

Erber's Hierarchy of Listening:

How do we take a new listener from hearing beeps at their cochlear implant activation or detecting a sound with their first hearing aid to using/enjoying (as best a possible) sound? If you remember "*How to Eat an Elephant*", one bite –or step- at a time!

Erber's Hierarchy, developed by speech scientist Dr. Norman Erber, breaks the listening task into four levels.

By guiding individuals (and new adult listeners) up this "listening hierarchy", the task of listening and learning to listen can be broken into manageable parts.

Level One: DETECTION.

Do I hear the sound or not?

Can I detect the presence of sound? A baby might blink, an adult might turn his head, or point to his ear. This demonstrates detection.

Level Two: DISCRIMINATION.

Can I tell one sound from another?

If you put two words/sounds in front of the person (e.g. cow and dog, /t/ and /f/; /ee/ and /i/; Gallaudet and kitchenette) and say one, the person can indicate the correct item for the sound-word association? The goal here is pattern perception and indicating same vs. different.

- a. Discrimination moves through various stages: discrimination by duration (e.g. short vs. long sounds, single syllable vs. multisyllabic words), discrimination between words that are the same length but have different consonant and vowel information, discrimination between individual consonants and vowels, etc.
- b. Skilled adult listeners are doing this ALL THE TIME. You constantly take in information and "weed out" all of the things it is not (discrimination) to get to the real meaning (e.g. you hear "bat" and effortlessly weed out baD, Cat, bUt, etc.)

Level Three: IDENTIFICATION.

If you hear a sound, can you tell what it is?

For example, if the person hears a dog barking with no visual reference, can he say, "That's a dog!" The idea is can the person name or repeat what he's heard?

If the person hears a telephone ringing with no visual reference/cue, can he say, "That's a telephone!" The person can name or repeat what he's heard.

If the person hears a sentence "Do you want fries with that hamburger?" given no visual reference/cue, can he say or repeat "Do you want fries with that hamburger?" Again, the person can hear it and can name or repeat what he's heard.

Level Four: COMPREHENSION.

Making use of the auditory information.

For example, if the person hears a chapter read at a study group he can not only make out the words but understands them and can use them to answer questions about or discuss the information from chapter.

If the person hears a telephone ringing with no visual reference/cue, he knows that the phone is ringing, then goes to pick it up and answers it. That person understands what he has heard and responds appropriately.

If the person hears a sentence "Do you want fries with that hamburger?" given no visual reference/cue, that person can understand what he has heard and can respond appropriately by saying "Yes I want fries." or "No thank you - no fries for me." The idea is that the person can understand what he's heard and respond appropriately.

Comprehension requires auditory memory and follows an auditory sequence. Under the area of comprehension the following can be addressed. Identification and comprehension level practice/goals/activities include but are not limited to:

- Familiar expressions and common phrases
- Following single directions, two directions, multi-level directions
- Following classroom instructions
- Sequencing three directions
- Comprehension of multi-element directions
- Listening to and sequencing three/four/ more events in a passage
- Answering questions about passage/chapter closed set and open sets
- Descriptions of environmental sounds heard

- Listening in quiet
- Listening in background noise
- Listening in the midst of other conversations
- Listening with minimal or no visual cues
- Listening in a variety of environments
- Listening in difficult acoustic environments (buildings/rooms that are built in such a way that listening is challenging)
- Focusing on listening to individuals with high-pitched voices
- Focusing on listening to individuals with low-pitched voices

- Listening on telephone

SUMMARY: *Can I hear a sound (detection), know what it is not (discrimination), single out what it is (identification), and use that information for something meaningful (comprehension)?*

Compiled by Denise Wray et. al., University of Akron, 2007 from:

Erber, N. (1977) "Evaluating Speech Perception Ability in Hearing Impaired Children" [Bess, Fred H. (ed): Childhood deafness: Causation, Assessment, and Management.] New York, Grune & Stratton.

Estabrooks, W. (2006). ***Auditory-Verbal Therapy and Practice***. Washington, DC: A.G. Bell

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