# **GUIDELINES & RESOURCES**





# DEAF & HARD OF HEARING (DHH)

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# Deafness, Hearing Impairment and Deaf-Blindness

Students who may require deaf and hard of hearing specialized services and supports may be eligible for special education by meeting the criteria for deafness, a hearing impairment, or deaf-blindness.

Deafness (DF): A hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification, and that impairment adversely affects a child's educational performance.

Hearing Impairment (HI): 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 section. The Special Education Information System (SEIS) refers to a Hearing Impairment as Hard of Hearing (HH).

Deaf-blindness (DB): Concomitant hearing and visual impairments the combination of which causes such severe communication and other developmental and educational needs that cannot be accommodated in special education programs solely for children with deafness or children with blindness.

# Assembly Bill 1836: Rights for Children Who Are Deaf or Hearing Impaired

In September of 1994, Assembly Bill 1836 (AB 1836) was signed into law (EC 56000.5). AB 1836 acknowledges the essential need for children who are deaf and hearing impaired to be educated in an environment that respects and uses their preferred mode of communication. The goal in developing the passage of AB 1836 was to change the way education and related services were delivered to deaf and hard of hearing children.

### AB 1836 addresses the need for Deaf and Hard of Hearing (DHH) students to:

- Have access to teachers, psychologists, assessment staff, and other professionals who are fluent in the primary language mode being used by the student.
- Be educated with a sufficient number of other deaf and hard of hearing students to allow free, open, and spontaneous communication.
- Allow free, open and spontaneous communication by providing deaf and hard of hearing students with regular contact to other children and professionals who are proficient in the language utilized by the student.
- Participate in all school programs, including after-school social and athletic functions, lunch, and recess.
- Have access to vocational programs and preparation for life beyond the school experience.

### AB 1836 does not promote any one form of communication for deaf students.

- AB 1836 calls for IEP teams to develop goals and objectives for a child with DHH needs and consider the following issues:
  - Does the student have a sufficient number of schoolmates who are similar in age, language, and learning ability?
  - Are teachers and other professionals who work with the child skilled in the child's language and way of communicating?
  - Are the critical elements of the educational program (e.g. academic instruction, school services, and extracurricular activities) available in the child's language and their way of communicating?

# Assessment for Students Who Are Deaf and Hard of Hearing

As with any student, thorough assessments must be completed in order to inform the education team as to what the child's needs are and what supports are needed in the education setting. Appropriate evaluation of children with hearing loss means assessing the performance areas most vulnerable to challenges due to the access issues resulting from hearing loss or deafness. Assessment results should provide decision makers with information from a variety of sources.

Assessments may also be conducted by the holder of the Clinical Rehabilitative Services Credential: Audiology. This credential authorizes the holder to provide audiological assessment, tympanometry, and management of individual and classroom amplification systems and assistive listening devices.

Assessments for students who are deaf and hard of hearing may be provided by the holder of an Educational Specialist Instruction Credential: Deaf and Hard of Hearing. This individual may conduct assessments, provide instruction and special education related services to individuals with a primary or secondary disability of deaf or hard of hearing.

Some assessments may be completed by a licensed or credentialed Speech/Language Pathlogist in the area of language, speech, and hearing development and remediation.

Many formal evaluation tools require some form of modification which must be noted in the student's record. Many assessment tools that are utilized when evaluating a student who is deaf or hard of hearing are only usable in parts; such as the use of only visual or performance subtests from a more comprehensive standardized evaluation.

### Assessments for students who are DHH may include, but are not limited to:

- Cognitive/intellectual assessments
- Auditory/listening skills
- Audiological
- · Assistive technology
- · Speech skills
- Psycho-social assessments
- Behavior

- Occupational therapy
- Expressive and receptive language
- Vocabulary
- · Basic concepts
- · Sign language
- Hearing technology (i.e. hearing aids, cochlear implants, and hearing assistive technology)

# Related Services for Deaf and Hard of Hearing Students

In accordance with California Education Code, instruction and services for students who are deaf and hard of hearing shall be provided by an individual holding an appropriate credential, who has competencies to provide services to students who are hearing impaired and who has training, experience, and proficient communication skills for educating individuals with hearing impairments.

### Related services for DHH students may include, but are not limited to:

- Speech, speech reading, and auditory training.
- Instruction in oral, sign, and written language development.
- Rehabilitative and educational services for hearing impaired individuals to include monitoring amplification, coordinating information for the annual review, and recommending additional services.
- Adapting curricula, methods, media, and the environment to facilitate the learning process.
- Consultation to students, parents, teachers, and other school personnel to maximize the student's experience in the general education program.
- A specially trained instructional aide, working with and under the direct supervision of the credentialed teacher of the student, who may assist in the implementation of the student's IEP.

# Specialized Services for Low Incidence Disabilities

A low incidence disability is defined as a severe disabling condition with an expected incidence rate of less than one percent of the total statewide enrollment in special education. For purposes of this definition, severe disabling conditions are hearing impairments, vision impairments, severe orthopedic impairments, or any combination thereof.

Please refer to the EDCOE SELPA Low Incidence Guidelines for more information about guidance and funding for low incidence materials/equipment.

### Low incidence disabilities are:

- Hearing impairments (hard of hearing, deaf)
- Vision impairments
- Severe orthopedic impairments
- Any combination thereof (e.g., deaf-blind)

### Specialized services for low incidence disabilities may include:

- Specially designed instruction related to the unique needs of the student with a low incidence disability provided by a qualified specialist.
- Specialized services related to the unique needs of pupils with low incidence disabilities provided by qualified individuals such as interpreters, note takers, readers, transcribers, and other individuals who provide specialized materials and equipment.

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- An "educational interpreter" who facilitates communication between the DHH student, and other students in the general education classroom as well as other school-related activities; this includes extracurricular activities designated in the student's IEP.
- An "educational interpreter" shall be certified by the national Registry of Interpreters for the Deaf (RID), or equivalent. In lieu of RID certification or equivalent, an educational interpreter must have achieved a score of 4.0 or above on the Educational Interpreter Performance Assessment (EIPA), the Educational Sign Skills Evaluation-Interpreter and Receptive (ESSE-I/R), or the National Association of the Deaf/American Consortium of Certified Interpreters (NAD/ACCI) assessment. If providing Cued Language transliteration, a transliterator shall possess a Testing/Evaluation and Certification Unit (TECUnit) certification, or have achieved a score of 4.0 or above on the EIPA Cued Speech.

Specialized services for pupils with low incidence disabilities shall be provided only by personnel who possess a credential that authorizes services in special education or clinical rehabilitation services in the appropriate area of disability.

## Language, Speech, and Hearing Services

Students who are deaf or hard of hearing may require support in the areas of language, speech or hearing. The areas of need and the supports required are defined based on appropriate assessment.

### Language, speech, and hearing development and remediation may include:

- Referral and assessment of individuals suspected of having a disorder of language, speech, or hearing.
   Such individuals are not considered as part of the caseload of a Speech and Language Pathologist unless an IEP is developed and services are provided.
- Specialized instruction and services for individuals with disorders of language, speech, and hearing, including monitoring of pupil progress on a regular basis, providing information for the review, and when necessary, participating in the review and revision of IEPs of pupils.
- Consultative services to pupils, parents, teachers, or other school personnel.
- Coordination of speech and language services with an individual's regular and special education program.

Caseloads of full-time equivalent (FTE) language, speech, and hearing specialists providing instruction and services within the district, SELPA, or county office shall not exceed a district-wide, SELPA-wide, or county-wide average of 55 individuals.

### Language and speech development and remediation shall be provided only by personnel who possess:

- A license in Speech-Language Pathology issued by a licensing agency within the Department of Consumer Affairs; or
- A credential authorizing language or speech services.

Services may also be provided by speech-language pathology assistants working under the direct supervision of a qualified language, speech, and hearing specialist, and if specified in the IEP. No more than two assistants may be supervised by one qualified language, speech, and hearing specialist. The caseloads of the qualified specialist shall not be increased by the use of assistants.

## *Interpreters*

# Interpreting services may include the following, when used with respect to children who are deaf or hard of hearing:

- Oral transliteration services, cued language transliteration services, sign language transliteration and interpreting services, and transcription services, such as communication access real-time translation (CART), C-Print, and TypeWell.
- Special interpreting services for children who are deaf-blind.

The state board of education requires that educational interpreters for students who are deaf or hard of hearing meet state-approved or state-recognized requirements for certification, licensing and registration or other comparable requirements. The regulations further define "educational interpreters" as any person who provides communication facilitation between students who are deaf or hard of hearing, and others, in the general education classroom and for other school related activities, including extracurricular activities. These services shall be designated in the students' IEP.

In order to meet the state requirement for education interpretation, an individual shall be certified by, or meet an equivalent level of competency, established by the national Registry of Interpreters for the Deaf (RID). In lieu of the RID certification, an educational interpreter shall have achieved a score of 4.0 or above on one of the following assessments:

- Educational Interpreter Performance Assessment (EIPA)
- Educational Sign Skills Evaluation- Interpreter and Receptive (ESSE-I/R)
- National Association of the Deaf/American Consortium of Certified Interpreters (NAD/ACCI) assessment

If providing Cued Language transliteration, a transliterator must possess certification in the Testing / Evaluation and Certification Unit (TECUnit) or have achieved a 4.0 or above on the Educational Sign Skills Evaluation (EIPA)- Cued Speech.

LEAs/districts may employ or contract with outside agencies for educational interpreters, and must ensure that they meet the minimum qualifications listed above.

### When working with an educational interpreter, some tips to consider:

- When communicating with a student who is deaf or hard of hearing, look at the student, not the interpreter when talking.
- Speak directly to the student using person-first language. For example, "Do you have your assignment?" rather than "Does he/she have their assignment?"
- When possible, share notes, outlines, or handouts with the interpreter in advance, or at minimum, provide the interpreter with a visual cue during the lesson/assignment/activity.
- Allow the interpreter to focus on facilitating communication for the student rather than utilizing them for clerical or teacher support in the classroom.
- Allow the interpreter to request specific seating/positioning to facilitate the best viewing angles for himself/herself and for the client.
- When separated from the student, avoid giving messages to the interpreter to relay at a later time to the individual.

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- Avoid private conversations with the interpreter or others in the presence of the student who is deaf or hard of hearing as everything that is spoken shall be interpreted.
- Speak naturally at a reasonable, modest pace. The interpreter will let you know if speaking slower is neccessary.
- Interpreters are entitled to breaks throughout the day. These can be taken at naturally occuring times within the student's schedule (lunch, recess, etc.) and should be arranged ahead of time. It may be necessary to arrange for a second interpreter if breaks cannot be accommodated.
- Ensure there is adequate lighting when using an interpreter. If the lights are dimmed to use technology in the classroom, make sure the lighting is adequate for the deaf student to the see the interpreter.
- The interpreter will typically stand near the teacher. Then, the student will have an option to view both the teacher and the interpreter and visual aids being used for instruction.

# **Audiology**

Students who are deaf or hard of hearing usually require support in the areas of audiology assessment, instruction and services. The areas of need and the supports required are defined based on appropriate assessment.

# Based on the provisions of 34 C.F.R. Section 300.34 and 5CCR 3051.2 audiological instruction and services may include:

- The identification of a child with a hearing loss.
- Determination of the range, nature, and degree of hearing loss, including referral for medical or other professional attention for the habilitation of hearing.
- Consultative services regarding test findings, amplification needs and equipment, otological referrals, home training programs, acoustic treatment of rooms, and coordination of educational services to hearing-impaired individuals.
- Delivery of habilitative activities, such as language habilitation, auditory training, speech reading (lipreading), hearing evaluation, and speech conservation.
- Planning, organizing, and implementing an audiology program for individuals with auditory dysfunctions, as specified in the IEP.
- Creation and administration of programs for the prevention of hearing loss.
- Counseling and guidance of children, parents, and teachers regarding hearing loss.
- Monitoring hearing levels, auditory behavior, and amplification in the instructional setting.
- Determination of children's needs for group and individual amplification, selecting and fitting an appropriate aid, and evaluating the effectiveness of amplification.

### Audiological services shall be provided only by personnel who possess:

- A license in Audiology issued by a licensing agency within the Department of Consumer Affairs; or
- A credential authorizing audiology services.
- Educational audiologists are uniquely qualified to facilitate support for students with hearing loss in the educational system.

In addition to identifying a student's hearing loss, the educational audiologist has knowledge and skills regarding the impact of hearing loss on learning, ability to suggest relevant educational goals and benchmarks in developing an Individualized Education Program (IEP), and experience with strategies and technology for support within the classroom for both the student and the teacher. Educational audiologists are also trained in diagnosing auditory processing disorders and recommending remediation or compensation strategies.

# Assistive Technology Equipment

Students with low incidence disabilities require highly specialized services, equipment and materials.

An "assistive technology device" is any item, piece of equipment, or product system (whether acquired commercially off the shelf, modified, or customized), that is used to increase, maintain, or improve the functional capabilities of a child with a disability. For a child with a speech-related disability, a common example of an assistive technology device is a communication board.

# Assistive Technology Services

An "assistive technology service" is any service that directly assists an individual with exceptional needs in the selection or use of an assistive technology device that is educationally necessary. Assistive technology services include:

- A functional evaluation of the individual in their customary environment.
- Evaluations, including a functional evaluation of the student in the educational environment.
- Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with the student's education programs and rehabilitation plans and programs;
- Training or technical assistance for the student, family, and professionals who are substantially involved in the major life functions of the student.

IDEA 2004 regulations require schools to ensure that hearing aids and external components of cochlear implants are functioning properly [§300.113(a)(b)].

### Assistive technology services shall be provided only by personnel who possess:

- A license in Physical Therapy issued by a licensing agency within the Department of Consumer Affairs, where the utilization of assistive technology services falls within the scope of practice of physical therapy as defined in Business and Professions Code section 2620 and implementing regulations.
- A license in Occupational Therapy issued by a licensing agency within the Department of Consumer Affairs.
- A license in Speech-Language Pathology issued by a licensing agency within the Department of Consumer Affairs or a valid document, issued by the California CTC, where the function of the assistive technology service is augmentative communication.
- A baccalaureate degree in engineering with emphasis in assistive technology.
- A baccalaureate degree in a related field of engineering with a graduate certificate in rehabilitation technology or assistive technology.
- A certification from the Rehabilitation Engineering and Assistive Technology Society of North America and Assistive Technology Provider (RESNA/ATP).
- A certificate in assistive technology applications issued by a regionally accredited post-secondary institution.
- A credential that authorizes special education of students with physical impairment, orthopedic impairment, or severe impairment.

## Deaf and Hard of Hearing Versus Audiological Services

### **Educational Audiologists**

- Manage school-based hearing screening programs.
- Lead efforts with students, teachers, and parents to provide education regarding the impact of noise exposure and hearing loss prevention measures.
- Manage audiological equipment and hearing assistive devices including maintenance and calibration.
- Collect and review audiological evaluations for children evaluated in other audiological facilities.
- Perform comprehensive, educationally relevant hearing evaluations, interpret results and implications, and make recommendations to enhance communication access and learning.
- Assess auditory processing function and make recommendations to manage Auditory Processing Disorder (APD), issues in the classroom.
- Assess classroom acoustics and make recommendations to improve classroom listening environments.
- Evaluate and make recommendations for personal hearing instruments, classroom, and other hearing-assistive technology
- Perform fitting, validation, and management of hearing assistance technology.
- Provide hearing-assistive technology services including educating students, teachers of the deaf/ hard of hearing, and other school personnel regarding technology performance and expectations.
- Provide training to perform listening checks and basic trouble shooting to maintain proper functioning of personal hearing instruments and hearing-assistance technology.
- Participate in initial and review IEP and 504 meetings to address audiological and communication access needs, services, and placement determination.
- Provide instruction in audiology-related areas to students.
- Participate as member of the school multidisciplinary special education team.

### **Collaborative Activities**

- Observe classroom and school environments to evaluate communication access, classroom acoustics, and how children who are deaf or hard of hearing, or who have other auditory disorders are functioning.
- Make recommendations to improve access to communication, participation and instruction including use of assistive technologies for alerting, messaging, and other routine functions.
- Use audiological data, coupled with academic and communication data, to determine appropriate use of visual technologies for equitable access to language, instruction, and the curriculum (e.g., ASL, signed systems, cued speech, CART and voice-to-text translations).
- Collaborate with interpreters, transliterators and/or CART providers regarding expressive and receptive preferences and abilities of students accessing those services.
- Lead discussion of the Special Factors requirements at annual IEP meetings.
- Educate school personnel about language, communication, social, and educational effects of hearing loss/deafness, technology options, and associated accommodations.
- Ensure appropriate implementation of services and delivery of instructional accommodations.
- Provide emotional support to children who are deaf or hard of hearing or who have other auditory disorders.
- Organize support groups for children who are deaf or hard of hearing or who have other auditory disorders.
- Educate students and their families regarding hearing status, associated accommodations, technology options, and self-advocacy.
- Promote programs for speech reading, listening, communication strategies and use and care of amplification devices.
- Provide community leadership to enhance awareness of hearing, hearing impairment, and deafness to ensure all children and youth with hearing loss are promptly identified, evaluated, provided resources, and appropriate intervention services.

### Teachers of the Deaf & Hard of Hearing

- Assess educational performance of children who are deaf or hard of hearing or who have other auditory problems. When possible, distinguish learning issues that are related to hearing status from those related to other issues.
- Provide instruction to children who are deaf or hard of hearing or who have other auditory learning problems, including preview and review of academic material to help optimize learning.
- Provide specialized instruction in expanded core curricular areas such as communication, career education, self-determination and advocacy, social emotional skills, technology, and family education.
- Act as liaison to school-based instructional staff and personnel.
- Perform listening checks and basic troubleshooting to monitor personal hearing instruments and hearing-assistive technology. Contact school-based audiologist when problems require additional attention or repair.
- Participate in initial and review IEP and 504 meetings to address communication, education and access needs.
- Participate as member of school multidisciplinary special educational team.

# Exception to Related Services for Students with a Surgically Implanted Device

According to the California Code of Regulations (CFR Title 34 Section 300.34), related services that apply to children with surgically implanted devices, including cochlear implants, do not include optimization of the device's functioning (e.g., mapping), maintenance of that device, or the replacement of that device.

However, nothing limits the right of a child with a surgically implanted device from receiving related services, as outlined in the California Code of Regulations, that are determined by the IEP team as necessary for a child to receive FAPE. Nothing precludes the LEA/district from appropriately monitoring and maintaining medical devices that are needed to maintain the health and safety of the child, including breathing, nutrition, or operation of other bodily functions, while the child is transported to and from school. Lastly, nothing prevents the LEA/district from routinely checking the external component of a surgically implanted device to make sure it is functioning properly.

## **Auxiliary Aids and Services**

Under Title II of the Americans with Disabilities Act, public school districts shall ensure that communication for a student who is deaf and hard of hearing is as effective as communication for students without disabilities.

It is important to note that Title II and Section 504 also protect students with disabilities, regardless of eligibility for special education and related services under IDEA, but still have the right to effective communication as stated in the Title II federal requirements of ADA.

Public schools must apply both IDEA and Title II regulations on effective communication requirements for individuals with disabilities. In some instances, in order to comply with Title II requirements, a district may have to provide the student with services that are not required under the IDEA. However, in other instances, communication services provided under IDEA may meet the requirements of both laws of individual students. Schools need to be aware of both federal laws in order to meet the communication needs of students with disabilities.

Auxiliary aids and services include a wide range of services, devices, technologies, and methods for providing effective communication, as well as the acquisition or modification of equipment or devices. It is the obligation of the district to provide auxiliary aids or services to the maximum extent appropriate, but if the school is able to prove that providing auxiliary aids or services would be a fundamental alteration in the nature of a service, program, or activity, or be an undue financial and administrative burden, the school does not need to provide the auxiliary aid or service.

Title II regulations require that when a school is deciding what types of auxiliary aids and services are necessary to ensure effective communication, the school shall give primary consideration to the aid or service requested by the person with the disability (or an appropriate family member, such as the parent or guardian). The LEA/district must honor the choice of the student with a disability (or appropriate family member) unless the LEA/district can prove that an alternative auxiliary aid or service provides

communication that is as effective as that provided to students without disabilities.

# For a student who is deaf, deaf-blind or hard of hearing, some examples of aids or services may include, but are not limited to:

- · Exchange of written materials
- Qualified interpreter
- Note-takers
- Real-time computer-aided transcript services (i.e. Communication Access Real-time Translation (CART))
- · Real-time captioning
- · Assistive listening systems/devices

- Accessible electronic and information technology
- Open and closed captioning
- Written materials
- Exchange of written notes
- Telephone handset amplifiers
- · Telephone compatible with hearing aides
- Video-based telecommunication systems

In general, the services, devices, technologies, and methods for providing effective communication that are "auxiliary aids and services" under Title II could also be provided under IDEA as a part of FAPE.

# IEP Team Meeting Resources for Students Who Are Deaf and Hard of Hearing

A multi-disciplinary team is encouraged to address all of the unique needs of a child who is deaf or hard of hearing. Some of the key questions for the IEP team to address when making decisions regarding services, supports, and the Least Restrictive Environment (LRE) for a student who is deaf or hard of hearing:

- What is the student's preferred method of communication?
- What are the student's communication needs?
- What are the student's opportunities for direct communication with peers and professional personnel in the child's language and communication mode?
- What are the student's academic level, strengths, and needs?
- What are the student's language skills (including expressive and receptive language), strengths and needs? Possible impact of the hearing loss on understanding of language and speech?
- What are the student's social strengths and needs? Possible social impact of hearing loss?
- What are the student's self-advocacy skills, strengths, and needs?
- What are the student's hearing loss and audiology needs?
- What are the student's needs as it relates to hearing devices, assistive technology, or auxiliary aides and services?
- How does the student access Common Core State Standards?
- What instructional services, supports and accommodations does the student need to access curriculum?

# Determining the Necessary Accommodations and Modifications for Students Who Are Deaf or Hard of Hearing

Questions for the IEP Team to discuss when determining accommodations or modifications for a student who is deaf or hard of hearing may include:

- Classroom routines
  - Is the student aware of classroom routines?
  - Does the student require adult assistance or prompting to follow classroom routines?
  - Is the student able to observe others or independently follow classroom routines?
- Comprehension of instruction
  - Does the student comprehend grade level instruction? What supports the student with comprehending grade-level instruction?
  - What supports are needed for the student to understand and comprehend grade level instruction?
- Participation during whole-class instruction
  - How does the student engage during whole-class instruction?
  - Does the student respond when called upon? Is the student's response on topic/off topic? What does the student need to be more involved during whole-class instruction?
  - What is the student's level of independence when initiating a response during whole class discussions?
- Participation during small group discussions/cooperative learning
  - How does the student engage in small group discussion/cooperative learning environments?
  - What is the student's level of attention in the small group discussions/cooperative learning environments?
  - What level of participation does the student have in small group discussions/cooperative learning environments?
- Self-advocacy skills
  - What is the student's level of awareness of their hearing-related needs?
  - What level of prompting or support does the student need in order to inform others of their hearingrelated needs?
  - What is the level of the student's awareness of their preferential seating needs?
  - What supports the student in selecting the most appropriate seating position within the classroom?
  - Is the student aware when/if information presented to the whole class is misunderstood?

- Does the student ask for assistance when information is misunderstood? Does the student ask for instruction to be repeated when it is misunderstood?
- · Visual attention during instruction
  - What percentage of the time does the student visually attend to the speaker?
  - What supports are needed to improve the percentage of time the student visually attends to the speaker?
- · Auditory skills
  - What are the student's auditory skills in a quiet classroom? What distances does the student demonstrate auditory skills in a quiet classroom?
  - What are the student's auditory skills within a normal noise level? What distances does the student demonstrate auditory skills within this environment?
  - What are the student's auditory skills within noisy classroom? What distances does the student demonstrate auditory skills within this environment?

## Instructional Strategies and Best Practices

There are a few key characteristics to be aware of when interacting with students who are deaf or hard of hearing. First, the level of "usable" hearing varies greatly from person to person. Second, they may or may not speak, and communication may or may not require an American Sign Language (ASL) interpreter. It is important to remember that each student with hearing loss is unique, and should receive supports and services based on their unique needs.

# Each child with hearing loss requires supports and services to access all classroom activities and social and educational opportunities. Some strategies to consider include:

- Check classroom acoustics to minimize typical classroom noise and maximize sound amplification for student.
- Ensure student is seated appropriately to have best access to teacher's instruction.
- Student may need attention to auditory skills, speech and language development, and support with vocabulary and reading.
- Student may use hearing aids and an FM system for amplification of sound. Check regularly for proper working condition.

- Self-esteem and peer acceptance may be areas of concern. Support and encourage proactively.
- Student may use sign language or a visual communication system. An educational interpreter may be necessary. Communication systems should be used consistently.
- Student may benefit from note-taking assistance.
- Closed captioning in films and videos may be necessary.
- If student uses sign language, access to other ASL users is beneficial.

The classroom itself can help or hinder the student's success in a class. Most students who are deaf or hard of hearing depend on their vision to either lipread the teacher or to watch an interpreter, so the physical aspects of the classroom become very important.

- Standing in front of a light source puts the teacher's face in a shadow, making it very difficult to lipread for the student.
- The teacher should avoid speaking any time his/ her face is hidden from the student's view, such as when writing on the board or walking around the room.
- When using an overhead projector, the teacher should stand to the side of the projector so that it doesn't block the face.
- If a PA microphone is used in a large classroom, the microphone should be held below the mouth to facilitate lipreading.
- Classroom staff should use visual aids whenever possible.
- When referring to items on the board, the teacher should be specific about the word or phrase being referenced to by pointing directly to it.

- When showing a videotape to the class, classroom staff should ensure it is captioned and that the television has a decoder. Any videos you purchase should be captioned. Videos may be 'open captioned' (always visible) or 'closed captioned' (visible only when a decoder reveals them).
- For small classrooms, arranging desks in a semicircle will allow the student to watch for physical cues.
- The deaf or hard of hearing student may want to sit in front of the classroom and to the side to better see the teacher, the interpreter, and the rest of the class.
- Staff should be aware of the noise level in the classroom. Hard of hearing students, whether or not they are using an assistive listening device, may be very sensitive to environmental (background) sounds, which tend to 'mask' speech. Background noise should be kept to a minimum.
- Deaf or hard of hearing students may also have visual disabilities, thus each situation with a student may have different solutions.

# Accommodations for a Student Who Is Deaf or Hard of Hearing

There are a number of accommodations that can be provided to a student who is deaf or hard of hearing that can be implemented by administrators, teachers, support staff, and related service providers. Alteration to amplification, assistive devices, communication, instruction, the physical environment and assessment may be warranted in order for a student who is deaf or hard of hearing to gain access to their education. Refer to the <a href="Appendix">Appendix</a> for the following resources:

- A sample a IEP Checklist of Recommended Accommodations and Modifications for Students who are Deaf and Hard of Hearing
- An article on classroom adaptations titled *Children with Hearing Loss Helpful Adaptations in the School Environment*

# Children with Hearing Loss - Helpful Adaptations in the School Environment

The following was developed by Karen L. Anderson, PhD for the Minnesota Department of Education Parents Know website, 2011 (http://parentsknow.state.mn.us).

Adaptations to the classroom environment need to be considered individually for each child. Adaptations 'level the playing field' for children with learning challenges. Every learner should be able to fully access educational information in the classroom. Challenges and appropriate classroom adaptations will vary depending on a child's age.

### **Challenges to Classroom Communication for Children with Hearing Loss**

Learning at home is different than learning at school. At home most people are within a few feet of each other as they communicate. It is often pretty quiet and there are only a few people together. In school the room is large, there are many children present and it is noisy. Children learn from their teachers and from other children. Children without hearing loss can listen across distance, even when it's noisy. They can catch the fast-paced conversation of other children, even if it is only a whisper. They can listen, learn and hold a conversation even when they aren't watching who is talking and it is noisy. And these conditions are changing all the time. Communication under some or all of these conditions can be very difficult for children with hearing loss. The challenges of each child should be considered for necessary adaptations in the classroom. These adaptations should be included in the student's IEP or 504 Plan. Teachers for deaf/hard of hearing students and audiologists who work in Minnesota's public schools can help evaluate a child's learning environment and make recommendations.

### **Classroom Considerations that Help Most Students**

- Keep the classroom door closed to minimize noise in the hallway from interfering with learning.
- Teacher avoids standing in front of a window so that his/her face can be seen without glare from the sun or outside distractions.
- All new directions, concepts and information should be presented from the front of the room, not when the teacher is moving between desks or during noisy classroom transition times.
- Adhere to a classroom routine; if a student misses something they will be better able to predict what they should be doing or what will happen next.
- Maintain quiet during lecture times and classroom discussion when students will be expected to understand information
- During classroom discussions ask students to speak one at a time.
- Summarize key points made by students' answers or comments during class discussion.
- Write all assignments on the board, including textbook page numbers the class will be turning to in each lesson period.
- If a visual is used, like a map, graph or a projected image, allow students a chance to look at the visual, describe what they are seeing, and provide short silences so they can process the meaning of both the visual and what is being said.

### Classroom Adaptations to Help Children with Hearing Loss Listen Better

- Assign children to classrooms that have acceptable acoustics. Open-plan schools are not appropriate
  settings for children with hearing loss who are auditory learners. Noisy ventilation system, rooms next
  to noisy gym or band areas and classrooms that lack acoustic ceiling tile and/or carpeting are likely to
  add to the child's listening and learning challenges. Felt pads or tennis balls on the legs of the chairs/
  desks will cut down on noise made by students.
- Make sure the child's hearing aids or cochlear implants are functioning each day. A school staff member should be responsible for checking the devices daily and/or for working with the student as they gain responsibility for performing daily checks of their own devices. Students who are unable to repeat 90% or more of words in background noise should be considered for personal FM devices that work with their own hearing aids or cochlear implants. The teacher wears a microphone transmitter and the child is able to hear the teacher's voice through the FM device as though s/he was speaking only a few inches from the student's ears. If the microphone is passed around during classroom discussions and small group learning then the child will be able to hear other student's voices too.
- Use FM devices to allow the child to be able to hear school assemblies and daily announcements. Provide a way to use FM with Smart Boards, computers and videos.
- Seat the student in the second row and a little off to one side of the classroom. If he or she has a better hearing ear, that ear should be facing the teacher. Recognize that the student may need to turn to watch other students as they speak or to gather visual cues if they miss directions.
- The student and teacher can work out a signal that can be used when the student is having a hard time understanding. For example, cupping a hand behind one ear, putting a finger on the side of the nose or hanging a hand over the front of the desk and wiggling the fingers could all be confidential signals between the student and the teacher. With this reminder, the teacher can control the noise, distance or summarize what has recently been presented.
- Encourage the student to close the classroom door if it is open to interfering noise.
- Some children benefit from use of a 'buddy system' in which the student asks another student to repeat directions or help them get started on seat work. This should not interfere with the student taking responsibility for letting the teacher know that they didn't understand. Becoming an independent communicator is an important lifelong skill.

### Classroom Adaptations to Help Children with Hearing Loss with Visual Learning or Visual Cues

- Allow the child to move to another seat, chair or place in the room that allows him or her to see better as classroom activities change.
- Adults and children should be reminded to not speak with hands or other things in front of their mouths. Long mustaches can also interfere and should be trimmed short or shaved off.
- Student notetakers can be used so that the student with hearing loss can focus on the instruction. Unlike children without hearing loss, listening while taking notes at the same time is often not possible.
- All videos need to be captioned for the student to access the same information as other students.
- Voice-to-text adaptations can be explored for students who are unable to access verbal instruction auditorilly (or via sign language or cued speech) at a rate similar to students without hearing loss.
- Sign language interpreters, spoken language facilitators or cued speech transliterators can be used. Children must be trained to pay attention to the interpreter starting by late preschool or kindergarten.

### **Expectations of the Child as an Active Learner**

- Communication is a 2-way street. Everyone mishears or misunderstands communication some of the time. We are all responsible for repairing these broken communication situations. Children with hearing loss need to recognize that 'bluffing' is not okay when they do not understand.
- The student can work out a signal system with teachers, community sports coaches or group leaders (e.g., Boy Scouts) to let the adults know when communication is difficult.
- Students need to gradually learn to take responsibility for their own devices until they can check them independently every day and report any problems immediately.
- Students should remind adults to use FM devices and let them know when noise is interfering with learning.

### **Resources and Information**

All students

 Education – Including Deaf and Hard of Hearing Children in the Classroom http://deafness.about.com/od/schooling/a/inclassroom.htm

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### IEP CHECKLIST: RECOMMENDED ACCOMMODATIONS AND MODIFICATIONS FOR STUDENTS WHO ARE DEAF AND HARD OF HEARING

Name:	Date:		
Note: Accommodations provide access to communication and instr			
evaluation of academic performance.	ruction, would reactions after the content, the expectations, and the		
evaluation of academic performance.			
A 100 / A 1 /			
Amplification Accommodations	Physical Environment Accommodations		
Personal hearing instrument (hearing aid, cochlear	Noise/reverberation reduction (carpet & other sound		
implant, tactile device)	absorption materials) reANSI.s12.60		
Personal FM (hearing aid + FM or FM only)	Special lighting		
FM hearing assistance technology system (without	Room design modifications:		
personal hearing instrument)	Flashing fire alarms/smoke detectors		
Classroom amplification/sound distribution system			
	<b>Curricular Modifications</b>		
<b>Assistive Devices Accommodations</b>	Modified reading assignments (shorten length,		
Videophone or TDD	adapt or eliminate phonics assignments)		
Alerting devices	Modified written assignments (shorten length,		
Other	adjust evaluation criteria)		
	Extra practice		
Communication Accommodations	Pre-teach, teach, re-teach vocabulary, concepts		
Priority seating arrangement:	Strategies to adapt oral/aural curriculum/instruction		
Thomas during arrangement.	to accommodate lack of auditory access		
Obtain student's attention prior to speaking	Supplemental materials to reinforce concepts of		
Reduce auditory distractions (background noise)	curriculum		
Reduce visual distractions	Alternate curriculum		
Enhance speechreading conditions (avoid hands in			
	<b>Evaluation Accommodations &amp;</b>		
front of face, mustaches well-trimmed, no gum chewing)			
<i>S</i> /	Modifications		
Present information in simple, structured, sequential	Reduce quantity of tests		
manner	Alternate tests		
Clearly enunciated speech	Reading assistance with tests for clarification of		
Extra time for processing information	directions, language of test questions (non-reading		
Repeat or rephrase information when necessary	items)		
Frequent checks for understanding	Extra time		
Speech to text software (speech recognition)	Special setting		
Interpreting (ASL, signed English, cued speech,	Other:		
oral)	<del></del>		
	Other Needs/Considerations		
Instructional Accommodations &			
Modifications	Expanded core curriculum instruction (speech,		
	language, pragmatic language/communication,		
Visual supplements (overheads, charts, vocabulary	audition and listening, speechreading, sign		
lists, lecture outlines)	language, self-advocacy, transition planning, deaf		
Interactive whiteboard (e.g., Smart Board, Mimio)	studies)		
Classroom captioning (CART,)	Counseling		
Captioning and/or scripts for television, videos,	Vocational Rehabilitation services		
movies	Deaf/Hard of Hearing peers		
Buddy system for notes, extra	Deaf/Hard of Hearing role models		
explanations/directions	Recreational/Social opportunities		
Check for understanding of information	Sign language instruction for family		
Down time/break from listening/watching	Family supports and training		
Extra time to complete assignments	Financial assistance		
Step-by-step directions	Transition services		
Interpreting (ASL, signed English, cued speech, oral)	<del></del>		
Speech to text software (speech recognition)			
Tutoring			
Notetaker			
Direct instruction (indicate classes):			

<sup>&</sup>lt;sup>1</sup> Johnson, CD, Benson, P, & Seaton, J. 1997. Educational Audiology Handbook, Appendix 11, Revised 2007- CDJ

## Glossary of Terms

**Accommodation** — A service or modification provided to a student with a disability that enables the student to participate in the classroom (or other) experience on an equal basis.

**ASL** — American Sign Language.

Assistive Listening Device (ALD)—Technical tool to assist people with hearing loss, with or without a hearing aid. It brings the speaker's voice directly to the ear. Helps to overcome the problems of distant and surrounding noise.

Audiologist — A healthcare professional who evaluates hearing and prescribes hearing aids. A Minnesota licensed audiologist has a current certificate of clinical competency (CCC) issued by the American Speech and Hearing Association and/or current board certification from the American Board of Audiology.

Audio Loop (Induction Loop)—Uses electromagnetic waves for transmission of sound. The sound from an amplifier is fed into a wire loop surrounding the seating area (or worn on the listener's neck) which broadcasts to a telecoil that serves as a receiver. Hearing aids without a T-switch to activate a telecoil can use a special induction receiver to pick up the sound.

### **CART Communication Access Realtime**

**Translation**—CART or Communication Access Realtime Translation is the verbatim, near instantaneous conversion of spoken language into text. A stenotype machine, notebook computer and realtime software is used to produce the text. The text is usually displayed either on a screen by a projector connected to the notebook computer, or on a notebook computer or computer monitor. CART is usually utilized by people with hearing loss who use spoken language as a primary mode of communication. However, some culturally Deaf people (whose primary mode of communication is sign language) use CART in situations such as graduate level anatomy classes, as it may be easier to read all of the specific terminology rather than have signs improvised on the spot, or use fingerspelling.

**Certified Hearing Dog**—A dog that has completed extensive training to alert its owner to a variety of sounds in different environments. These dogs are usually identified by a bright orange leash with black lettering.

**Closed Captions**—Text display of spoken dialogue and sounds on TV and videos visible only to those using a caption decoder or TV with built-in decoder chip.

**Cochlear Implant (CI)**—A cochlear implant is an electronic device that is surgically implanted and worked by directly stimulating functioning auditory nerve fibers in the inner ear. Cochlear implants convert sound waves to electrical impulses and transmit them to the inner ear, providing people with severe to profound hearing loss the ability to hear sounds and potentially better understand speech without reading lips.

**Code of Ethics** — Guidelines for ethical behavior that all interpreters must follow.

**Communication Access**—Accommodations that provide an environment where persons with hearing loss can communicate.

**Computer-Assisted Notetaking**—Visual display of the speaker's words. A note taker types on a computer keyboard a summary of what is being said. The notes are displayed on a projection screen or monitor.

**C-Print** — Computerized speech to text transcription.

**Cued Speech** — A sound-based visual communication system which in English uses eight hand shapes in four different locations ("cues"), in combination with the natural mouth movements of speech, to make all the sounds of spoken language look different.

**Cumulative Trauma Disorder** — A painful physical condition, such as Carpal Tunnel Syndrome, that is caused by overuse and repetitive motion without sufficient breaks for resting.

**Deaf/Blind**—Having a dual sensory loss that interferes with the ability of a person to function effectively in the "hearing-sighted" world. This term does not necessarily mean total lack of hearing and vision.

**Deaf Person** — A person whose hearing loss makes it impossible to understand speech.

**Decibel (dB)**—Unit used to express the intensity of a sound wave in logarithmic ratios to the base of ten. Sounds of different frequencies need to be from 0-20 dB in intensity to be heard by normal ears. If more than 20 dB is needed, then further hearing evaluation would be recommended.

**Decoder** — A device which allows closed captioning to be seen on a television screen.

**Fingerspelling** — Using the manual alphabet to spell words. The manual alphabet is 26 single hand positions representing the 26 letters of the alphabet.

**FM (Frequency Modulation)**—A transmitter which broadcasts the signal by radio waves from the sound source to a receiver worn by the listener. Useful in large indoor or outdoor locations, since it can cover several hundred feet and pass through physical obstructions.

**Hard of Hearing Person** — One whose hearing loss makes it difficult, but not impossible, to understand speech with or without the use of hearing aids

**Hearing Aid**—An amplification device to assist persons with hearing loss. There are different kinds of hearing aids which are distinguished by how they are worn. They might be in-the-ear (ITE), in-the-canal (ITC), behind-the-ear (BTE), or on the body. The technology is still imperfect and hearing aids do not correct hearing loss. Newest developments include programmable aids.

Interpreter Sign Language—Visible movements of hands, body and face that replace the vocal elements of a spoken language. Depending on the communication situation and personal preferences, people who have hearing loss or who are deaf in the United States who use sign language might communicate using the unique grammar of American Sign Language (ASL) or some variety of

signing that uses features taken from both ASL and English Sign Language.

**Lipreading**—A skill used by a person with hearing loss to try to understand speech by watching the lips. The term "speechreading" is now recognized as being more descriptive since it includes watching the facial expressions and body language, as well as the lips of the speaker.

**Note-taker** — Someone designated to provide written notes to the student who is deaf or hard of hearing.

**Open Caption** — Text that appears on the television screen that conveys the spoken information and does not require a decoder.

**Oral Interpreting** — A form of interpreting in which the interpreter mouths without voice what is being said so the person who is deaf or hard of hearing can speech read more easily.

**Real-time Captioning** — Verbatim captioning that is produced live as words are spoken.

**RID** — Registry of Interpreters for the Deaf, the organization responsible for testing and certifying interpreters, and the formation of the Code of Ethics.

**Tactile Interpreting** — A form of interpreting with individuals who are deaf blind which involves them receiving information by placing their hand(s) on the interpreter's hand(s) during the interpretation.

**T-Switch**—A setting on a hearing aid that can be used with a hearing aid-compatible telephone, assistive listening device, and audio loop system. When the hearing aid is switched to "T", it activates the induction telecoil (the technical name for the "T" switch), causing the hearing aid to pick up the magnetic field generated by the "hearing aid-compatible" telephone assistive device, or audio loop system being used.

**Text Telephone (TT)**—Formerly TDD or TTY – a text telephone is a telecommunications device used by those who cannot understand on the phone. A typewriter-like unit shows the conversation on a screen so that it can be read. The transmission is with a special coding called Baudot or ASCII.

### National Resources

# Alexander Graham Bell Association for the Deaf and Hard of Hearing

3417 Volta Place NW

Washington DC 20007-2778

Phone: (202) 337-5220

TTY/TDD: Same

www.agbell.org

### **Auditory-Verbal International, Inc. (AVI)**

2121 Eisenhower Avenue, Suite 402

Alexandria, VA 22314

Phone: (703) 739-0395

TTY/TDD: same

www.auditory-verbal.org

# BEGINNINGS for Parents of Children who are Deaf or Hard of Hearing, Inc.

3900 Barrett Drive, Suite 100

Raleigh, NC 27609

Phone: (800) 541-4327 and (919) 571-4843

TTY/TDD: Same

www.ncbegin.com

#### **Hands and Voices**

A parent driven, non-profit organization dedicated to providing unbiased support to families

Phone: (866)422-0422 V/TTY

www.handsandvoices.org

# National Information Center for Deafness (NICD), Gallaudet University

800 Florida Avenue NE

Washington, DC 20002-3695

Phone: (202) 651-5051

TTY/TDD: (202) 651-5052

www.gallaudet.edu

# National Information Clearinghouse on Children Who Are Deaf-Blind

354 North Monmouth Avenue

Monmouth, OR 97361

Phone: (800) 438-9376

TTY/TDD: (800) 854-7013

https://nationaldb.org/

## Resources in California

# California Department of Social Services: Office of Deaf Access

744 P Street

Sacramento, CA 95814

Phone: (916) 653-8320

TTY/TDD: (916) 653-7651

www.cdss.ca.gov/cdssweb/entres/pdf/ODA/

EntireDeafDirectory.pdf

# California Educators of the Deaf and Hard of Hearing

http://cal-ed.org/

# California Public Utilities Commission: Deaf and Disabled Telecommunications Program (CTAP)

Mailing address: 505 Van Ness Avenue

San Francisco, CA 94102

Phone: 1-800-806-1191

TTY/TDD: 1-800-806-4474

Refer to the website for regional CTAP Service

Center contact information

http://ddtp.cpuc.ca.gov/homepage.aspx

# California Department of Rehabilitation: Deaf and Hard of Hearing Services

721 Capitol Mall

Sacramento, CA 95814

Phone: (916) 558-5670

TTY/TDD: (916) 558-5673

www.rehab.cahwnet.gov/SSD/Deaf-Hard-of-

Hearing-Services.html

### **California Department of Education**

www.cde.ca.gov/sp/ss/dh/

### **California School for the Deaf Fremont**

39350 Gallaudet Drive, Fremont, CA 94538

Main Office # (510) 794-3666 | Fax: (510) 794-2409

VP # (510) 344-6044

Spanish Speaking Families # (510) 794-3685

www.csdeagles.com

### **California School for the Deaf Riverside**

3044 Horace Street

Riverside, CA 92506

info@csdr-cde.ca.gov

(951) 248-7700

(951) 824-8070

www.csdr-cde.ca.gov

### **Parent Links**

www.empoweryourfamily.org/ParentLinks

#### Warmline

2424 Castro Way

Sacramento, CA 95818

(916) 455-9500

Toll Free: (844) 455-9517

www.warmlinefrc.org









