

# Impact of Hearing Loss on Listening, Learning, and Social Interactions

Student's Name: \_\_\_\_\_ Gr: \_\_\_\_\_ School: \_\_\_\_\_

*Hearing loss is an access issue that often causes significant learning and/or functional performance issues. Classroom and/or instructional accommodations are required. Educational impacts are not due a learning disorder.*

<b>20-25 dB HEARING LOSS</b> (aided or unaided thresholds) (-10 to +15 dB is normal hearing)			
Possible Impact on the Understanding of Language and Speech	Possible Social - Emotional Impact	Potential Educational Accommodations and Services	
<ul style="list-style-type: none"> <li>Hearing decrease when index fingers are placed in ears is approximately 20-25 dB.</li> <li>Majority of students will only hear at 20-30 dB <b>when using their hearing aids</b></li> <li>Can be "seen to hear" but misses fragments of speech leading to misunderstanding, <b>especially when speaker is 6+ feet away</b></li> <li>Degree of difficulty experienced in school will depend upon <u>noise level</u> in the classroom, <u>distance</u> from the teacher, and the hearing loss, <u>even with hearing aids</u></li> <li>Is at high risk to miss unemphasized word endings and consonants, especially when a high pitch hearing loss is present (cast, cap, calf, cat may all sound alike – like 'ca')</li> <li>May have 'Swiss cheese' language causing 'average' language test results but gaps in understanding vocabulary</li> <li>May experience difficulties learning early reading skills (i.e., letter/sound associations)</li> </ul>	<ul style="list-style-type: none"> <li>Barriers begin to build with negative impact on self-esteem as student is accused of "hearing when he/she wants to," or "not paying attention"</li> <li>May believe he/she is less capable due to difficulties understanding in class</li> <li>Student is beginning to lose the ability to pay attention just to the speech signal when listening in any noise; causing the learning environment to be more stressful than peers</li> <li>More fatigued due to effort needed to listen</li> <li>May be viewed as socially awkward due to misheard, fast speaking rate of peers</li> </ul>	<ul style="list-style-type: none"> <li>Hearing aids and personal FM/DM system technology are needed for access in all learning environments</li> <li>Requires seating where other students are visible (i.e. 2<sup>nd</sup> row or U-shape), away from bright light, with absorptive material within classroom to reduce reverberation (i.e., carpet)</li> <li>Requires training in self-advocacy skills; necessary if the student is to be a full participant in class</li> <li>Level of need for auditory, speech, language, vocabulary development, and support in reading and self-esteem needs to be determined More fatigued due to effort needed to listen</li> <li>Routine monitoring of functional class performance is necessary</li> <li>Need for teacher inservice on the impact of a 20 – 25 dB hearing loss on listening and learning</li> </ul>	
<b>Audibility of Speech Sounds</b> (puzzle pieces available for understanding) <b>NOTE:</b> Typically hearing students have 95%+ audibility in all conditions.			<b>Example of listening with 20-25 dB loss</b>
<b>"Soft speech"</b> <b>35 dB HL</b> Ex: listening to student respond across class	<b>"Conversational speech"</b> <b>45 dB HL</b> Ex: listening to someone talking from 3 feet	<b>"Teacher speech"</b> <b>50 dB HL</b> Ex: Teacher speaking from 10 or more feet away, represents no FM/DM used	<b>Write your name and the date on the top left of your paper. Read the first paragraph, answer the odd questions using a pencil. With a blue marker, underline all of the vocabulary words from your math list. Count all of the underlined words and put the total number on the bottom right corner of your paper. Hand it in to me by 2:00.</b>
<b>40% audible</b>	<b>80% audible</b>	<b>95% audible</b>	
Missing Sounds f, s, th, p, k, v, z, g, t, sh, ch	Missing Sounds f, s, th, p, k, v, z	All speech sounds are detectable, but will not be as loud as for typically hearing	
<b>Possible listening challenges in school*</b> <i>All may be improved with use of FM *LIFE-R Results</i>	<input type="checkbox"/> Teacher talking with back turned to student <input type="checkbox"/> Listening to students across room during class discussions	<input type="checkbox"/> Understanding others during small group work <input type="checkbox"/> Teacher talking while moving	

**Accommodations are Mandated by Law. Please Implement the Indicated Items in the Child's Educational Program:**

- Seating for optimal auditory/visual access   
  Get closer or use FM/DM, do not raise your voice   
  Preteach vocabulary   
  Frequent visual aids  
 Routinely implement a cue to listen   
  Slow your speaking rate; pause frequently   
  Inservice peers on hearing loss/aids/FM to reduce bullying  
 Use open-ended comprehension checks   
  Repeat key information using different words   
  Support/train use of self-advocacy (clarification requests)  
 Daily recording of use and function of hearing devices (monitoring required by IDEA)   
  Regular contact with other students with hearing loss  
 Periodic educational monitoring such as October and April teacher/student completion of SIFTER, LIFE-R   
  Ensure access to computer, video and group learning

**NOTE: All children require full access to teacher instruction and educationally relevant peer communication to receive an appropriate education.**

Distance, noise in classroom and fragmentation caused by hearing loss prevent full access to spoken instruction. Appropriate acoustics, use of visuals, FM amplification, sign language, notetakers, captioning, etc. increase access to instruction. Students need periodic hearing evaluation, routine amplification checks, and regular monitoring of access to instruction and classroom function.