

# Advocacy Evolution: Educate the World!

Marjorie Madsen Keilers  
Executive Director, Hands & Voices New Mexico Chapter  
Parent and HH Adult

# About Me



Chloe @ 2



Chloe @ 18

# Journey

- Mystery
- Road Trip
- Education
- Discovery

# Mystery

- Clues
  - Piano
  - Mouths
  - Balance
- Response to Sounds
- Opinions
  - Friends
  - Families
  - Pediatrician
- Testing @ 18 Months

# Road Trip



Source: "Blank US Map." *Blank US Map*. Marches, Inc., 20 July 1996. Web. 27 August 2014.

# Education

- Pediatric Audiologists
  - Ear Molds
- Speech Therapists
  - Acquiring Sounds  $\neq$  Recovering Language
- Educators
  - Don't Always Know What's Best

# Discovery

Anticipate

Advocate

Educate

# Educate The World!

- Define!
- Anticipate!
- Summarize!
- Educate!



# Hearing Loss

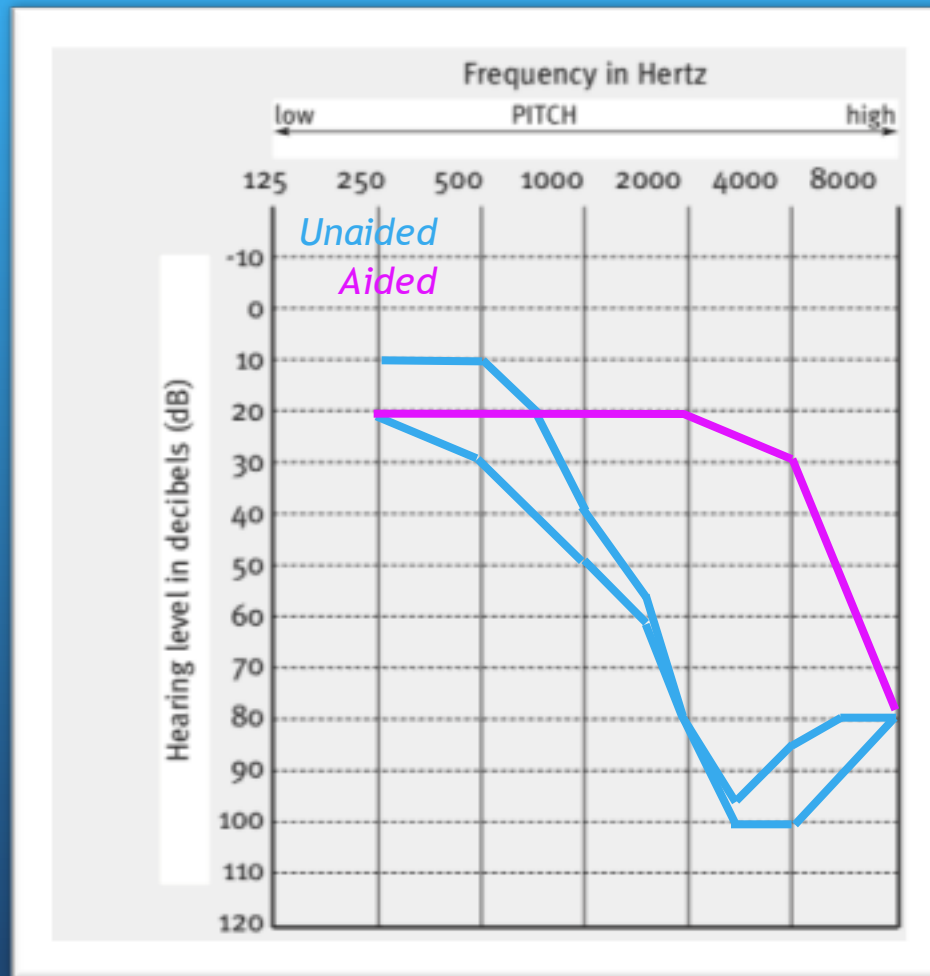
- Percentage
- Degree
  - Mild
  - Moderate
  - Severe
  - Profound
- Description Not Enough

# DD 2216

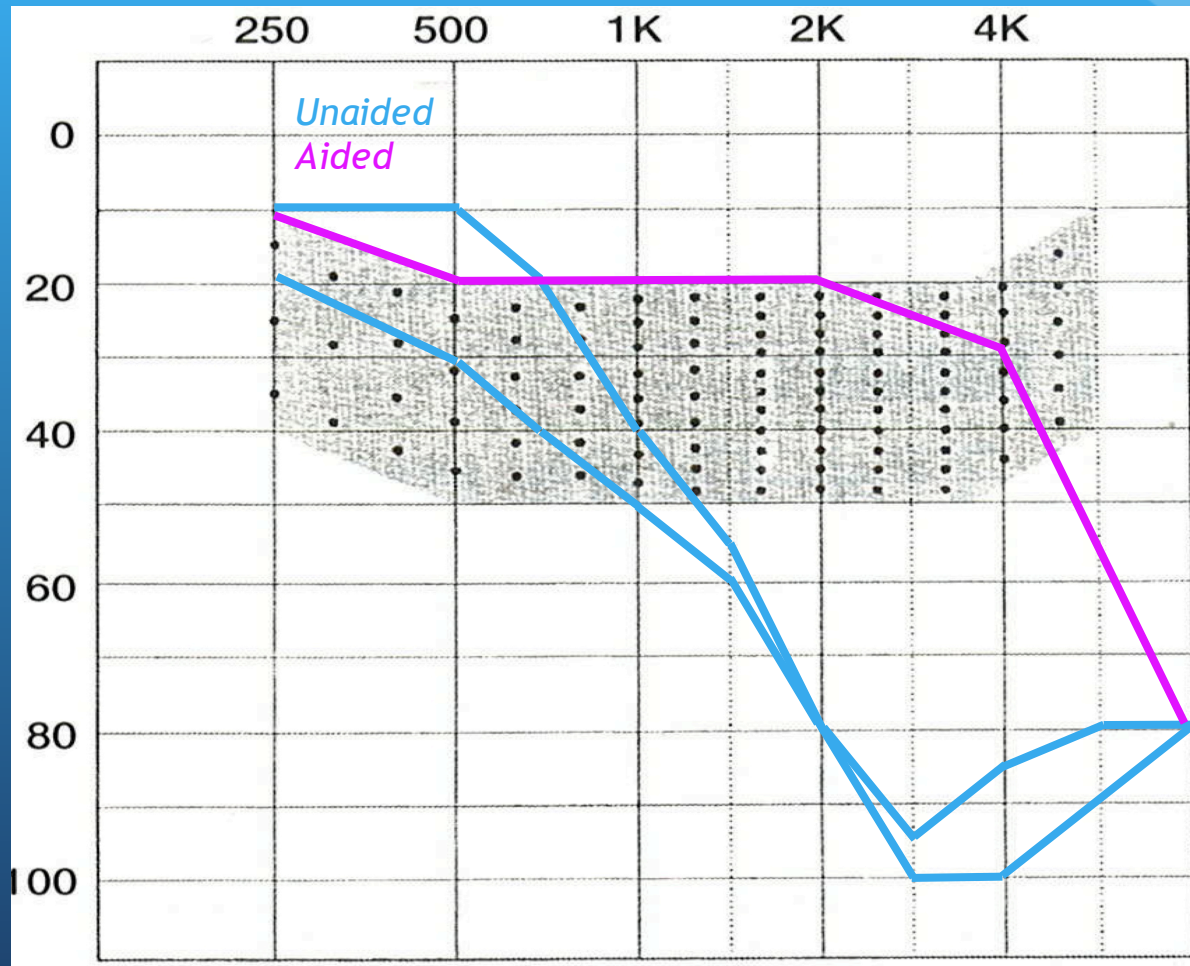
HEARING CONSERVATION DATA											1. ZIP CODE/APO/FPO/PAS		
<i>(This form is subject to the Privacy Act of 1974 - use Blanket PAS - DD Form 2005)</i>													
2. DOD COMPONENT				3. SERVICE COMPONENT									
A - ARMY		F - AIR FORCE		1 - OTHER DOD		R - REGULAR		G - NATIONAL GUARD					
N - NAVY		M - MARINE CORPS		ACTIVITY		V - RESERVE		1 - OTHER					
4. SOCIAL SECURITY NUMBER			5. NAME (Last, First, Middle Initial)					6. DATE OF BIRTH (YYYYMMDD)			7. SEX		
											M - MALE F - FEMALE		
8. PAY GRADE, UNIFORMED SERVICES		9. PAY GRADE, CIVILIAN		10. SERVICE DUTY OCCUPATION CODE			11. MAILING ADDRESS OF ASSIGNMENT						
12. LOCATION - PLACE OF WORK						13. MAJOR COMMAND			14. DUTY TELEPHONE (Include area code)				
15. AUDIOMETRY	a. PURPOSE	1 - 90 DAY		2 - ANNUAL			3 - TERMINATION		4 - OTHER				
AUDIOMETRIC DATA RE: ANSI S3.6 - 1989		LEFT						RIGHT					
		500	1000	2000	3000	4000	6000	500	1000	2000	3000	4000	6000
b. CURRENT AUDIOGRAM DATE (YYYYMMDD)		10	40	80	100	100	80	30	50	80	95	85	80
c. REFERENCE AUDIOGRAM DATE (YYYYMMDD)		20	20	20	25	30	55	20	20	20	25	30	55
d. SIGNIFICANT THRESHOLD SHIFT (STS)		e. THRESHOLD SHIFT											
1 - NO 2 - YES		→											
f. REMARKS (Include exposure data)													
g. TYPE OF PERSONAL HEARING PROTECTION USED													

Source: "Hearing Conservation Data." *Defense Technical Information Center*. Department of Defense, January 2000. Web. 27 October 2014.

# Audiogram

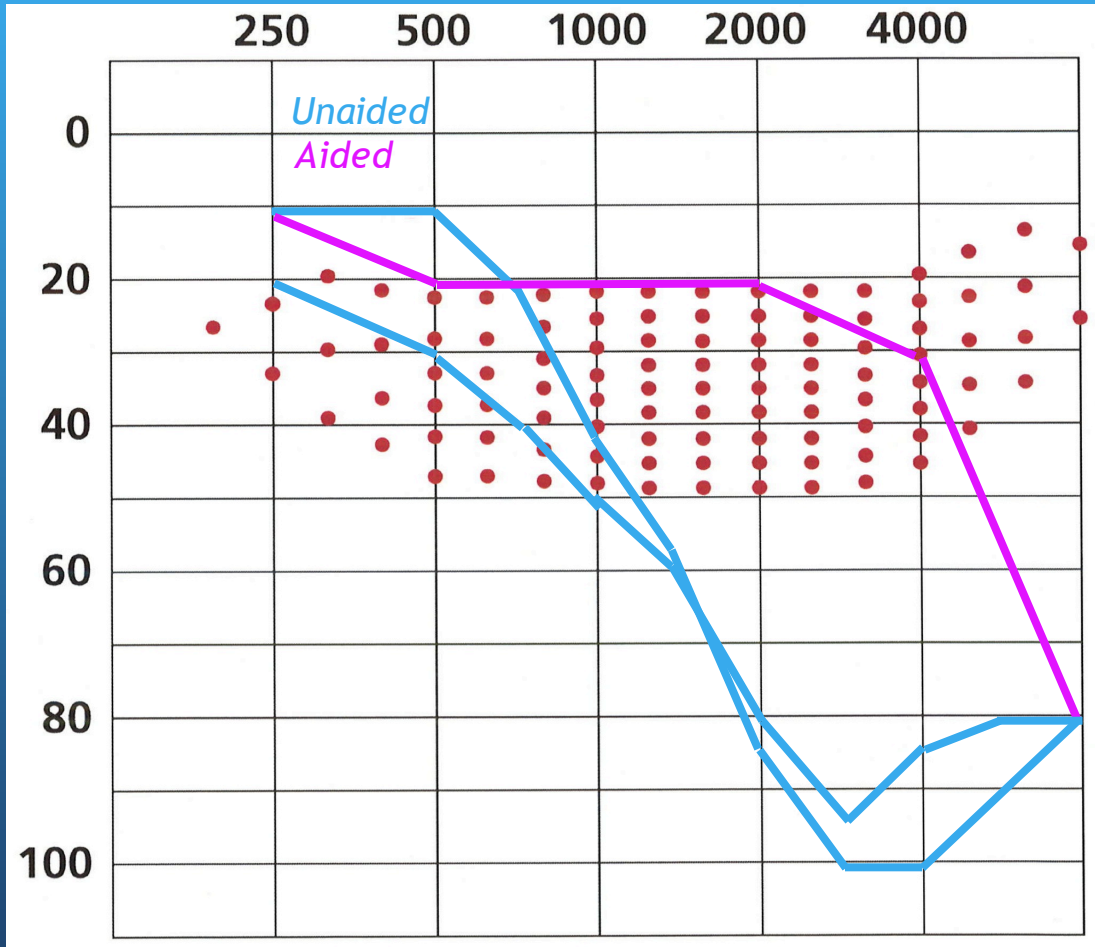


# Count The Dots



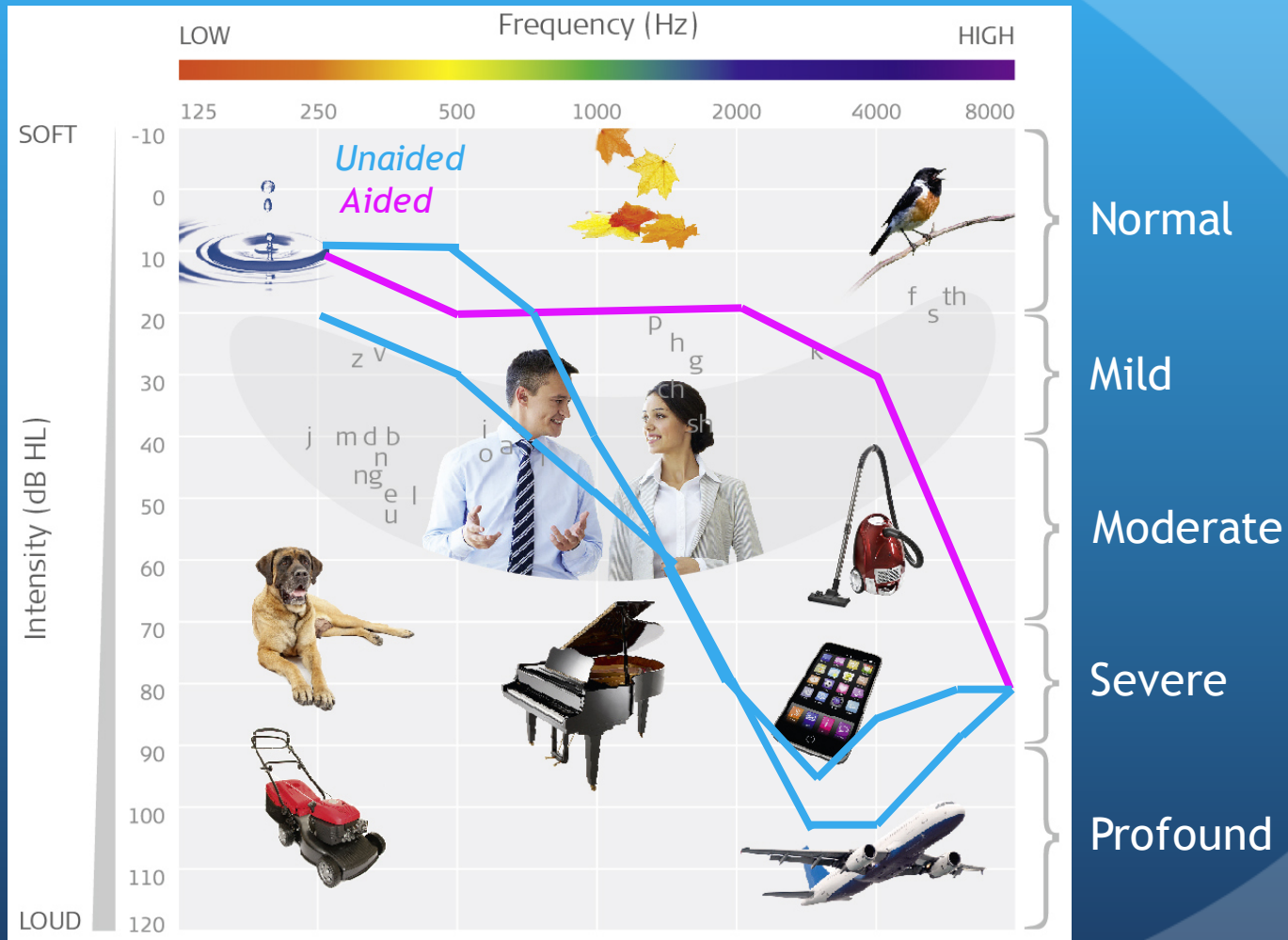
Source: Killion, Mead C., and H. Gustav Mueller. "Twenty Years Later: A NEW Count-The-Dots Method." *The Hearing Journal*. The Hearing Journal, January 2010. Web. 27 August 2014.

# New Count the Dots



Source: Killion, Mead C., and H. Gustav Mueller. "Twenty Years Later: A NEW Count-The-Dots Method." *The Hearing Journal*. The Hearing Journal, January 2010. Web. 27 August 2014.

# Visual Audiogram



Source: "What is Sound?" *The Hearing People*. The Official MED-EL Blog, 13 November 2013. Web. 27 August 2014.

# Simulated Hearing Loss



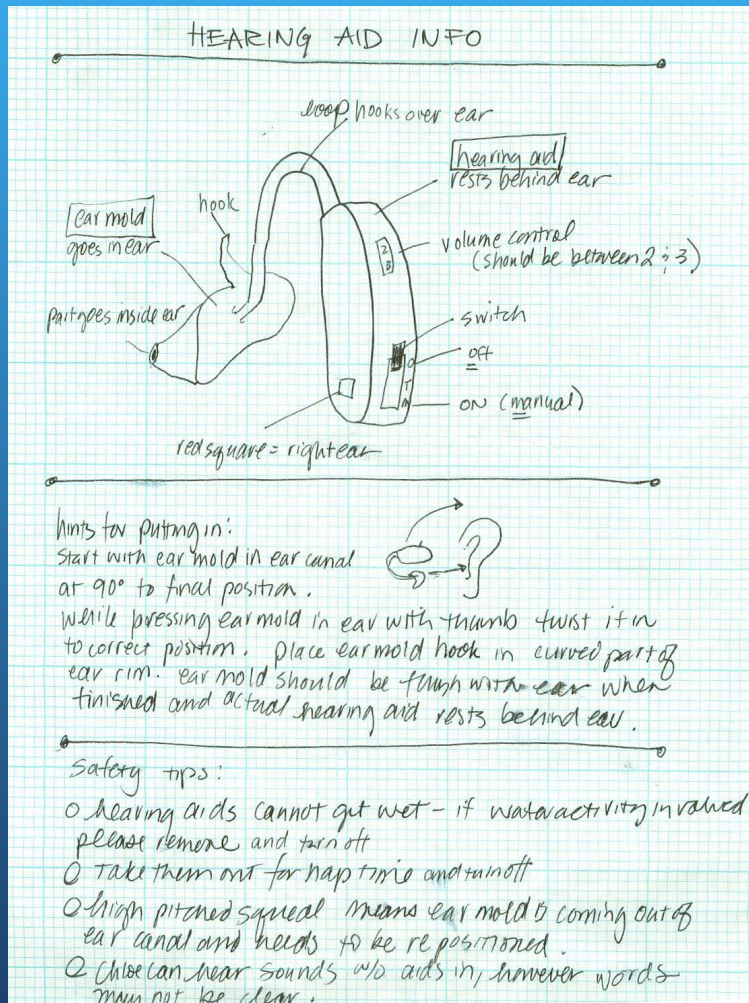
Source: House Research Institute. "Hearing Loss Example." *YouTube*. HouseEar, 31 March 2011. Web. 15 August 2013.  
<https://www.youtube.com/watch?v=1EJ4g3J6cJM>

# Care Givers

- Basic Equipment Operations
  - On-Off
  - Battery Replacement
  - Feedback
  - Don't Get Wet!
- Effective Communication
  - Visual Cues
  - Cue to Listen By Calling Name
  - 1-on-1 vs. Group Situations



# Basic Operations



Source: Keilers, Marjorie Madsen. "Hearing Aid Information." 1999. JPG File.

# Basic + Home FM

CHLOE'S HEARING AIDS

### HEARING AIDS

### REMOTE

### MICROPHONE

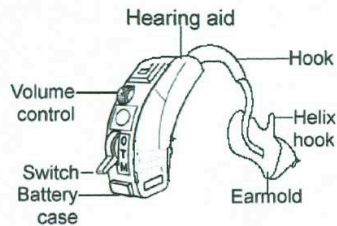
- sticker faces away from head
- press ear mold in ear canal, flush with earlobe, hook sits on top of ear, hearing aid rests behind the ear
- switch must be an "O" setting for FM system's, remote to work
- hearing aids cannot get wet
- high pitched squeal means ear mold is loose

- press "ON" button until red indicator light blinks
- press "MT" for FM system AND hearing aid to function (operates with program 1)
- volume is adjusted by pressing "+" to increase and "-" to decrease
- if only one aid is problematic, press "L" for left or "R" for right until light blinks, then adjust volume

- adjust microphone cord to bring close to chin
- set at unidirectional for single teacher
- small groups can set microphone on table using stand with setting on omnidirectional
- turn off when on playground or lunch so FM system is off and hearing aid alone will work.

# Basic + School FM

## Hearing Aids



### Hearing Aids Position

Stickers face way from head  
Earmolds flush with ear  
Helix hook inside ear lobe  
Hook sits on top of ear  
Hearing aid rests behind ear

**Hearing aids must not get wet**

**Rotate battery case door to replace battery**

### Settings

Volume set on **4**  
Switch set on **M** for FM microphone to work

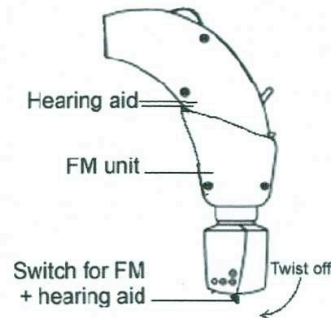
### Troubleshooting

High-pitched squeal means ear mold is not sitting snug in ear canal; reinsert

Chloe complains it's not working; try turning off then on again as switch may have been toggled, if that doesn't work, replace battery

Chloe says "too loud" or "too quiet"; adjust volume by removing clear plastic volume cover, if there (cover can become dislodged and lost, hearing aid operates w/ or w/o plastic cover) and rotate dial, **5** is loudest.

## FM Unit



### FM Position

Fits snugly on bottom of hearing aid

Push straight onto bottom for best fit

Twist off in direction of arrow to remove

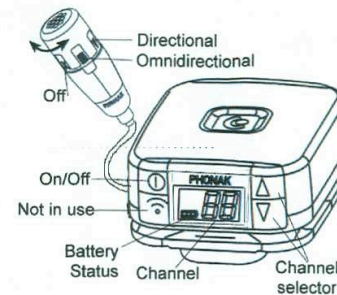
Switch set on ●● for FM & hearing aid to work

Comes in two pieces, may separate but easily plugged back into each other

### Troubleshooting

Chloe complains it's not working; microphone unit may be too far away or not have enough charge, FM unit may be loose, or hearing aid battery may be dead. Try recharging microphone, removing and reinstalling FM on hearing aid, and/or replacing battery in hearing aid.

## Microphone



### Microphone Position

Microphone worn clipped to clothing by teacher

Turn off by pressing circle button until LED displays number **01**

Base unit can be clipped to clothing or worn around neck

Microphone cord to unit is antenna, avoid coiling

Recharge unit each night

Unit may be directly connected to audio equipment

Turn off when not giving instructions, e.g. lunch, so FM is off and hearing aid alone will work

### Troubleshooting

Chloe doesn't respond: you may be too far away, microphone may be off, base unit needs recharging, FM unit may be loose or off, or hearing aid battery may be dead. Try recharging microphone, removing and reinstalling FM on hearing aid, and/or replacing battery in hearing aid.

# Camps

- D/HH Camps
  - Awareness of D/HH Needs
  - Bonding With Other D/HH
  - Emphasis on Specific Communication Modality
- Mainstream Camps
  - Twilight
  - Water Events

# Schools

- Visual Audiogram
- Links to Video
- Classroom Accommodations
- IEP Accommodations List
- Links
  - [HearChloe.blogspot.com](http://HearChloe.blogspot.com)
  - Rachel Kolb Article in *Stanford Magazine*

# Classroom Accommodations

## **Creating an Optimal Learning Environment for a Hard of Hearing Student**

Hearing-Impaired (HI) students work very to understand what is said in and out of the classroom. Listening requires their full attention, auditory and visual. They can't half listen or let their minds wander. They have to fill in and guess at times. This creates fatigue and stress and some misunderstandings. The effort listening requires day in day out is often taken for granted.

### **These strategies will enhance understanding, facilitate learning, and reduce stress & fatigue:**

#### **1. USE THE FM SYSTEM**

\*Clip microphone on before class, wearing it about a fist width away from your mouth and avoiding wearing jewelry or anything that might bang against it.

\*Turn microphone on when you are speaking to the class as a whole, a group including the HI student, or the HI student individually.

\*Turn microphone off when you are not speaking to the HI student, especially when you step outside the classroom or are speaking to another teacher, parent or student.

\*Encourage guest speakers, students making presentations, etc. to use the microphone.

#### **2. ENHANCE VISUAL INFORMATION**

\*Seat the student so your face can be easily seen for speechreading.

\*Face the student when you talk. Do not hold books or papers in front of your face and do not talk while writing on the board.

\*Put as much information as possible in writing.

#### **3. REDUCE CLASSROOM NOISE**

\*Seat this student away from potential sources of noise such as fans, vents, open windows, pencil sharpeners, noisy students, etc.

\*Do not play background music while students work at their desks.

#### **4. CHECK/ENHANCE COMPREHENSION**

\*Do not ask "did you hear?" or "did you understand?". The hearing-impaired student has no way of knowing if they understood everything that was said.

\*Ask the student specific questions related to the material, have them repeat information or instructions, or observe their work to check for comprehension.

\*Pretutor new vocabulary and new units prior to the initial classroom presentation.

#### **5. MAKE CLASSROOM DISCUSSIONS MORE ACCESSIBLE**

\*Slow down the pace - pass an object from speaker to speaker

\*Seat the students in a semi-circle

\*Repeat or paraphrase what was said

#### **6. OTHER ISSUES**

\*Note taking - student needs to look at the speaker and cannot look down to write notes.

\*Films - turn on the captions or English subtitles for all films.

\*Avoid oral tests

\*May miss what is said in the background - announcements, classroom jokes, etc.

\*Assemblies - speakers should use the FM mic

Audrey Chumley, Educational Audiologist

# IEP Accommodations

<p><b>Environment:</b>          Preferential seating</p> <p>Quiet, structured setting</p> <p>Unobstructed view of speaker's face</p> <p>Group projects in quiet place</p>	<p><b>Instructional Presentation Mode:</b>          Visual modelling</p> <p>Closed captions for videos</p> <p>Speaker says name for initial cuing</p> <p>Visual contact and articulation for foreign language or spelling</p>
<p><b>Instructional Material</b>          Textbook copies at home for pre-reading</p> <p>Preview new vocabulary</p>	<p><b>Instructional Strategies</b>          Full-time use of FM system          Teacher repeat classmates input during discussions or use microphone</p> <p>Rephrase directions, rather than repeat</p> <p>Visual supports, cues, and directions</p> <p>Note taking carbons, teacher or peer notes, use iPad for notes</p> <p>Check for understanding by asking to paraphrase oral material</p>
<p><b>Assignments/Homework:</b>          Extended time due to fatigue or illness, which impacts hearing acuity, with note from parent</p> <p>Check for understanding of classroom routines at beginning of semester</p> <p>Minimize group assignments</p>	<p><b>Student Response Mode:</b>          Allow to make corrections if letter sounds are omitted</p>
<p><b>Testing:</b>          Visual directions for tests and quizzes</p> <p>No oral tests for articulation metrics, unless spelling or vocabulary</p> <p>Allow 50% extra time for timed reading and writing assignments and tests</p>	<p><b>Other:</b>          Do not count off for tardies</p> <p>Allow time for managing hearing equipment</p> <p>Use of buddy for assignments and announcements</p>
<p><b>Behavior Supports:</b>          Orientation meeting with new teachers at the beginning of semesters</p>	<p>Grades will be determined by:</p> <p>Grades will be based on:</p>

Source: *Instructional Accommodations and Modifications*. 2013. Los Alamos.

# Evolution

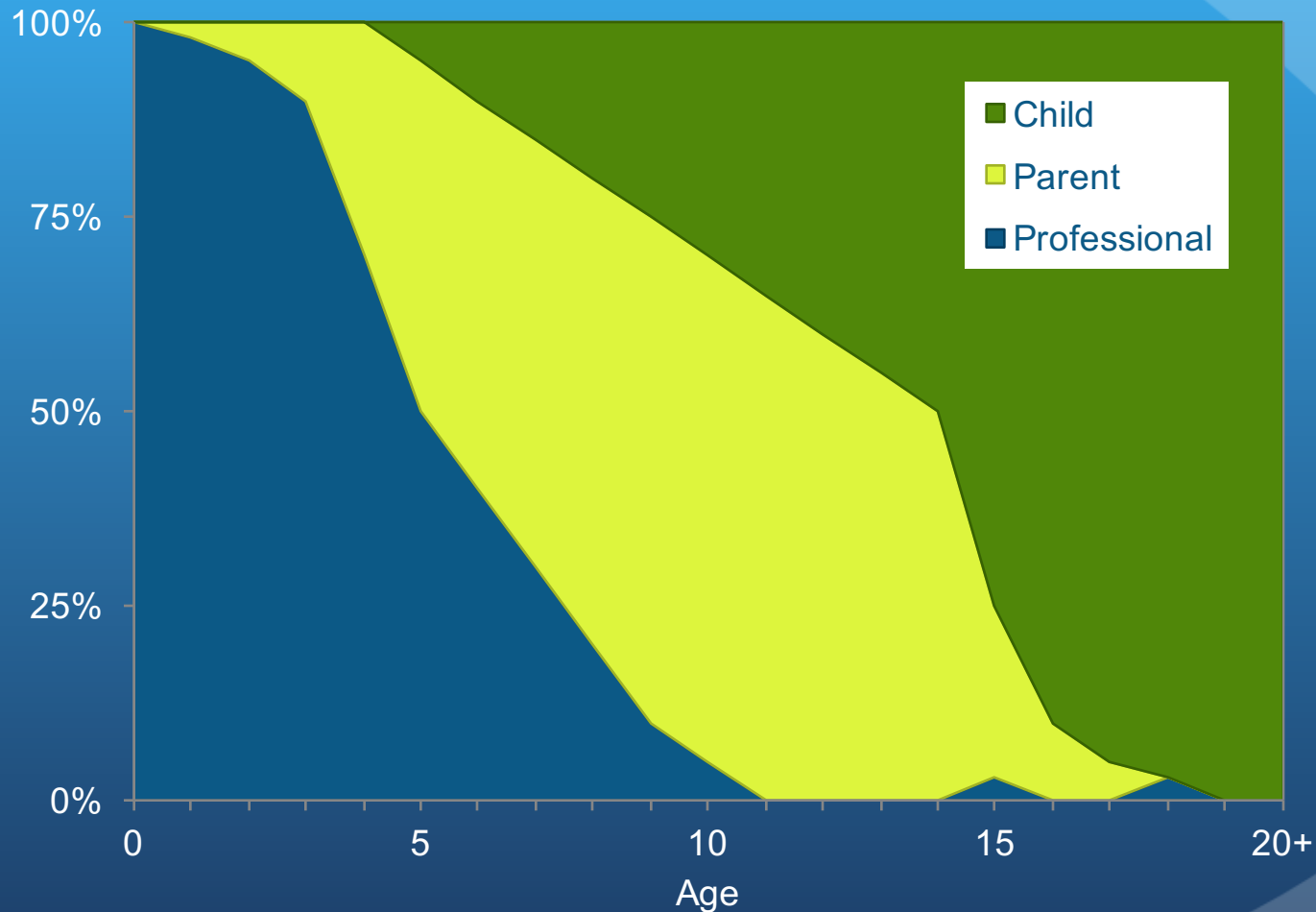
**Professional**

**Parent**

**Child**



# Advocacy Evolution



Source: The Keilers Family Experiences from 1999 to 2014.

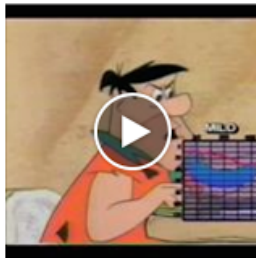
# HearChloe



HearChloe

July 26

Hello tree-world! I'm [Chloe](#) and very excited to go to Stanford in the fall and meet all of you. I'm from Los Alamos (the other LA), NM and I like reading, watching movies (with closed captioning of course!), doing origami, and learning new things, especially Physics, Chemistry, and Latin. But there's one more thing I want to put right out here upfront -- because, when I meet you all in person, I'm going to need your help to communicate -- I am deaf. I wear two hearing aids and rely heavily on lip-reading in addition to what I hear. Hearing aids are not like glasses, they don't give me "20/20" hearing. The help I need from you is patience, the ability to see your lips moving to form words, and ideally speaking one-on-one. I know that last bit will be tough, as everyone is so excited and will be chattering all at once! A lot of people are curious about what deafness sounds like, and here's a short video clip (39 s) I have shared with teachers and classmates at school. In the clip there is a small audiogram displayed in the lower right corner that depicts the degree of hearing loss shown in the cartoon. Without my hearing aids, I can't hear any difference, and with my hearing aids, I actually hear something between the "mild" to "moderate" range, definitely not "normal." First time I saw this clip, I realized I was trying to lip-read the cartoons—unsuccessfully. That's [Chloe](#) 101! I can't wait to meet everyone in person. Fear the trees!



## Hearing Loss Example (produced by House Research Institute)

This is an example of what various types of hearing loss sound like to the individual with the loss. I had been looking for something like this that would gi...

YOUTUBE.COM

132 Likes 22 Comments

# Resources

- Hands & Voices New Mexico Chapter Web Site: <http://HVNM.org/>
- Chloe's Blog: <http://HearChloe.blogspot.com/>
- Kolb, Rachel. "Seeing at the Speed of Sound." *Stanford Magazine*. 1 March 2013. Web. 25 April 2013. [https://alumni.stanford.edu/get/page/magazine/article/?article\\_id=59977](https://alumni.stanford.edu/get/page/magazine/article/?article_id=59977)
- "HVNM Back To School Event." *YouTube*. YouTube, 26 October 2013. Web. 27 August 2014. <https://www.youtube.com/watch?v=BjEJ7xQOBRE>
- Derr, Theresa and Scott Bradley. "Classroom at 15 Feet." *Wireless FM (Auditory Trainer) Simulation*. University of Wisconsin-Whitewater, 21 July 2006. Web. 15 August 2014.
  - <http://facstaff.uww.edu/bradleys/radio/fm/fmdemo3a.mov>
  - <http://facstaff.uww.edu/bradleys/radio/fm/fmdemo3b.mov>
- "Navigating Deafness in a Hearing World: Rachel Kolb at TEDxStanford." *YouTube*. YouTube, 20 June 2013. Web. 27 August 2014. <https://www.youtube.com/watch?v=uKKpjvPd6Xo>
- "Can You Read My Lips?" *Vimeo*. YouTube, 6 December 2015. Web. 8 December 2015. <https://vimeo.com/148127830>