Optimizing the Classroom Environment

Program in Audiology and Communication Sciences
Pediatric Audiology Specialization

The contents of this presentation were developed under a grant from the US Department of Education, #H325K140303. However, those contents do not necessarily represent the policy of the US Department of Education, and you should not assume endorsement by the Federal Government. Project Officer, Maryann McDermott
Classroom Optimization

• Classrooms can be noisy, which might make it hard to hear the teacher and children may become tired from struggling to listen
  • This is referred to as listening fatigue and can be a barrier to learning
• Different steps can be taken to help all students hear the teacher adequately, which is especially beneficial for students with hearing loss
  • Classroom optimization is the process of implementing these steps
Importance

- A child with hearing loss might struggle to hear his or her teacher if the noise in the room is too loud.
- Noise can come from the hallway, the air conditioner, or students talking.
- Making the teacher's voice louder than the background noise will help children to hear the teacher with less listening fatigue.
Signal to Noise Ratio (SNR)

- The difference between the loudness of the teacher’s voice compared to the loudness of the noise in the room.

The higher the SNR is in the classroom, the better your child can hear!
Legislation

- The **Individuals with Disabilities Education Act of 2004 (IDEA)** and the **Rehabilitation Act of 1973** state that school districts must provide access to appropriate education for all students.
- Plans created with your child’s school that describe classroom modifications or academic support include:
  - **504 Plan**
  - **Individualized Education Program (IEP)**
- These plans are helpful to ensure everyone is in agreement about the modifications and supports your child will use while at school.
504 Plans and IEPs

• If your child qualifies, the school will work with you to develop a 504 Plan or IEP

• You may work with:
  • General Education Teachers
  • Teachers of the Deaf
  • Educational Audiologists
  • Speech Language Pathologists
  • Other professionals from your school district

• You are a valuable part of the team and should feel comfortable giving your opinion and asking questions
Options for the Classroom

Communication and learning can be improved in the classroom through various modifications and accommodations such as:

- Preferential seating
- Visual supplements
- Notetaking
- Assistive listening devices

Talk to your child's teacher about the possibility of using any of these options!
Preferential Seating

- Your child should be given a seat in the classroom that is best for hearing his or her teachers and classmates.
- This may be the front of the room, by the teacher’s desk, or any place that gives your child the most access to sound.

Your child may also benefit from sitting away from noisy areas of the room including near the door, air conditioner, or window.
Visual Supplements

• Visual aids can help all children in the classroom learn and may improve their understanding and engagement in lessons

• **Captions** are a type of visual aid that display words on a device to describe the audio of videos

• Other visual aids include blackboards, picture schedules, and diagrams
Notetaking Accommodations

• Notetaking is another beneficial modification for some children with hearing loss

• A **notetaker** can be another student in your child’s class who will share written notes with your child

• These supplemental notes will allow your child to concentrate on listening, while still having access to the main points of the lesson in written format to review after class
Reducing Background Noise

• Your child may also benefit from **reduction of other noises** in the classroom through the use of Assistive Listening Devices (ALDs)
  • ALDs increase signal to noise ratios by sending teachers' voices directly to your child, overcoming competing noises
  • These include classroom microphone systems, FM systems, and hearing or induction loop systems

For more information on ALD options, please visit the Pediatric Amplification module at [pacs.wustl.edu/kidshearinghealth/](http://pacs.wustl.edu/kidshearinghealth/)
Advocating for Your Child

• Advocating for your child may mean talking with the teacher, administrators, and other parents to educate them about your child's specific needs and devices

• Ways to teach your child to advocate for himself or herself include:
  • Explaining the importance of asking questions
  • Educating him or her about the devices and having a troubleshooting plan
  • Encouraging him or her to teach other students about the devices and hearing loss
Benefit for All

• All children can benefit from an optimized listening environment, especially through:
  • Captions and other visual supplements
  • Background noise reduction
  • Classroom microphones
• Teachers can benefit as well
  • Microphones and lower background noise lead to less vocal strain and fatigue
To find a pediatric audiologist near you, please visit one of the links below:

http://webportal.audiology.org/Custom/FindAnAudiologist.aspx

http://www.asha.org/profind/