

Who is on Your Assessment Team?

Guidelines for Testing Students who are Deaf and Hard of Hearing

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Introductions



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Learning Objectives

Participants will:

- compare the role of the educational audiologist and other D/HH professionals in the assessment process.
- identify available guidance documents and resources specific to the assessment of unique needs for D/HH students.
- describe considerations for test selection, administration and interpretation.

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About You

Type in the chat:

- Where are you from?
- Do you have an educational audiologist?

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Landscape of DHH in Schools

- ~2 per 1000 babies are born with hearing loss.
- By school age, close to 15% of children exhibit some level/type of hearing loss.
- Approximately 80% of students who are D/HH attend their neighborhood school.
- 40% of students who are D/HH have additional needs.

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The Impact of Access

- Hearing loss does not have to be severe in order to impact a student's access to auditory-based classroom instruction.
- An **educationally significant hearing loss** can be in both ears, one ear, minimal in degree, only in some pitches or even fluctuating.
- **Regardless of the etiology, type or degree of hearing loss, these children have to work harder than other children to listen. In the classroom, this can lead to fatigue or what looks like problems with attention or acting out.**

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Slide 6

- 1 @JessicaH@summitesc.org I needed to add a title to this slide for screen reader accessibility. Feel free to edit. I also had to adjust the font color for contrast accessibility. I highlighted the purple and that seemed to pass the contrast but changes the last bullet to black font as the blue was not high enough contrast. Let me know if you want to change this to a different high contrast color.

Reassigned to Jessica Hoefler

Christine Croyle, 3/26/2021

- 1 I think this slide looks great!

By the way, this is the first time I realized you can leave notes on the side for people!!! my mind is blown!

Jessica Hoefler, 3/26/2021

EMIS State Data

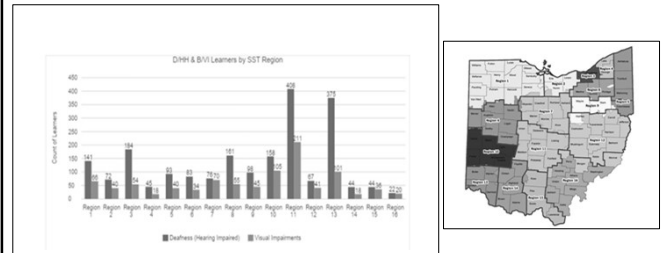
Category	Enrollment (2018-19 school year)	% of Total
No Disability	1,403,829	84.5%
Deaf-Blindness	68	0.0%
Deafness (Hearing Impairment)	1,967	0.1%
Visual Impairment	904	0.1%

Why are EMIS numbers so low compared to the data?

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Identified Learners by Region (2018-2019)

Source: Ohio Department of Education



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How Important is HEARING in Learning?

- Anytime the word "hearing" is used, think **"auditory brain development"**
- Hearing is a first-order event for the development of spoken communication and literacy
- **Acoustic accessibility to intelligible speech** is essential for brain growth

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How Important is LISTENING in Learning?

"Listening" is the cornerstone of the educational system

- Children spend up to **75%** of their school day listening

We hear with the brain...



...the ears are just a way in!

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Hearing Loss Simulation



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How Children Listen

Human beings are rich in auditory brain tissue.
But children can't listen like adults! Why?

1. The auditory cortex is not fully developed until about **15 years of age**
 - This means children do not hear like adults
2. Children do not have the same experience with language as adults
 - This means that they cannot accurately 'repair' misheard information

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Slide 12

- 2 @JessicaH@summitesc.org I had to rearrange this slide to have a title for accessibility needs. Please check and make sure I have changed your meaning.

Assigned to Jessica Hoefler

Christine Croyle, 3/26/2021

UNHS, EI Communication, and Technology



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I have a student who...

- has fluctuating hearing loss.
- has unilateral hearing loss.
- could not be screened for hearing.
- has a rare syndrome in which hearing loss may be a suspected factor.

Do I need to include the Educational Audiologist? Type in chat

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YES YOU DO!

When in doubt reach out.

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Educational Audiologists provide support services to the students, caregivers, and districts to ensure appropriate hearing and listening is occurring in the classroom in order for appropriate learning to occur!

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The Role of the Educational Audiologist

-Uniquely qualified to provide comprehensive services including assessments, direct/indirect services, in-service activities, and consultant for individuals birth through age 21 years and their families/caregivers.

-Audiologists are the professionals singularly qualified to select and fit all forms of amplification.

-Practice areas identified within IDEA for audiologists.

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Role of the Educational Audiologist

- Assistance with Hearing Screening Programs:
- Auditory Processing Assessment
- Educationally Relevant Audiological Evaluations
- Hearing Technology Assistance
- Personal DM and CADS Fitting
- Counseling and Guidance to Student/Parent/Teachers
- Provide Training/Consultation and Interpretation for School Personnel
- IEP Planning, Writing, and Participation

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APD and the Educational Audiologist

*(C)APD is an auditory deficit; therefore, it continues to be the position of ASHA that the **audiologist** is the professional who diagnoses (C)APD (ASHA, 2005b).*

Defined: What we do with what we hear (Jack Katz)

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Review of Scope of Practice

- Audiologists are the ONLY professionals where fitting hearing assistive technology (HAT) is within their Scope of Practice
- Making decisions/selections about HAT; initial HAT fittings: are not stated in Teachers of the Deaf or SLPs Scope of Practice, nor taught in their graduate training programs

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Role of the School Psychologist

To successfully provide assessments to the students who are D/HH, the licensed school psychologist has the competencies to work with students to provide accurate diagnostic interpretative and consultative services as determined by the IEP team.

<https://deafandblindoutreach.org/storage/ocali-ims-sites/ocali-ims-outreach/documents/Educational-Guidelines-DHH822019.pdf>

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Competencies

A school psychologist should demonstrate the following competencies to provide supports for students who are D/HH:

1. Training/background in psychological/sociological aspects of deafness
2. Knowledge to assess cultural and linguistic factors related to deafness
3. Knowledge related to non-discriminatory assessment for students who are D/HH
4. Proficiency in the student's mode of communication for direct communication during assessment

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Your areas of confidence

Which area(s) do you feel most confident? Type in chat

1. Training/background in psychological/sociological aspects of deafness
2. Knowledge to assess cultural and linguistic factors related to deafness
3. Knowledge related to non-discriminatory assessment for students who are D/HH
4. Proficiency in the student's mode of communication for direct communication during assessment

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Professional Position Statement



Position Statement

Serving Deaf and Hard of Hearing Students and Their Families:
Implications for Education and Service Delivery

<https://www.nasponline.org/research-and-policy/policy-priorities/position-statements/serving-deaf-and-hard-of-hearing-students-and-their-families-implications-for-education-and-service-delivery>

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Intersecting/Overlapping Roles



Student Assessments: Audiological and Equipment Needs	Ed Aud	TDDH	SLP	Other
1. Audiological evaluations that include recommendations to enhance communication access and hearing.	✓			
2. Diagnosis of auditory processing disorders (APD) with recommendations to manage APD issues provided to school personnel for the classroom and to parents for out of school consideration.	✓			
3. Management of auditory access in all educational environments.				
4. Assessment of classroom acoustics with recommendations made to improve classroom listening environments where necessary.				
5. Evaluation and fitting for personal hearing instruments, classroom, and other hearing assistive technology.	✓			
6. Management of hearing assistive devices including maintenance and troubleshooting.				

<https://www.edaud.org/position-stat/15-position-02-18.pdf>

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Role of the Teacher of the Deaf

The itinerant teacher ensures that students who are D/HH have programs in which they have direct and appropriate access to all components of the education program, including but not limited to recess, lunch, and extracurricular social and athletic activities.

<https://deafandblindoutreach.org/educational-service-guidelines-dhh>

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Role of the Speech Language Pathologist

- Provide assessment of spoken language, speechreading, auditory, listening skills, and social communication skills
- Collaborate for the assessment of receptive and expressive language skills, and social communication skills
- Provide direct instruction in speech, language, speechreading, auditory and listening skills, social communication skills and self-advocacy skills
- Implement strategies that develop communication, language, and related academic skills
- Enhance the student's overall communication skills

<https://deafandblindoutreach.org/storage/ocali-ims-sites/ocali-ims-outreach/documents/Educational-Guidelines-DHH822019.pdf>

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Role of Educational Interpreter

Educational interpreters employed by school districts and are licensed can provide interpreting services in school setting for students who are D/HH.

Ohio Administrative of Codes 3301-24-05 (E)(1)(c) states the educational interpreters shall have license obtained through Ohio Department of Education.

<https://deafandblindoutreach.org/educational-service-guidelines-dhh>

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Knowledge Check- Type in the chat

A child has been medically diagnosed with hearing loss.

Who is the person responsible for "HEARING" on the planning form?

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Poll Question: A hearing screening:

- Identifies how severe a loss is
- Identifies what type of hearing loss a student has
- Identifies the cause of hearing loss
- Gives possible treatment options
- All of the above
- None of the above

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Difference between Screening and Diagnostic Audiological Assessment

Hearing screening

- a quick test that you will pass or fail
- conducted by an audiologist or trained nurse, or teacher
- Pass means you show no signs of hearing loss.
- Fail means more in-depth hearing testing needed.

Hearing evaluation/diagnostic audiological assessment

- complete hearing test.
- conducted by an audiologist
- audiologist can identify the type of hearing loss; severity; possible cause; and possible treatment options.

<https://www.asha.org/public/hearing/hearing-screening-and-hearing-evaluation/>
<https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/children-s-hearing-vision-program/requirements/2015-guidelines>

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Considerations for Planning Form

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Considerations for Test Selection, Administration and Interpretation

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Test Characteristics

- If developmental level is likely to be discrepant from chronological age, look for tests or subtests that span a large age range so that the test is appropriate for both the child's chronological and developmental age.
- Students who are DHH would benefit from tests that include extended opportunity for teaching *how* to do the required task.

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Match Between Test And Child

Language, listening, and oral language demands of the test:

- Is it possible to make necessary adaptations without changing the nature of the task?
- Some tests are not easily adapted for the specific child's sensory/language abilities, and thus should not be administered.
- Some tests of "verbal intelligence" require listening and speaking where others only require pointing.
- Only part of a test may be appropriate (e.g., it would not be appropriate to administer the verbal subtests of the WISC to a child with no spoken language).

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Nonverbal Measures of Intelligence

Nonverbal refers to the method of administration and responses of the examinee, not what is being measured, nor the strategies used to arrive at solutions to questions.

Instructions: provided completely nonverbally

When to use: if general test introduces construct irrelevant bias

- Wechsler Nonverbal Scale of Ability
- Leiter International Performance Scale – 3
- Universal Nonverbal Intelligence Test – 2
- Comprehensive Test of Nonverbal Intelligence – 2
- Other nonverbal, single domain tests

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Test Items

Considerations:

- Do items discriminate against those with auditory impairment?
 - E.g. A scale containing the (observational) item 'makes telephone calls'.
- While an observational scale may protect against such concerns clearly this item would underestimate the individual's functioning.

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Verbal Test Items or Performance Items?

In this context, 'verbal items' may require:

- Reading or writing skills
- Incidentally acquired knowledge/vocabulary
- Other abilities based upon English (e.g. idioms, proverbs)

Be aware that some DHH students will have difficulty with English grammar, syntax, and vocabulary independent of cognitive function. This is particularly true of Deaf, signing students.

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Verbal Instructions

This is important to consider - even if the tasks themselves are considered to be performance tasks. For those measures that offer little or no flexibility in the way instructions are presented, departure from the formal administration may be necessary.

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Recorded Items

- Students who are deaf/hard of hearing should only be assessed through live speech.
- Listening to recorded or computer-presented speech through a hearing aid or cochlear implant will sound mechanical and fragmented.

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Test Interpretation

Standardized assessments are typically not normed on individuals who are deaf or hard of hearing.

- If substantial modification possibly interpret results quantitatively
- Report techniques not included in standardization and possible implications

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Intelligence and Academic Testing

- Verbally loaded!!!
- Students with HL typically have language delays
- Particular challenges with with synonyms, antonyms, defining words, analogies
- Late identification of the hearing loss ~~more~~ delays
- Be aware of how a "non-verbal" measure can also be very verbally loaded (e.g. "point to ____").
- Caution short term memory...was it memory or lack of hearing?

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Reading Measurement

- Students who are DHH will speak how they hear
- If cannot hear high pitched sounds, they will not say it
- Is it a decoding factor, hearing factor, or articulation factor????

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Math Assessment

Are instructions read aloud?

- **If so, it is now a listening task**

Word problems?

- **Now a language test**

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Dual Diagnosis

Are checklists answered with HL in mind?

Student with HL sits quietly in classroom with limited interactions with peers...is it b/c it takes a lot of mental energy to stay focused...but may be interpreted as depression

ASD and HL?

Defiant behavior? HL?

Social Pragmatic Checklists

Listening Fatigue

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Testing Considerations for Accessibility

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If a student uses hearing aids or a cochlear implant and communicates verbally, what accessibility strategies should be used?

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Should I test?

I am scheduled to test a student who wears hearing aids. Both of the hearing aids had to be returned to the clinical audiologist for repair. If I talk louder and sit across from the student, it is OK to proceed with testing as long as I make a note about it.

Type in Chat

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Hearing aids/cochlear implants
are not like glasses...

... they do NOT "fix" the
hearing loss.

Visual Loss:

Cane



Carseat

VS.

Hearing Loss:

Sign language



Sign language

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These are **NOT** my hearing aids



**Aided hearing provides
fragmented information to
the auditory system which
takes time for brain to
decode.**

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Considerations Prior to Testing

- Age of diagnosis
- Degree of hearing loss
- Etiology of hearing loss
- Age of initial amplification
- History of amplification use/benefit
- Educational history
- Language history
- Primary mode of communication

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It will be critical to be aware of what the
student can and cannot do with sound.

"Listening Age"

- How many years the student has been consistently using hearing aids/cochlear implants
- This will impact their ability to understand spoken language

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Legacy of the Hearing Loss Regardless of *Listening Age*

E.g. Consistent use of hearing aids from age 5-8 would not be commensurate with listening age of 3 due to language deprivation of starting hearing aids after age 5. Need to take history into consideration

- Learn about the child's language abilities prior to undertaking the evaluation.
 - May lend itself to choosing one test over another and/or heighten awareness of auditory and language skills.

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Hearing Technologies

IT IS CRITICAL that all hearing aid technologies are used and in good working order

- Includes both hearing aids/cochlear implants & DM system
- Ensure sure you are comfortable using the technology
- Wear DM system clipped or cinched up the the sternum level



Consult with the educational audiologist if you have any questions.

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Test Environment

Room Choice:

Make sure the room used for the assessment is quiet and without a lot of auditory distractions

- e.g. neighboring classroom noise, loud heating units, hallway noise

Limit Visual Distractions:

Students who are DHH are very reliant on visual information. As a result, they are more likely to be distracted by activity or items within their visual periphery.

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Room Set-Up

- Face the student so that they can use visual cues to enhance understanding
- If a child has hearing loss on one side, it is fine to still sit in front of the child. However, if you must sit to the side, sit on the side of better hearing.
- Be sure that your face is not backlit by a window; this will obscure speech reading cues



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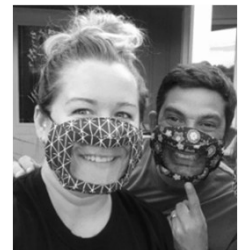
Verbal Test Administration

- Talk in a normal speaking voice
- Pronounce words very clearly, especially the last sound in the word, which can sometimes get dropped
 - This is especially important on a task like list learning. It would be normal for someone with mild hearing loss to mishear similar words (e.g., "eyes" vs "ice"; "16" vs. "60")
- Make sure your mouth is not covered when you talk and speak directly to the student
- Do not exaggerate movements of your mouth or facial expressions
- Beards or moustaches should be trimmed and not obstruct the student's ability to speech read

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CoVID Considerations

- Consider clear-window masks
- Consider placement of plexiglass barrier



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Other Considerations

- Many students with hearing loss won't admit or even be aware of mishearing/misunderstanding
 - **Be sure to check for comprehension.**
- Consider modifications for spelling prompts
 - e.g. emphasize high frequency such as three books
- Limit visual distractions

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Cochlear Implants

Please communicate with the DHH Team prior to assessing students with cochlear implants.

- It is critical that assessments requiring **ANY** amount of listening be administered only **after** the student has had their cochlear implant(s) activated and stable mapping (which can take up to **at least one year**).
- They may have had an assessment administered as a part of their CI candidacy process
 - Leiter-3 if non-verbal

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This [CI Simulation](#) demonstrates why it is so important to wait a year post-activation prior to administering any oral/aural assessments.

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Assessment with someone who is speechreading

- Speak at a normal rate and with normal articulation
- Keep your hands very still while talking
- If you want to show something while talking, silently show first, then explain, and possibly show a second time
- Never speak while not facing the person

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Assessment with an ASL Interpreter

If you are new to working with an ASL Interpreter in an assessment setting, you should seek out consultation.

- When working with an ASL interpreter, allow more time for the assessment
- Meet with an interpreter for 10-15 minutes before starting the assessment so you can talk about the process of the assessment, vocabulary, etc.
- It is helpful to mention that you want to know the child's level of language, therefore you want to know if they are using incorrect grammar, or if signs are produced incorrectly.
- Introduce the interpreter to the student and explain their role. Allow the interpreter and child a brief amount of time to establish language norms and fluency for accuracy of interpreting.

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- According to their Professional Code of Ethics, sign language interpreters will interpret everything that occurs in the room (sounds, private conversations, phone calls, etc.).
- Generally, it is best to sit next to the sign language interpreter, opposite the child. Thus, the student can easily shift from looking at you to looking at the interpreter. Make sure there is no distracting background (e.g., venetian blinds) that could make it taxing to see the interpreter's hands.
- Address the client directly, and maintain eye contact with the client rather than with the interpreter.
- In general, wait until the interpreter is finished signing before you resume speaking.
- Do not give visual instructions (pointing, demonstrating) at the same time as you are talking (or when the interpreter is signing).

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Hearing Loss and Neuromotor Populations

Hearing loss is much more common in children with neuromotor and multiple, severe disabilities compared to the general population. Children with hearing loss may present with bilateral hearing loss or unilateral hearing loss. You may also see mild to profound loss. Some children with neuromotor conditions may use a few "personal" signs to communicate. For those children, using an ASL interpreter is not necessarily appropriate.

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Eligibility Categories

13 Categories			
Autism	Hearing Impairment (HI)	Visual Impairment (VI)	Deafness
Deaf-Blindness	Other Health Impairment (OHI)	Orthopedic Impairment (OI)	Specific Learning Disability (SLD)
Speech Language Impairment (SLI)	Traumatic Brain Injury (TBI)	Intellectual Disability (ID)	Emotional Disability (ED)
Multiple Disability (MD)			

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Definitions for Eligibility

Deafness
DeafBlind
Hearing Impairment
SLD
OHI
Speech and Language Impairment

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OHI

Other health impairment means having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment, that is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette syndrome; and Adversely affects a child's educational performance.

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Deaf-blindness

Concomitant hearing and visual impairments

This combination causes communication and other developmental and educational needs that cannot be accommodated in special education programs solely for children with deafness or children with blindness

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SLD

Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Specific learning disability does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of intellectual disability, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

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Speech or language impairment

means a communication disorder such as stuttering, impaired articulation, a language impairment, or a voice impairment that adversely affects a child's educational performance."

- A communication disorder such as stuttering provides an example of a fluency disorder; other fluency issues include unusual word repetition and hesitant speech.
- Impaired articulation indicates impairments in which a child experiences challenges in pronouncing specific sounds.
- A language impairment can entail difficulty comprehending words properly, expressing oneself and listening to others.
- A voice impairment involves difficulty voicing words; for instance, throat issues may cause an abnormally soft voice.

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Hearing Impairment

Means an impairment in hearing, whether permanent or fluctuating, that adversely affects a child's educational performance but that is not included under the definition of deafness in this rule

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Deafness

Means a hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification that adversely affects a child's educational performance.

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Determining Eligibility

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IEP or 504

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Diversity of Learners

- Communication Modes
 - Visual support (sign language, cued speech, speech reading)
 - Technology
- EI/parent support
- Age of identification
- Additional disability areas

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Continuum of Placement Options

PART B DEVELOPMENT, REVIEW, AND REVISION OF IEP,
Consideration of special factors 34CFR300.324(2)(iv)

- The IEP Team must: (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;

- No one placement is best for all children who are D/HH

- Regional programs
- State school for the Deaf
- General Ed with necessary supports
- Special day classes/Resource/Itinerant
- Non public schools

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Resources

Guidance Documents

- [Communication Planning Guide](#)
- [Guidelines for the Assessment and Educational Evaluation of Students Who Are Deaf or Hard of Hearing](#)
- [MedEd Connections Resource Guide: Deaf or Hard of Hearing](#)

Professional Development

- [Telepsychology Webinars](#)
 - [The Basics: Preparing to Use Telepsychology as a Viable Option for Assessing All Learners](#)
 - [Protocols and Practices: Telepsychological Assessment](#)

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References

Wood, N. & Dockrell, J. Psychological assessment procedures for assessing deaf or hard-of-hearing children. January 2010. Educational and Child Psychology 27(2):11-22
https://www.researchgate.net/publication/258622676_Psychological_assessment_procedures_for_assessing_deaf_or_hard-of-hearing_children

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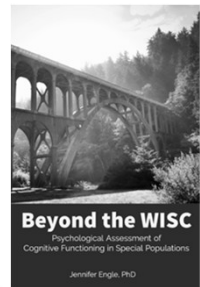
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Beyond the WISC: Psychological assessment of cognitive functioning in special populations

<https://pressbooks.bccampus.ca/jengle/>

Wood, N. & Dockrell, J. Psychological assessment procedures for assessing deaf or hard-of-hearing children. January 2010. Educational and Child Psychology 27(2):11-22

https://www.researchgate.net/publication/258622676_Psychological_assessment_procedures_for_assessing_deaf_or_hard-of-hearing_children



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Resources

<https://successforkidswithhearingloss.com/wp-content/uploads/2019/06/Resources-for-Assessment-of-Learners-who-are-deaf-or-hard-of-hearing.pdf>
<https://successforkidswithhearingloss.com/for-professionals/assessment-of-student-skills-challenges-needs/>
http://www.nasdse.org/docs/nasdse-3rd-ed-7-11-2019-final.pdf?fbclid=IwAR0FDGNjmlg-8mbPU1lZhOWos8dFT2f5_7ltpLpo-LvnaD0_BO4z-j9qaQ4

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Q and A

Digging Deeper
Additional Learning Opportunities

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