



Hearing Aids, Cochlear Implants, and Babies . . . Oh My!

Sharing A Vision 2015 Conference



Presenters

- Tracy Meehan

- Illinois State University
- DTH and Evaluator

- Danielle DeGuzman

- DTH, Deaf Educator, and Sign Language Interpreter

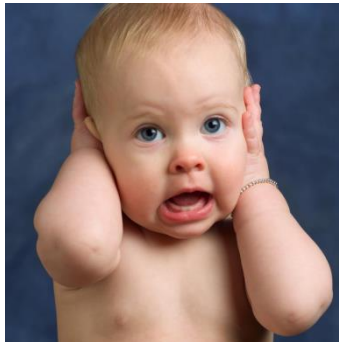
- Molly Herman

- DTH, Deaf Educator, MS in ED, NBCT
- PreK teacher of DHH children in Peoria, IL, EI provider for DHH children, and Doctorate Student at ISU
- New mother of a 3 month old!



Hearing Loss in Infants

- Approximately 1.4 per 1,000 babies are identified with a hearing loss
- The goal is for most to be identified via Early Hearing Detection Intervention (EHDI)



Infants & 1-3-6

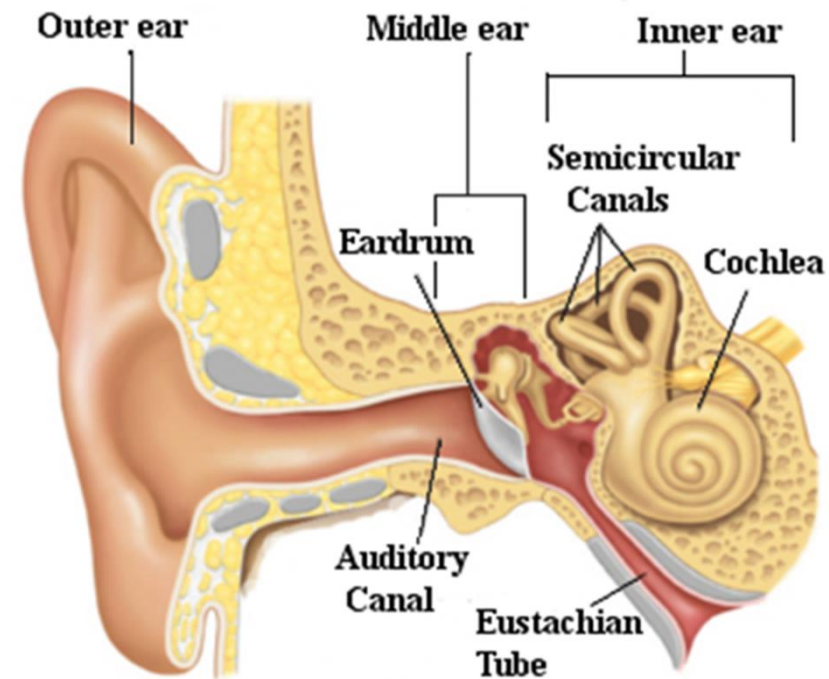
Recommended Guideline



- Identify hearing loss by 1 month
- Diagnostic follow-up by 3 months
- Appropriate intervention by 6 months of age
 - Consistent technology use
 - Focus on developing listening skills

Hearing Loss Descriptors

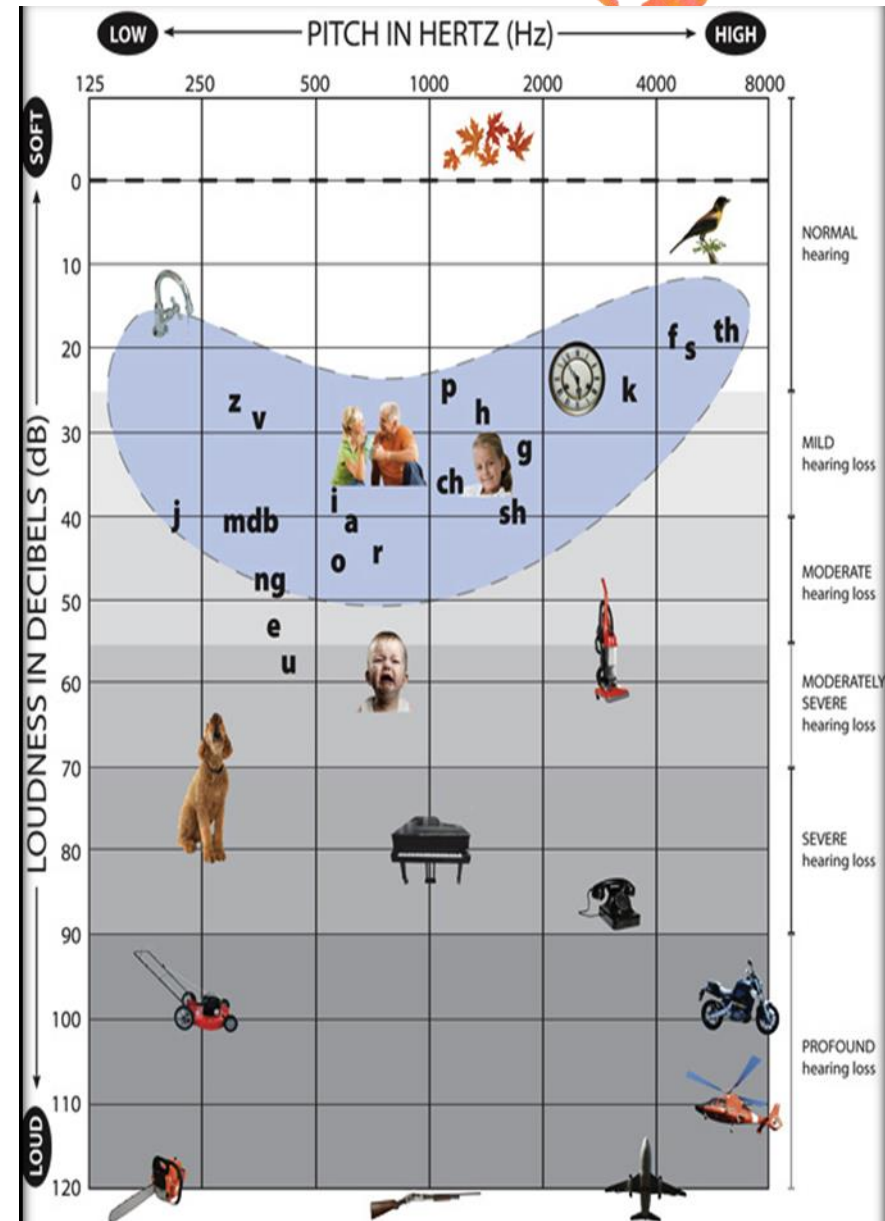
- Unilateral (1 ear)
- Bilateral (both ears)
- Progressive (worsens over time)
- Conductive (outer ear; temporary)
- Sensorineural (permanent)



Types of Hearing Loss



- Mild
 - Moderate
 - Moderately Severe
 - Severe
 - Profound
-
- Low Frequency
 - High Frequency



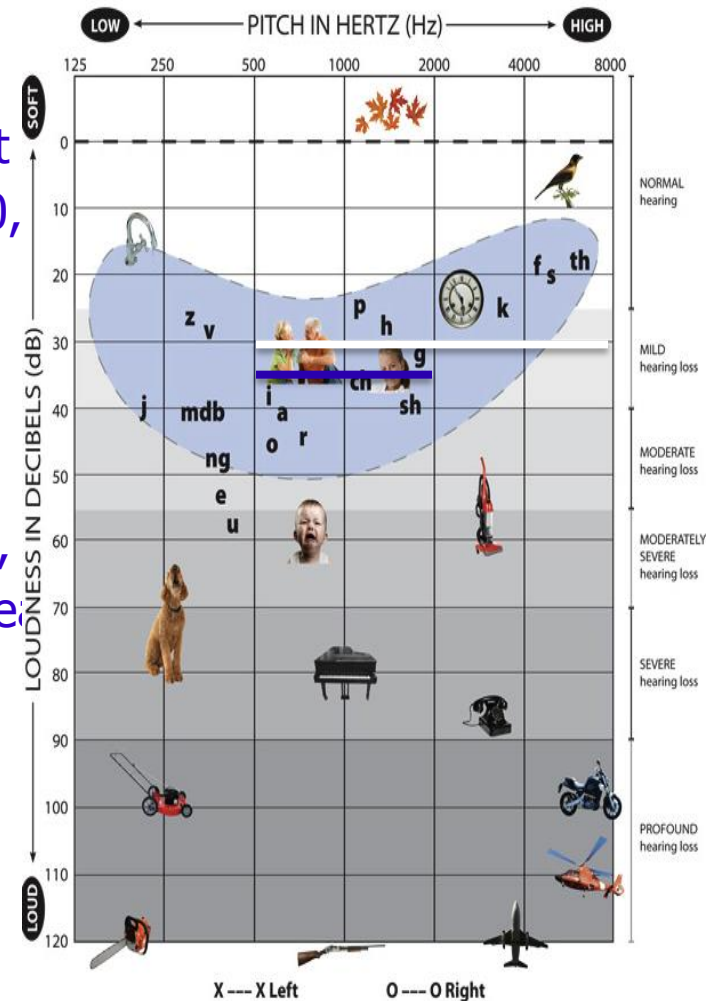
EI Eligibility Requirements:

Section 500.APPENDIX E Medical Conditions Resulting in High Probability of Developmental Delay



Disorders of the Sense Organs:

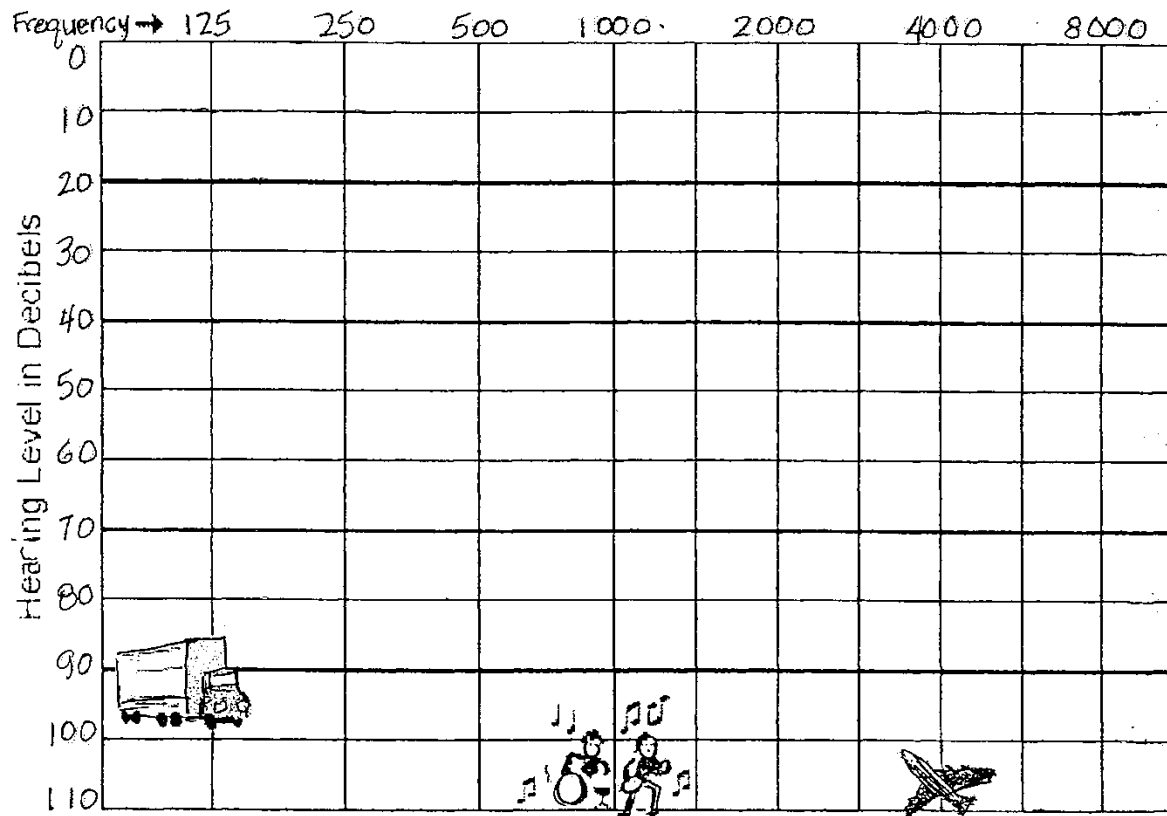
- Hearing loss of **30 decibels** (dB) or greater at any **TWO** of the following frequencies: 500, 1000, 2000, 4000 and 8000 Hertz (Hz) involving one or both ears.
- Hearing loss of **35 decibels dB** or greater at any **ONE** of the following frequencies: 500, 1000 and 2000 (Hz) involving one or both e



Spelling Test—set up



Degrees of Hearing Loss



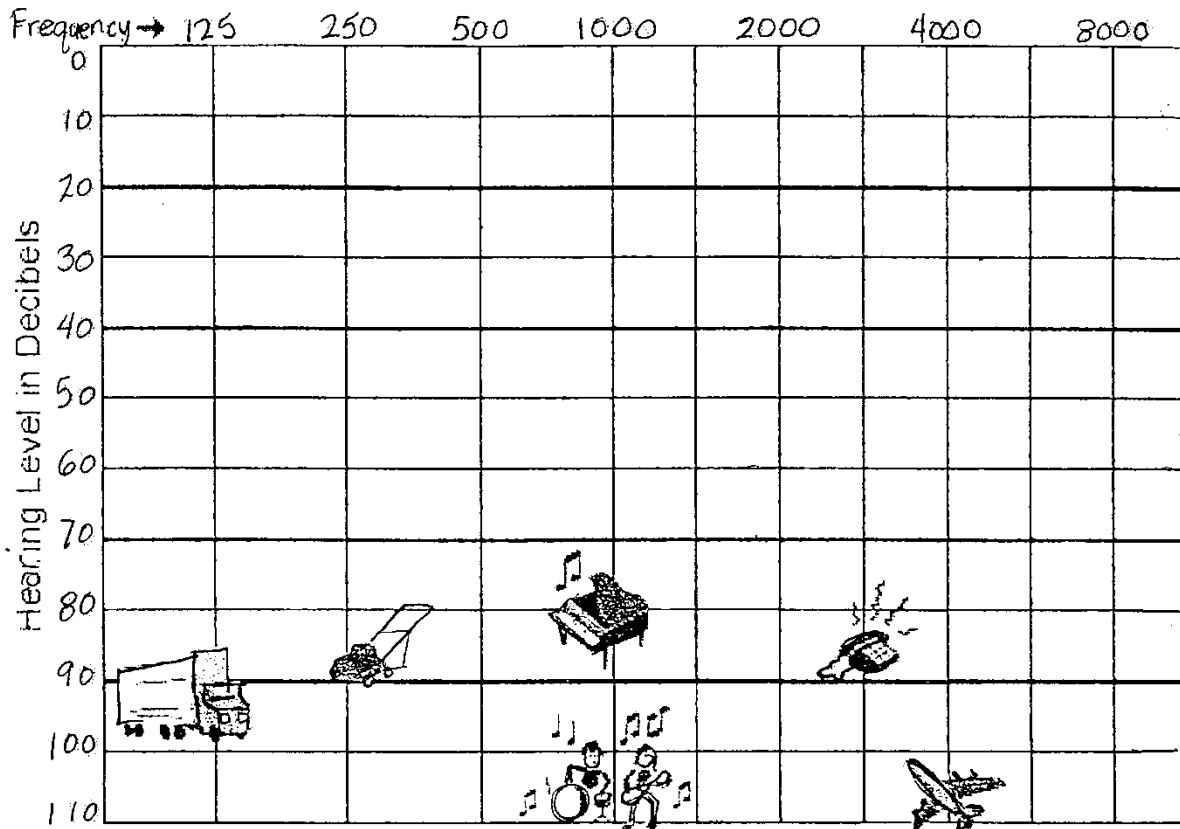
Often it was
not
diagnosed
until about
age 1 ½
**BUT NOT
NOW**



Degrees of Hearing Loss



It went
undiagnosed
until about
age 2
**BUT NOT
NOW**

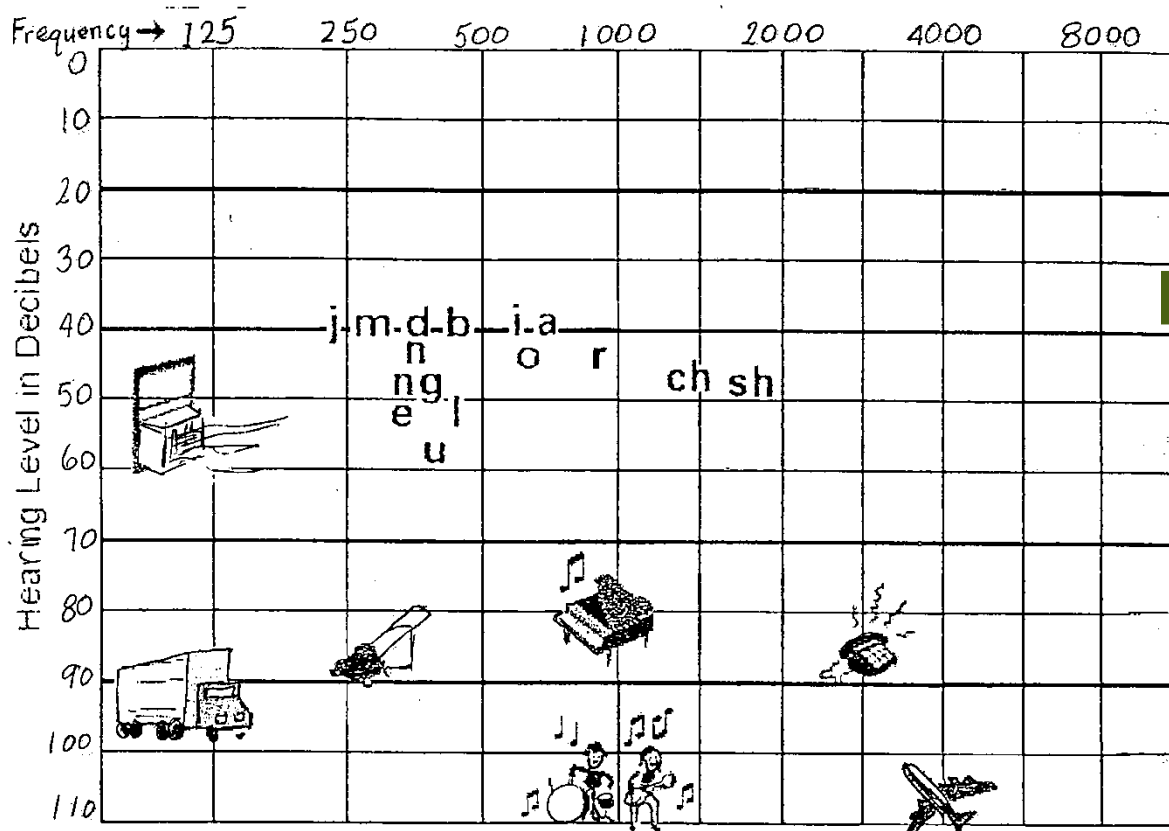


Severe (71-90dB)

Severe Hearing Loss: Simulation



Degrees of Hearing Loss



Often was
not

diagnosed
until about
age 3 ½

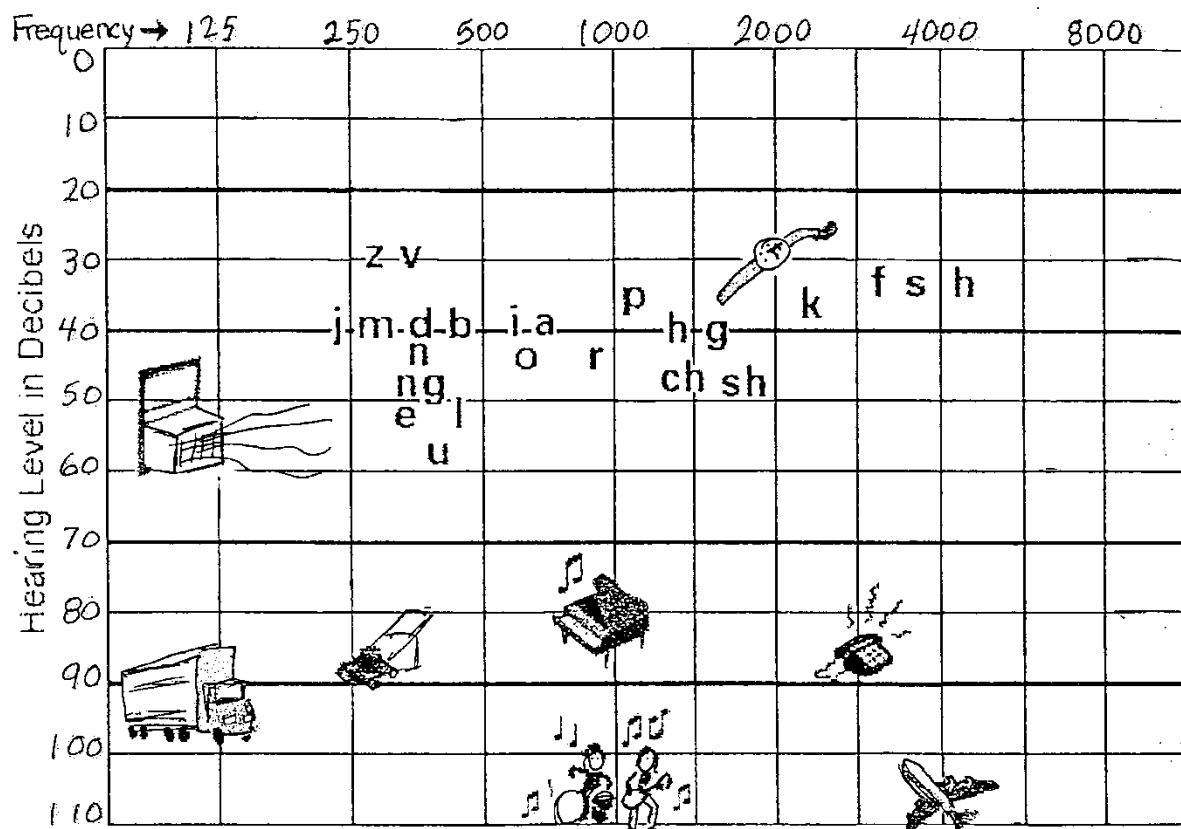
**HOPEFULLY
NOT NOW**



Moderate hearing loss: Simulation



Degrees of Hearing Loss



Mild (20-40dB)

This loss
often went
undetected
until age 6
WHY?



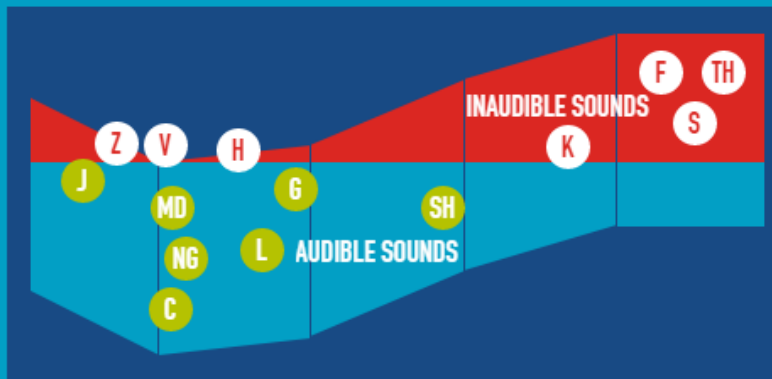
Mild Hearing Loss: Simulation



Hearing Loss Simulations

MILD HEARING LOSS:

People with mild hearing loss have difficulty hearing soft consonant sounds making words seem incomplete. Noisy environments make hearing more challenging.



Mild Hearing Loss Sentence:

As the sun shines more the colors become brighter.



Methods of Amplification

- Hearing Aids



- Cochlear Implants



- Bone Anchored Hearing Aid



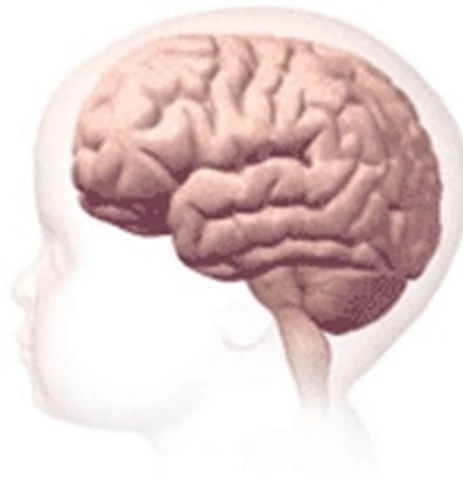
Troubleshooting Basics

- Is it on/have batteries?
 - Does it need new batteries?
- How do the wires/tubing look?
- More help can be found from:
 - Parent
 - Audiologist, DTH, or SLP
 - Device manufacturer



Little Loss = Huge Impact

- How do we learn language??
- Even a mild or unilateral hearing loss impacts the ability to listen and quality of sounds



Language Development

- Optimal listening environment
- Explicit teaching is necessary
- Hearing loss impedes incidental learning



Strategies & Modifications

- Slow, clear speech
- Increased wait time
- Front & center seating
- Reduce background noise
- Consistent FM use (if have)
- Sound friendly environment
 - Carpeting
 - Good lighting



Communication Options



American Sign Language (ASL)	Total Communication	Cued Speech	Auditory-Oral	Auditory-Verbal
Visual	Combined	Combined	Combined	Auditory
American Sign Language as a first language to teach English as a second language. ASL used by Deaf Community	Uses English Based Sign System which can include speech, speechreading, fingerspelling, natural gestures, and the use of residual hearing	Combines a system of hand cues with natural mouth movements of speech	Use amplification and speechreading to aid child's development of language	Emphasis is on spoken language development through listening



Sign Language Interpreters

- The primary role of an educational interpreter is to facilitate communication between deaf and hard of hearing students and their teachers and peers (Humphrey & Alcorn, 1994).
- Act out an example of an interpreter vs. deaf educator with Molly and Danielle



Deaf Culture



<https://www.youtube.com/watch?v=-XK8pWBgq3Q>



Activities

- Early Childhood Sign Packet
- Manual alphabet (A, B, C's)
- Sign a Story!
 - Brown Bear, Brown Bear



Questions?

- Danielle DeGuzman
 - deguz426@gmail.com
- Molly Herman
 - molly.herman@psd150.org
- Tracy Meehan
 - tmeehan@ilstu.edu



Resources

- Early Hearing Detection & Intervention
 - cdc.gov/ncbddd/hearingloss/data.html
- Hearing Loss Simulation
 - starkey.com/hearing-loss-simulator
- PowerPoint Template
 - PresentationMagazine.com
- Communication Options
 - <http://firstyears.org/lib/comchart.htm>
- Sign Language Interpreter Book
 - Humphrey, J.A., and Alcorn, B.J. (1994). So you want to be an interpreter? An introduction to sign language interpreting. Amarillo, TX H & H Publishers.

