Myths and Facts for Hearing Loss

(How Hard of Hearing People Hear)

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This presentation is available at www.nchearingloss.org/programs.htm
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Topics

- The Forgotten Child
- Explaining Hard of Hearing Issues
- Translating to the Classroom
## Hearing Ability Varies

<table>
<thead>
<tr>
<th>Okay</th>
<th>Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiet office</td>
<td>Noisy classroom</td>
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<tr>
<td>Carpeting</td>
<td>Bare floor</td>
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<tr>
<td>Bright room</td>
<td>Dark or inconsistent lighting</td>
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<tr>
<td>One-on-one</td>
<td>Discussion</td>
</tr>
<tr>
<td>Voice I know</td>
<td>New person</td>
</tr>
<tr>
<td>Close distance</td>
<td>Second row</td>
</tr>
<tr>
<td>Healthy and well-rested</td>
<td>Head cold</td>
</tr>
<tr>
<td>Can see the speaker</td>
<td>Tapes, people behind me</td>
</tr>
</tbody>
</table>

Hearing children do not experience this variation.
Listening is an Active Sport

- I can listen in noise for a few minutes, but not for an hour
- I can listen in an ideal classroom without technology for an hour, but not all day
- I can run around the block, but I can’t run in a marathon

For hard of hearing people, the journey is at full speed. The hearing people are allowed to walk.
Explaining Hearing Loss Issues
Hard of Hearing is Not Just Less Deaf
Medical Perspective

loudness

whispering
conversation
vowels
c consonants
whistle
teenager's music

Hearing
Hard of Hearing
Deaf

frequency
Cultural Labels

- **Deaf**
  - part of Deaf culture/community
  - deafness is an identity
- **deaf**
  - cannot hear well even with hearing aid
  - culturally hearing (translation: isolated)
- **Hard of hearing**
  - may hear some with hearing aid
  - too deaf to be hearing and too hearing to be Deaf
- **My spouse thinks I can’t hear**
Audiogram is Partial Story

- Frequencies heard
- Volume required to hear frequencies
- Tinnitus? Recruitment?
- Listening skills
- Coping strategies
- Technology
- Sleep the night before
Are You Wearing Your Hearing Aid?
Hearing Aid Facts

- Hearing aids do not “fix” hearing loss
  - not like glasses
  - external amplifier has to go through “bad” ear

- Problems with hearing aids
  - amplify background noise
  - can have interference from equipment

- Hearing aid helps, but is not total solution
Hearing Aid “Quality”

- Price does not always mean better fit
- Individual preference
  - Familiar tone
  - Listening environments
  - Gadget comfort level
- Fitting can be complex
  - Earmold
  - Programming
  - Tuning
But You Can Lipread
Fact: Lipreading is an Art

You’re hard of hearing! So you can lipread, right?

Only when I want to get myself in trouble...

Hollywood Teaches Us:
When someone loses their hearing they are able to lipread as compensation

Reality Is:
Lipreading is a difficult skill that few are able to master
Can you bowl next week against the Tow Trucks?

Sure -- I’ll be there!

Which Team is it Really?
- Navy Department 20
- Navy Department 40
- Navy Department 60
- Raytheon A
- Raytheon B
- Coast Guard
- Army
- Marines
I hear the COAST GUARD has a good team!
Did You Know?

- Lipreading is only successful
  - when the speaker never moves
  - all the words are known
  - the words are predictable
- Only 1/3 of speech is visible on the lips

An “expert” lipreader is guessing at 66% of what is said!
How Does Lipreading Work?

“f”
- How air is stopped (teeth, lips, none)
- Inside the mouth
- Throat
- Vocal Chords

“s”

“s” versus “f”
same except for the highest frequency
sound the same with a high frequency loss
they look different on the lips
How about if you sit closer? We can turn up the volume...
Louder Not Necessarily Clearer

What is this word?
Now it’s louder...
Louder Not Necessarily Clearer

help

Now it’s clearer.
Ambiguity is the Real Problem

- A few numbers that sound the same
  - 15, 16, 50, 60
  - “Fifteen, that is, one-five.”
- Letters sound the same
  - B, C, D, E, G, P, T, V, Z
  - “C as in Cat”

- Try it again, I got part of it
- Sometimes I need you to use a different word
Filling in the Gaps

Hard of Hearing People Play
“fill in the gaps”
to guess at the missing notes

UNDER __ T A N D
In noise there are more gaps to fill.
Competing Speech Is Worst

With nearby conversations there are gaps to fill and errors to correct

U Q D E R __ T A R D
Time Delay to Fill in the Gaps

When the next phrase arrives before sorting out the previous one, it becomes too hard to keep up.

People with hearing loss need extra processing time to listen.
Very Little Usable Volume

Can you turn it up, I can’t understand the program

Can you turn it down, I can’t think over here.

Volume = 5

Perfect

Ouch

Volume = 8

Volume = 3
A Common Phenomenon for Hard of Hearing People

- Need “8” to understand
- Need “3” to ignore
- Everything in between is useless

Source of misunderstanding:
“they have selective hearing”
“this noise won’t bother them”
Confidence about Hearing

- Experience in guessing wrong
- Not confident about what was “heard”

Examples:
- “Are they late, or did I get the arrangements wrong”
- “Yes, I’ll give her the message” “I didn’t understand them, you’ll have to call back”

Not enough to say “did you understand”, Need to ask for information to be repeated back
“I Think I Hear Fine”

- Poor mitigation strategies
  - Let me know if you miss anything
  - Did you hear everything okay?
  - *Same as asking: Are you asleep?*
- Person with hearing loss is worst judge of what they heard
- My biggest problem is not what I didn’t hear, but what I think I did hear
Communication

- Communication is not about
  - what is said
  - how it is said

Communication is About
What is Understood
My Hearing Loss

- Hearing loss is a challenge, not a limitation
- Hearing loss is something you share with everyone you attempt to communicate with
- Accommodation is a tool, not a weapon
- Ears are not important – only what is in between
- What do you mean I can’t... Watch me.
- We can talk about my hearing loss.
- I want you to understand.

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