



Children with Hearing Loss – Helpful Adaptations in the School Environment

- Our ears funnel sound to our brains so that we can ‘hear’.
- When we purposely pay attention to some sounds rather than others we ‘listen’.
- If people cannot hear or listen well enough to fully understand what is said, then using visual cues in the environment can help them access information.
- The amount of background noise in the classroom can also affect listening and should be minimized for best understanding.

The scenarios below show how different children who are hard of hearing can be in terms of their readiness for school and potential challenges learning in a typical classroom – setting:

JOHN: Identified at 1 month with a 50 dB hearing loss in both ears, John began wearing hearing aids during all waking hours before he was 2 months old. With much support from his parents and services from early intervention, John’s language development was equal to or better than other children his age and he was a confident communicator at home and with friends. By age 3, John was ready for preschool.

SAM: Identified at 1 month with a 35 dB hearing loss, Sam didn’t always wear his hearing aids. He was not talking by 18 months and it was found that his hearing loss had increased to 80 dB. By the time Sam was 3 he was very behind in language development. His family talked and sometimes used signs. Sam needed a preschool experience for intensive work on his language skills.

DAVID: Identified at 1 month with an 85 dB hearing loss, David wore hearing aids regularly and his family communicated mainly in sign language. By age 3, David’s language understanding via sign was similar to the language development of other children his age that didn’t have hearing loss. His ability to express himself was a little delayed. David was ready for a preschool experience with other children who communicated with sign language. He would later use a sign language interpreter in a regular education classroom setting.

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 auditorily (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>
- Information Packet for Your Child's Teacher
<http://deafness.about.com/od/schooling/a/inclassroom.htm>
- Compensatory Skills Checklist for Students with Hearing Loss (MN Department of Education)
http://education.state.mn.us/MDE/Learning_Support/Special_Education/Categorical_Disability_Information/Deaf_Hard_Hearing/index.html

Younger students

- Welcoming the Child with Hearing Impairment into Childcare (may also apply to preschool settings)
<http://www.kandersonaudconsulting.com> Parent Resources

Older students

- Links to sites describing university accommodation
<http://www.disabilityresource.uic.edu/viewer.asp?tab=0&label=Deaf%20%20Hard%20of%20Hearing>
<http://www.cpcc.edu/disabilities/deafness-101/accomodating>