversee appropriate pupil placement, prepare and monitor budgets, expedite hiring of personnel (e.g., classroom teachers, educational interpreters, classroom aides, interveners, and other educational personnel), supervise and evaluate program staff, and provide in-service workshops. Supervisors must have experience or knowledge of educational program placement options and related services for students who are DHH. Ongoing consultation and in-service training from a licensed professional who specializes in the area of DHH should be provided to teachers and support staff who work with students who are DHH.

For more information, see 23 IAC 1.705 at the following link
https://www.ilga.gov/commission/Jcar/admincode/023/023000010G07050R.html

For a list of programs and supervisors/coordinators for services to students who DHH, please visit the Illinois Supervisors of Programs for Deaf and Hard of Hearing Individuals (ISHI) webpage at https://www.ishi-il.org/

Teachers of Students Who Are Deaf and Hard of Hearing

Teachers must have completed an accredited university/college program preparing teachers in the education of students who are DHH and must hold a valid Professional Educator License issued by ISBE and be endorsed to teach the DHH and the grade range to be served or hold a valid professional educator license endorsed in another teaching area with approval issued by ISBE specific to the area of responsibility. Additionally, teachers must be employed pursuant to an authorization for assignment issued to the employing entity or hold short-term emergency approval or endorsement for DHH. Teachers should demonstrate the ability to communicate in the language or communication mode (e.g., sign language, oral, cued speech) of the individual student. The teacher of students who are DHH should have the ability to interpret educational assessments, determine current performance levels, and to develop IEPs. The teacher should assess, plan, and implement educational programs using specialized techniques, methods, and technology appropriate for students who are DHH as specified by individual child's IEP. Teachers must have knowledge of special considerations, placement options, and specific educational and communication needs of the students as listed in this document. The teacher must be able to determine that the needs of integrated/mainstreamed students are being met and that general education staff in the school system is provided in-service training on the unique nature of deafness. Teachers of students in integrated or mainstream settings should be knowledgeable about team teaching and collaboration techniques. Teachers of infants/toddlers, preschool, elementary, secondary, and students with multiple disabilities are encouraged to obtain additional training, background, and endorsements in the areas in which they teach.
https://www.isbe.net/Pages/Educator-Licensure-Requirements.aspx

Standards for the Teacher of Students Who Are Deaf and Hard of Hearing
https://www.ilga.gov/commission/jcar/admincode/023/023000280002200R.html

PEL Teaching Endorsements
https://www.isbe.net/Pages/Professional-Educator-License-Teaching-Endorsements.aspx

Educational Interpreters

Students who are deaf or hard of hearing may require educational interpreters. These interpreters must comply with 23 IAC 23 25.550 and be approved by ISBE. Any interpreter offering services in a school setting needs to have an ISBE approval. This includes substitute interpreters and interpreters provided through a private or community agency.

Students who are DHH and mainstreamed may require the services of oral/aural, sign language, cued speech, or deaf-blind interpreters to understand the instructional material presented by the teacher and the class discussions involving other students. It is critical to students who are DHH that only interpreters approved by ISBE be employed in regular educational settings. These interpreters must meet competency levels as specified in the code in both receptive and

expressive aspects of the communication system used by the student. Particularly crucial is the ability of the interpreter to keep pace with the teacher's presentation and class discussions, to interpret at the student's functional language level, and to voice interpret for the teacher and students who can hear so that the students who are DHH can fully and freely participate in the instructional process. Students who are DHH should be provided instruction on how to effectively use an interpreter's services.

An interpreter must be made available to individuals who are DHH when indicated in the IEP. This person may provide the following services which are assigned by an administrator or director:

- Assistance in facilitating communication between students who can hear and students who are deaf or hard of hearing
- Interpreting services at all school levels including extracurricular activities, according to individual need
- Tutoring to increase sign language fluency under the direction of a teacher for students who are DHH.

Interpreting and other duties assigned to educational interpreters are set by an administrator or director and are up to the discretion of the school, district, cooperative, or Regional Office of Education under local control.

The Registry of Interpreters for the Deaf (RID), a national certifying organization for interpreters, has issued a Standard Practice Paper for educational interpreters which can be found at the following link:
https://rid.org/about-rid/about-interpreting/resources/for-educational-interpreters/

Additional information about ISBE approval and testing can be found at the following links:
ISBE: https://www.isbe.net/Pages/educator-licensure-approvals.aspx
IDHHC: https://www2.illinois.gov/idhhc/licensure/Pages/K12Interpreting.aspx

Interveners

Interveners provide communication and environmental access for students who are deaf-blind and have the responsibility to facilitate the access of information which is usually gained through vision and hearing but which is unavailable or incomplete to the individual who is deaf-blind. The intervener also facilitates the development and use of receptive and expressive communication skills by the individual who is deaf-blind. More information is available at the national definition of intervener services.
https://documents.nationaldb.org/NCDB_Intervener_Services_Definition_2019_a.pdf

An introduction to the National Center on Deaf-Blindness Intervener Initiatives is available at https://www.nationaldb.org/national-initiatives/iqp/.

Information on the Open Hands, Open Access Free Deaf-Blind Intervener online learning modules is available at https://nationaldb.org/ohoa.c

Parent videos on the power of deaf-blind intervention are available at https://intervener.org/for-families/parent-training/ Information on the ISBE Approval for Interveners for Students who are Deaf-Blind can be found at the following links:

- 23 Illinois Administrative Code 25.560: https://www.ilga.gov/commission/jcar/admincode/023/023000250G05600R.html
- ISBE Webpage: https://www.isbe.net/Pages/educator-licensure-approvals.aspx

M. Family Supports

Support systems are necessary for families with students who are DHH. Training and information for families about such things as communication, child development, assistive technology, sibling issues, and Deaf culture are essential for families.

Support systems are also necessary for students to be part of their classroom, school, and community. Students need opportunities to directly communicate with age and language peers, experience appropriate accommodations in their learning environment, and enjoy opportunities for full participation in the community.

Parents, foster parents, guardians, and caregivers need access to resources and opportunities to meet and network with other families, advocacy organizations, and professionals to enhance educational opportunities, community integration, recreation, and leisure for their students who are DHH. For a comprehensive, up to date listing of state and national resources for parents of children who are deaf or hard of hearing, go to https://www.choicesforparents.org/notebook.

Families should be included on advisory boards and committees in state and local agencies and organizations.

Families need to know their rights and responsibilities, the implications of deafness, treatments and technology available, best practices in the field of deafness, and information regarding transition from school age programs to adult career or educational opportunities.

Support for families with a child who is DHH and exhibits emotional or behavioral problems is available through the Illinois Service Resource Center (ISRC).

N. Illinois Service Resource Center

The Illinois Service Resource Center (ISRC) is a component of the ISBE Statewide Technical Assistance Center, providing behavioral support for students who are DHH in Illinois.

Behavior support is provided at all three tiers of the Multi-Tiered System of Support /Response to Intervention model, at the program-wide, classroom-wide, and individual student levels, corresponding to the Universal, Targeted, and Individualized/Tertiary levels of service.

- Universal Level – Support for DHH programs in developing and implementing Positive Behavior Interventions and Supports (PBIS) or PBIS-type school-wide or program-wide behavior support programs
- Secondary/Targeted Level – Support data collection and development of targeted interventions such as Check In Check Out (CICO)
- Tertiary/Individualized Level – Wraparound-type Home-School Team support, home visits to support coordination of behavior support between home and school, support with FBA/BIP development

ISRC Services	ISRC Resources
Helpline (24 hour)	Resource Library
Onsite Technical Assistance for Individual Student Behavior Support (school or home)	Resource Directory of Services for Students with Emotional/ Behavioral Challenges
Behavior Team Training with Follow-up Coaching and Support	Psychological Testing Guidelines and Psychological Consultation Team
Data Collection Coaching	E-Learning Academy – Free CPDUs
Classroom Management Mentoring	Newsletter
Parent Facilitators	Tracking System – DHH/ED Students
PBIS Team Support	Behavior Intervention Database

ISRC Office Location/ Contact Information
3444 West Dundee Road
Northbrook, Illinois 60062
847/559-0110
847/559-8199 FAX
www.isrc.us
isrc@isrc.us
Helpline Voice/TTY 1-800-550-4772

ISRC is federally funded with IDEA Part B funds through ISBE School Code of Illinois 5/14-11.03.

O. Deaf Culture

The Conference of Educational Administrators of Schools and Programs for the Deaf (CEASD), through its Child First campaign, noted that language deprivation is disabling and stated:

> "Being deaf is not what disables a child—it is language deprivation that results from diminished exposure and access to meaningful language and communication. On-going access to language and communication is essential for normal cognitive functioning and development and is taken for granted for every hearing child. Without comparable access, deaf and hard of hearing children lose the opportunity to become thinking, literate, self-sufficient individuals. Instead, they experience disadvantages and delays that can become impossible to overcome. All too often inaccurate information is disseminated about the best way for deaf and hard of hearing children to learn language. Renowned researcher Laura Pettito said it best when she said that the brain does not discriminate between signed and spoken languages, people do (Gallaudet Today).
>
> People develop identities with groups of other people who share similar life experiences. These groups are generally characterized by the use of a common language. People within each group also share a belief system that governs their behavior, a specific way of conceptually organizing the world, a set of values, and a rich heritage of traditions" https://www.ceasd.org/child-first/

Deaf people are one such group. They have a strong sense of identity as members of the Deaf community. They also share certain cultural aspects of the hearing community and apply those cross-cultural skills to achieve economic and political goals and to communicate with hearing people. (Laird, American Deaf Culture.) We need to recognize Deaf people as a linguistic and cultural group that is committed to the preservation of the group's rich cultural heritage and to nurturing its growth and development (Geeslin, p. 143).

Lane, Hoffmeister, & Bahan (1996) have stressed that a natural signed language is the best visual-spatial language for a deaf child to acquire at birth. Similar to a hearing child who acquires spoken language, a deaf child can have full access to communication and psycholinguistic development through signed language. Moreover, cultural aspects of any language are an important consideration, and ASL is no exception to the rule. Kannapell (1993) has explained that the definition of cultural identity among deaf people should be based on how deaf people identify themselves in terms of language identity, personal identity, and social identity. These three major types of identity strongly interrelate with ASL. Many deaf people feel a strong kinship to each other through the use of ASL. They experience living in a fundamentally non-signing society with all of the aforementioned challenges of lacking access through language and communication (Higgins, 1980; Mitchell, 2006; Schein, 1989; Senghas & Monaghan, 2002). Why ASL is a crucial requirement for membership in the Deaf community is understandable. Personal identity is crucial to the development of language and social identity among deaf children. If their language

identity is ambiguous, then personal identity is ambiguous, and their social identity is marginal (Kannapell, 1993). The crucial part of identity is language, because ASL is the main part of deaf children's lives; it moves them toward establishing their own personal and social identities, enabling them to feel connections in their world (Horejes, 2009). Outside of families, of which only one in 20 readily and fluently provide ASL to their deaf children at birth (Mitchell, 2006; Mitchell & Karchmer, 2005), schools for the deaf are the primary societal institutions organized to promote, support, and sustain ASL education and ASL-fluent communities.

P. Glossary

This section contains words or terms commonly used in the identification, evaluation, assessment and service provision of children who are deaf or hard of hearing.

Acoustics: The qualities of a room, hall, auditorium, etc., that determine how well sounds can be heard

Amplification: The process of increasing the power of a signal (sound). In audiologic reports this term may refer to hearing aids, cochlear implants, and assistive listening devices.

American Sign Language (ASL): ASL is a visual language which is produced in a visual-spatial mode and has its own phonology, syntax, and morphology. ASL has a rich history of literature and culture.

Assistive Listening Device: Specially designed electronic equipment for use by individuals who are deaf or hard of hearing. It amplifies speech and other sounds using a microphone, transmitter, and receiver and channels sound more directly to the person.

Audiogram: An audiogram is a graph of the softest levels at which an individual can hear sound. It is a picture of the results of a test that is done by an audiologist and shows the intensity and frequency.

Audiologist: An individual who is professionally trained to administer and interpret hearing evaluations and to discuss appropriate remediation; a specialist who tests an individual's ability to hear

Audiology Services: Identification of auditory impairment; determination of the range, nature, and degree of hearing loss and communication; referral for medical and other services as necessary; provision of auditory training, aural rehabilitation, speech reading and listening device orientation and training; and determination of the child's need for individual amplification, including selecting and dispensing appropriate listening and vibrotactile devices, and evaluating the effectiveness of those devices

Auditory Skill Development (auditory training): The use of special techniques and equipment to assist children who are deaf or hard of hearing with the identification and understanding of sound

Auditory Verbal Philosophy: Emphasizes the earliest use of the most appropriate type of high-tech amplification to facilitate the acquisition and use of spoken language. A comprehensive plan is created which focuses on developing the ability to listen and communicate with spoken language.

Auditory Verbal Programs: Emphasize the development of speech and listening skills through the use of high-tech amplification

Aural Habilitation: Specialized services for children who are deaf or hard of hearing which helps develop language and communication skills including speech reading, listening, and speaking

Auditory Evoked Potentials: This test measures hearing from the level of the outer ear through the lower brainstem. Electrodes are attached to the child's head and earphones are placed on the child's ears. Sounds are transmitted through the earphones and the electrodes measure how the child's brain responds. This test gathers specific information about the child's hearing at different pitches and loudness levels.

Auditory Neuropathy: A type of hearing loss in which the outer hair cells in the cochlea are present and functional, but sound is not transmitted to the auditory nerve and brain functionally. It is also known as auditory dyssynchrony or auditory neuropathy spectrum disorder (ANSD).

Auditory Processing Disorder (APD): Auditory processing is the term used to describe how the central nervous system uses auditory information. APD is an auditory deficit that is not the result of a hearing loss or other higher-order cognitive, language, or related disorder.

Bone Conduction Device (Also known as a "BAHA"): Amplification using specific bone conduction. Sound is picked up by a special processor that vibrates the mastoid bone and sends information straight to the cochlea, bypassing the damaged or missing parts of the external and/or middle ear.

Bilateral Hearing Loss: A hearing loss in both ears.

Bilingual-Bicultural (Bi-Bi): Education that emphasizes the early use of American Sign Language. ASL is used as the language of instruction, and English is taught by reading and writing. Both English and ASL are valued as are the cultures.

Case Study: Also called an Eligibility Review; a series of in-depth, multi-disciplinary diagnostic procedures conducted within an established time frame and designed to provide information about the child, the nature of the problems which are or will be affecting his/her educational

development, and the type of intervention and assistance needed to alleviate these problems

Cochlear Implant: An auditory prosthesis that uses electrical current to stimulate the auditory system which the brain interprets as sound. It does not restore normal hearing. The implant consists of a surgically placed internal receiver and an externally worn microphone, signal processor, and transmitter.

COED: Commission on Education of the Deaf. A presidential commission established to review the state of deaf education in the U.S. The final report with recommendations was published in 1988.

Conductive Hearing Loss: This type of hearing loss involves the outer and/or middle ear. A conductive loss prevents sound from moving effectively through the outer and/or middle ear to the inner ear.

Congenital: a condition present at birth.

Consultation: The level of service to a student who is deaf or hard of hearing requiring an IEP/504 plan but not removing the student from the regular classroom. Consultation service may involve providing strategies and materials to the regular classroom teacher, collaborative teaching with that teacher, and/or teaching small groups of students within the classroom.

Counseling Services: Services provided by qualified personnel such as social workers, counselors, psychologists, or guidance counselors

Cued Speech: Cued Speech is a **visual mode of communication** in which mouth movements of spoken language combine with hand cues to make the sounds (phonemes) of traditional spoken languages look different. Cueing allows users who are DHH or who have language or communication disorders to access the basic, fundamental properties of spoken languages through the use of vision. (National Cued Speech Association https://www.agbms.org/about-cued-speech.html)

Deaf (Culturally Deaf), Deaf Culture: Set of social beliefs, behaviors, art, literary traditions, history, values, and shared institutions of communities that are influenced by deafness and which use sign language as the main means of communication

Deafness: A hearing loss so severe or profound that the individual experiences difficulty in processing speech through hearing, with or without amplification. The IDEA also defines deafness at 34 CFR 300.8(c)(3).

Deaf-Blind: The term deaf-blind covers a wide range of hearing and vision loss, from complete deafness and blindness to vision loss of 20/70 in the better eye (corrected) or decreased visual field (20 degrees or less) and a mild hearing loss of 30 dB in the better ear (aided). The IDEA defines deaf-blindness at 34 CFR 300.8(c)(2).

Decibel (dB): A measurement of sound intensity. The larger the number, the louder the sound.

Direct Services: Educational services that are provided on a regular basis to the student who is deaf or hard of hearing as outlined by the IEP. These services can be provided in a variety of settings.

Environmental Sound: Sounds that occur in the person's surroundings

Fingerspelling: Spelling words using the manual alphabet hand shapes

Fluency (Reading): Fluency is the ability to read text accurately, quickly, and with proper expression.

Fluctuating Hearing Loss: This type of hearing loss refers to hearing levels that change or fluctuate. A student may have better hearing on some days and poorer hearing on other days.

FM System: Personal frequency modulation (FM) systems transmit sound on special frequencies for individual users. The system consists of a transmitter worn by the teacher or other speaker and a receiver which transmits sound to the ear, typically via an ear level device. An FM can also be called an assistive listening device, ALD, Roger, or HAT-hearing assistive technology, to name a few.

Gain: The amount that a hearing aid amplifies sound. Gain is expressed in decibels (dB).

Hard of Hearing: A hearing loss which prevents development of full awareness of environmental sounds and spoken language with or without a hearing aid. Normal language acquisition and academic achievement may be impacted.

Hearing Impaired: A generic term used to refer to persons with a loss of hearing whether it is mild, moderate, severe, or profound. Although the IDEA refers to the disabling condition of hearing impairment as a disability label, this term is not an acceptable way to refer to the population of people with hearing loss. Deaf or Hard of Hearing is considered politically correct. The IDEA defines hearing impairment at 34 CFR 300.8(c)(5).

Hearing Screening: A process through which individuals are identified for further assessment and audiometric evaluation.

Individualized Education Program (IEP): A written statement of the student's present levels of educational performance, annual goals and short-term instructional objectives, specific special education and related services, the extent of participation in the regular education program, the projected dates for initiation of services, anticipated duration of services, appropriate objective criteria and evaluation procedures, and a schedule for annual determination of short-term objectives.

Interveners: Interveners provide communication and environmental access for students who are deaf-blind. Interveners have the responsibility to facilitate the access of information which is usually gained through vision and hearing but which is unavailable or incomplete to the individual who is deaf-blind. The intervener also facilitates the development and use of receptive and expressive communication skills.

Itinerant Teacher: A hearing itinerant teacher is a certified teacher of the DHH who works with students with hearing impairments attending their home school and other educational sites. The hearing itinerant teacher provides services as determined by the student's IEP.

Mild Hearing Loss: A hearing loss between 26 dB and 40 dB

Minimal Hearing Loss: A hearing loss between 16-25 dB

Moderate Hearing Loss: Hearing loss between 41 dB and 55 dB

Moderately-severe Hearing Loss: Hearing loss between 56 dB and 70 dB

Normal Hearing: Thresholds of hearing at -10-15 dB or less.

Oral-Aural: This method stresses the development of speech, speech reading, and auditory development.

Otitis Media: Inflammation or infection of the middle ear

Otoacoustic Emissions Testing (OAE): A small probe is placed in the student's ear canal and a sound generated by the testing equipment is sent to the cochlea (inner ear). If the hair cells in the cochlea are normal, an otoacoustic emission is generated and measured by the equipment.

Phonemic Awareness: The ability to notice, think about, and work with the individual sounds in spoken words

Phonics: The relationships between the letters (graphemes) of written language and individual sounds of spoken language

Placement Options: The availability of different types of educational environments such as general education classes, resource room classes, self-contained classes, day and residential special schools, home instruction, hospital instruction, and institutional instruction

Pressure Equalizer Tubes (P. E. Tubes): Tiny plastic tubes that are inserted in the eardrum. They are sometimes used to treat chronic otitis media. They are also known as ventilation tubes.

Profound Hearing Loss: Hearing loss exceeding 91 dB

Progressive Hearing Loss: A progressive hearing loss occurs when someone loses their hearing over time. This loss is permanent.

Pure Tone: A single frequency sound without accompanying overtones or other sounds

Pure Tone Average (PTA): The average of hearing thresholds at the frequencies 500 Hz, 1000 Hz, and 2000 Hz for each ear

Pure Tone Testing: Hearing testing done to establish an individual's threshold of hearing at individual frequencies

Re-evaluation: A series of diagnostic procedures which are performed to determine a child's continued eligibility for special education

Referral: A formal procedure, established by the local school district, by which an eligibility review may be requested

Related Services: Developmental, corrective, and other supportive services which are required to assist a child with a disability to benefit from special education program

Residual Hearing: The amount of unaided, useable hearing

Resource Program: A classroom model which serves children with disabilities of varying ages who are able to function in a general education classroom the majority of the school day. Support services and specialized supplementary instruction are provided, as defined in the student's IEP.

Special Classes: A classroom model in which the student's needs, as defined by the IEP, are met by a special education teacher for most of the day.

Sensorineural Hearing Loss: This type of hearing loss involves the inner ear, usually the cochlea. Hearing loss results when tiny hair cells inside the cochlea are not fully formed or are damaged**.**

Severe Loss: A hearing loss between 71 dB and 90 dB

Sign Language: A system of communication using visual gestures and signs, as used by deaf people; includes American Sign Language (ASL), Signed English (SE), Manually Coded English (MCE), Signing Exact English (SEE), Pidgin Signed English (PSE), Conceptually Accurate Signed English (CASE), Contact Sign, and Fingerspelling

Special Education: A system of supports put in place to meet the needs of the student as determined by the IEP team to assist the student in accessing the general education curriculum. The IDEA defines special education at 34 CFR 300.39.

Speech Reading: The process by which a person attempts to follow a conversation by watching

a speaker's lip movements. This is also called lipreading. Only of 30 percent of speech is visible on the mouth.

Total Communication (TC): Total communication focuses on using the individual student's preferred modes of communication. It includes oral, auditory, speech reading, sign language, writing, and gestures. Instruction emphasizes signing, fingerspelling, and speaking at the same time. Amplification and speech reading are important components of TC.

Transliteration: The process of going from a spoken modality to a signed modality while staying within the same language

Unilateral Hearing Loss: A hearing loss occurring in one ear

Ventilation Tubes: See Pressure Equalizer Tubes

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Individuals with Disabilities Education Act. 34 CFR 300.43 – Transition services. https://www.ecfr.gov/cgi-bin/text-idx?SID=9b88b090d2c21df3ddae61adc24fa8ad&mc=true&node=se34.2.300_143&rgn=div8

Individuals with Disabilities Education Act. 34 CFR 300.115 – Continuum of alternative placements. https://www.ecfr.gov/cgi-bin/text-idx?SID=9b88b090d2c21df3ddae61adc24fa8ad&mc=true&node=se34.2.300_1115&rgn=div8

Individuals with Disabilities Education Act. 34 CFR 300.320 – Definition of Individualized Education Program. https://www.ecfr.gov/cgi-bin/text-idx?SID=9b88b090d2c21df3ddae61adc24fa8ad&mc=true&node=se34.2.300_1320&rgn=div8

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R. Resources

504 Plans:

- Office of Civil Rights https://www2.ed.gov/about/offices/list/ocr/504faq.html
- National Center for Learning Disabilities https://www.ncld.org/?s=504+plans

American Printing House for the Blind. Deaf-Blind Pocket Communicator. https://www.aph.org/product/deafblind-pocket-communicator/)

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- https://nationaldb.org/library/list/20
- http://www.deafblind.com/slmorgan.html
- http://www.protactile.org

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- https://www.asha.org/public/hearing/Understanding-Auditory-Processing-Disorders-in-Children/

Assistive Technology:

- https://www.isbe.net/Pages/Special-Education-Assistive-Technology.aspx
- https://www.isrc.us/library - Equipment and materials may be borrowed

- https://www.isrc.us/node/466 - FM Training Module (equals three CPDUs)
- https://www.iltech.org/ - Illinois Assistive Technology Program

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(http://www.wiu.edu/coehs/provider_connections/links/index.php)

Conference of Educational Administrators of Schools and Programs for the Deaf. Statement of Child First Principles.
https://www.ceasd.org/statement-of-child-first-principles/

Communication Matrix
https://communicationmatrix.org/Matrix/About

Deaf-Blind Communication Options
- http://aadb.org/factsheets/db_communications.html
- https://www.youtube.com/embed/-OE6zr1TXQo

Deaf Students with Disabilities
https://www3.gallaudet.edu/clerc-center/info-to-go/deaf-students-with-disabilities.html

Department of Human Services Early Intervention
https://www.dhs.state.il.us/page.aspx?item=31183

Educational Interpreter Performance Assessment - Guidelines of Professional Conduct for Educational Interpreters
https://www.classroominterpreting.org/Interpreters/proguidelines/EIPA_guidelines.pdf

Helen Keller National Center for Deaf-Blind Youths and Adults
https://www.helenkeller.org/hknc/lesson/alternative-methods-communication

I Can Connect. Equipment and Training for People with Significant Vision and Hearing Loss.
http://www.icanconnect.org/

IDEA Series: Every Student Succeeds Act and Students with Disabilities.
https://ncd.gov/sites/default/files/NCD_ESSA-SWD_Accessible.pdf

Illinois Department of Human Services' Division of Mental Health (more below under Mental Health)

http://www.dhs.state.il.us/page.aspx?item=33007

- Center on Deafness: http://www.centerondeafness.org/
- Thresholds Bridge: https://www.thresholds.org/programs-services/deaf-program/
- Illinois Service Resource Center: http://www.isrc.us/
- National Deaf Center: https://www.nationaldeafcenter.org/sites/default/files/Mental%20Health%20Care%20for%20Deaf%20Individuals_%20Needs_%20Risk%20Factors_%20and%20Access%20to%20Treatment.pdf

Illinois Administrative Code - 23 IAC 226 - Special Education
http://www.ilga.gov/commission/jcar/admincode/023/02300226sections.html

Illinois Administrative Code, 23 IAC 1.705 - Requirements for Supervisory and Administrative Staff
https://www.ilga.gov/commission/Jcar/admincode/023/023000010G07050R.html

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https://www.ilga.gov/commission/jcar/admincode/023/023000250G05600R.html

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https://www2.illinois.gov/idhhc/licensure/Pages/DirectoryHome.aspx

Illinois Department of Human Services. "When I'm 3 Where Will I Be? A Family's Transition from Early Intervention"
English: https://www.childfind-idea-il.us/Materials/transition_workbook.pdf
Spanish: https://www.childfind-idea-il.us/Materials/transition_workbook_sp.pdf

Illinois Early Intervention (EI) Clearinghouse
https://eiclearinghouse.org/

Illinois Sound Beginnings
http://www.illinoissoundbeginnings.org/

Illinois State Board of Education - Individualized Education Programs (IEPS)
https://www.isbe.net/Pages/Special-Education-Individualized-Education-Program.aspx

Illinois State Board of Education: Special Education
https://www.isbe.net/Pages/Special-Education-Programs.aspx

Illinois State Board of Education. Dynamic Learning Maps Alternate Assessments (DLM-AA)
www.isbe.net\assessment\dlm.htm

Illinois State Board of Education - Illinois Learning Standards & Instruction
https://www.isbe.net/Pages/Learning-Standards.aspx

Illinois State Board of Education - Assessment
https://www.isbe.net/assessment

Illinois State Board of Education - Dynamic Learning Maps Alternate Assessment Participation Guidance
https://www.isbe.net/Documents/Session-15-DLM-Participation-Guidelines.pdf#search=dynamic%20learning%20maps%20participation%20guidance

Illinois State Board of Education - Special Education Personnel
https://www.isbe.net/Documents/50-44_sped_personnel.pdf

Illinois Post-High School Access to Transition Help for Deaf/Hard of Hearing (IPATH)
https://www.isrc.us/ipathfordhh/

Illinois Service Resource Center
https://www.isrc.us/

ISHI: Illinois Supervisors of Programs for Deaf and Hard of Hearing Individuals – General Information
https://www.ishi-il.org/

ISHI: Illinois Supervisors of Programs for Deaf and Hard of Hearing Individuals – Illinois Programs for Students Who Are Deaf or Hard of Hearing
https://www.ishi-il.org/programs

Interpreter Training Programs

- College of DuPage
  https://www.cod.edu/academics/programs/american_sign_language_interpreting/
- Columbia College Chicago
  https://www.colum.edu/academics/programs/asl-english-interpretation
- Harper College
  https://www.harpercollege.edu/careerpaths/sign-language-interpreting.php
- Illinois Central College
  https://icc.edu/academics/catalog/academic-departments/humanities/interpreter-preparation/
- John A. Logan College
  https://www.jalc.edu/allied-health-and-public-service/interpreter-preparation-program-ipp

- Southwestern Illinois College
  https://www.swic.edu/academics/career-degrees/arts-and-communication/sign-language/
- Waubonsee Community College
  https://www.waubonsee.edu/programs-courses/programs-subject/public-safety-and-service/interpreter-training

Interveners - Parent videos on the power of deaf-blind intervention
http://intervener.org/intervener/

Mental Health Programs for Students Who Are Deaf or Hard of Hearing in Illinois
- https://www.dhs.state.il.us/page.aspx?item=94009
- https://www2.illinois.gov/idhhc/resources/Pages/StatewideServices.aspx
- https://www.centerondeafness.org/
- https://iadeaf.org/parent-resources
- https://www.isrc.us/sites/default/files/pdf/20181016-Resource-Directory.pdf

Modifications and Accommodations for Students Who Are Deaf and Hard of Hearing
http://www.handsandvoices.org/pdf/IEP_Checklist.pdf

National Center on Deaf-Blindness - National Child Count
https://nationaldb.org/library/page/2199

National Center on Deaf-Blindness - Overview of Deaf-Blindness
https://nationaldb.org/library/page/1934

National Center on Deaf-Blindness - Intervener Services and Interveners in Educational Settings
http://0a6a5bfc42275da80092-13cee80c2bfb23b1a8fcedea15638c1f.r47.cf1.rackcdn.com/cms/NCDB_Intervener_Services_Definition_179.pdf

National Center on Deaf-Blindness - Open Hands, Open Access (OHOA): Deaf-Blind Intervener Learning Modules.
https://www.nationaldb.org/products/modules/ohoa/

National Center on Deaf-Blindness Interveners and Qualified Personnel
https://www.nationaldb.org/national-initiatives/iqp/

National Deaf Center
https://www.nationaldeafcenter.org/

Philip J. Rock Center and School
http://www.philiprockcenter.org

Print on Palm System
https://www.helenkeller.org/hknc/lesson/alternative-methods-communication

Pro-Tactile: The Deaf-Blind Way
www.ProTactile.org

Registry of Interpreters for the Deaf (RID)
https://rid.org/about-rid/about-interpreting/resources/for-educational-interpreters/

School-based Audiology Services
http://www.edaud.org/advocacy/6-advocacy-09-09.pdf

Sign Language with People who are Deaf-Blind: Suggestions for Tactile and Visual Modifications.
http://www.deafblind.com/slmorgan.html

Supporting Success for Children with a Hearing Loss
https://successforkidswithhearingloss.com/for-professionals/accommodations-for-students-with-hearing-loss/

Teacher of the Deaf and Hard of Hearing Preparation Programs
Illinois State University
https://education.illinoisstate.edu/hearing/