

Sneaking Language Into Auditory Activities: The Thinking While Listening Approach By Amy McConkey Robbins, M.S., Speech-Language Pathologist

In a previous issue of "Loud and Clear"¹, we discussed the two paths of auditory development available to children who receive cochlear implants. Ideally, much of this development will come as a result of natural, incidental learning in everyday situations. Even so, we recognized that virtually every implant child also will require structured auditory activities as an important component of his or her listening development. In this issue, we present ideas for making structured auditory activities more meaningful by incorporating language into them. Structured therapy activities serve several important functions. First, they allow the clinician to focus on specific skills that need to be practiced, rather than waiting for an opportunity in the environment to present itself. Second, in structured activities, the child is provided with multiple repetitions of the task.

Third, structured activities allow the clinician to contrive learning situations, manipulating variables to make a task just a bit harder, if necessary, or perhaps just a bit easier. Finally, structured activities allow the clinician to telescope stages of learning to try to make up for the period before implantation when the child had limited auditory experiences, resulting in delayed auditory development.²

Structured auditory activi-

ties are most beneficial when they incorporate meaningful communicative skills that are appropriate for the child's linguistic and cognitive levels. The clinician who is able to "sneak" language goals into auditory activities provides a great service to the child, because the inter-related components of communication are integrated. This is in contrast to an approach that treats auditory activities as isolated, independent learning tasks.



When a clinician decides to utilize a more integrated approach, it is not necessary to throw away all the techniques that he or she has found useful. Traditional activities may still be used successfully, but may be modified in certain ways so that they are conducted with a new twist. Although this modification is sometimes quite subtle, it may change substantially the significance of the task for the child.

Some Pointers When Working On Listening Activities:

1. The optimal ways to present information for listening-alone tasks are (a) sitting next to the child, rather than face-to-face; or (b) using an acoustic screen. Sitting next to the child is the more natural way to eliminate speechreading cues. However, for children using TC, this may be an awkward position, as these children are accustomed to receiving signs in a face-to-face orientation. Therefore, use of an acoustic screen is very helpful. The screen is made by stretching two thicknesses of black speaker mesh (available at electronic stores) over an embroidery hoop³. The screen creates minimal attenuation or distortion of the acoustic signal which are the undesirable effects of using paper or a hand to cover the mouth.

2. Remember to get "more for your money" by alternating work on perception and production skills within the same tasks whenever appropriate. The clinician and student may switch roles to achieve this.

3. When incorporating language skills into an auditory task, challenge or "stretch" EITHER language or listening skills, not both. A new and difficult auditory task that also contains challenging lan-

gauge is too much at one time. "Stretch" one skill or the other!

4. If the child is unsuccessful when a task is first presented through listening alone, don't immediately provide complete visual cues. Rather, provide only as much clarification as is needed for the child to be successful. See "Cues to Use" below. (Table 1)

Traditional Auditory Activities "With A Twist":

Below are suggested activities that allow the clinician to "sneak" language into listening tasks. Many are based upon traditional auditory activities, but we've added "a twist" to make them more meaningful and motivating. Further discussion about these and other listening activities may be found in Robbins.⁴

1. Is it Living or Non-Living?

Traditional auditory word identification tasks involve the child repeating a word spoken by the clinician, such as:

bacon....elephant.....tree.....snail.... typewriter."

Stimuli are presented through listening alone, either as a closed-set of items, or in an open-set format. The child's only involvement in the task is to repeat the word. To add a "twist" to this listening game, the clinician uses the same stimuli but instructs the child to repeat what is heard, and then tell whether it is a living or a non-living thing. For a very young child with an implant, the task could be easier (e.g., "Is it big or small?"). For school-aged children, the category chosen might relate to a topic being studied in Science (e.g., "Is it a solid or a liquid?"), Social Studies (e.g., "Is it in the Northern or Southern

hemisphere?") or English (e.g., "Is it an adjective or an adverb?") Regardless of the complexity of the category, the auditory demands remain the same: to identify single words through listening alone.

2. Change a Sound.

The idea for this activity comes from Maxwell⁵ who provides several pages of stimuli. This game challenges listening and semantics skills by requiring the child to manipulate a sound within a word to change the word's meaning. The clinician might say, "Change a vowel in the word *cake* to make it mean a soft drink" [Coke], or "Change a vowel in the word *dash* to make it mean a plate" [dish]. Keep in mind that consonant changes (particularly those involving place of articulation, e.g., tea vs. key) will generally be more difficult than vowel changes. You may want first to present some sound changes using combined auditory and visual cues, to be certain that the child understands the task. Once the

child does so, administer items using listening alone. If the child is unsuccessful, the clinician follows the hierarchy of cues in Table 1. If appropriate for the child's production skills, you may also switch roles so that the child becomes "teacher" and the clinician listens. Since only one sound in a word is altered, the child's speech accuracy must be high in order to convey the information. This also is a good homework project as the child may be asked to construct ten word changes and bring them to the next session. In addition to providing speech and listening practice, this game encourages vocabulary growth and practice with word definitions.

3. What is It?

The object of this game is to use sentence-length clues to determine what "it" is. The clinician presents the information initially through listening alone, using an acoustic screen. For example, the clinician might say, "What is it? It is an animal. (pause) It is white or brown. (pause) It has long ears. (pause) It hops." The clinician may ask the child to repeat each clue after it is given to ensure she has heard it correctly. If misunderstanding occurs, the clinician follows the hierarchy of cues in Table 1. Clarification is first provided through listening alone such as repetition, acoustic highlighting, slowing of rate, clearer pronunciation, heightened intonation contrasts or rephrasing. If these are unsuccessful, speechreading cues are given, and finally, signs. The complexity of the language used in the cues may range from very simple to very complex, depending on the child's skills. Worthley⁶ provides numerous stimuli for this game, or you may create them to fit the child's

TABLE 1
"CUES TO USE"
During Listening Activities*
(Use in descending order)

Auditory cues	Acoustic Highlighting Slower rate of Speaking Repetition Heightened intonational contrasts Clearer pronunciation Rewording
Speech-reading cues	Single word Short phrase Part of the message Whole message
Manual cues (For TC Child)	Fingerspell first letter Sign a single word Sign a short phrase Sign part of message Sign whole message

* Adapted from Robbins⁴ (in Estabrooks)

Table 2
\$25,000 Pyramid Stimuli

	Less Difficult	More Difficult
CLUES	Broccoli Grass A Frog	A Stuffed Animal A Pillow A Blanket
		A Football Helmet Sun Screen An Alarm System
CATEGORY	Things that are green	Things on a Bed
		Things that Protect

skill level.

4. What is Happening?

This companion game to "What is It?" targets verbs. Addressing verbs is important for most children with hearing loss whose vocabularies often contain mostly noun labels. This game encourages depth of vocabulary for action words. For example, the clinician might say, "What is happening? You are sitting down. (pause) You are holding handle bars. (pause) Your feet are pushing the pedals." Again, *Worthley*⁶ is an excellent resource for stimuli to use. For less advanced listeners, information may be printed on cards and items presented as closed-set options.

5. "\$25,000 Pyramid"

The clinician may replicate parts of this television game show which is essentially a class inclusion/exclusion task. In other words, with successive clues, the listener must delineate the category or superordinate label for the items listed by the speaker. Each additional clue allows the listeners to include or exclude possibilities from the set, thereby honing in on the correct category. The clinician may manipulate the level of complexity of the items, as appropriate for the individual child. Concrete, visible characteristics (e.g., "Things that

are red" or "Things that are big") will be the simplest categories for children to identify. Table 2 contains examples that vary in abstraction level.

6. Guess Who?

Each player in this board game⁸ has a set of 24 faces and must, by process of elimination, determine which face is his opponent's "Mystery Person." Faces are eliminated by posing Yes-No questions of the opponent, such as, "Does your mystery person have a mustache?" If the response is "no," all faces with mustaches are eliminated. Questions continue until one player successfully guesses the identity of the other player's mystery person. If appropriate, all discussion may take place through listening alone, with clarification cues provided as needed. The clinician may make some adaptations of the game as follows: 1) For children with less well-developed open set listening skills, the game may be modified to be a closed-set task. Possible questions may be printed on cards and a set of four cards presented as options for the child to listen for. When the clinician asks, "Is your person a woman?", the child checks his set of cards, identifies the question posed, and answers it "Yes" or "No". 2) For a young child, some faces may be removed

from the playing board so that the number of possible faces is reduced to 8, 12 or 16. This game lends itself to integrating perception and production because players must alternate in asking or answering questions.

7. Which Number was Said

Twice? In a traditional digit repetition task, the child simply repeats sequences of digits spoken by the clinician. This version adds a "twist" to require a greater challenge, and children do enjoy this! The clinician says a list of numbers, such as "8, 3, 6, 8, 1, 7" from behind an acoustic screen. The child must report which number was said twice, using listening alone. He must hold all the numbers in memory, compare them, and decide which one was repeated. Rather than focusing on global linguistic meaning, this game requires the listener to focus on the discrete differences between one- and two-syllable words (i.e., numbers) using a closed set of stimuli. The clinician can make the activity more difficult by using a longer list, or easier by using a shorter list of numbers. To double-check the child's attention, sabotage may be used, such as "4, 0, 3, 7, 2, 9." If the child can spontaneously report that no number was said twice, we have confidence in the fact that she is effectively processing this memory/cognitive task through listening alone.

8. "Barbara Walters" This game, adapted from the "Pretend You Are" activity by Mannix⁹, uses an interview format to find out about another person. It encourages the child to take another's perspective and then to respond to questions from that perspective. More limited life experiences often cause

children with hearing loss to have a somewhat egocentric view of the world. It is good practice for them to put themselves in another's shoes. The clinician makes a set of cards and the child selects one whom he'll pretend to be. Choices might include: "an astronaut," "Santa Claus," "a sailor," "Pocahontas," "Mr. Rogers." The examiner poses questions that the child responds to in character. Questions might include: "What clothes do you wear to work? What is your favorite thing to eat? What would be a good present for you?" The activity is carried out through audition alone, if possible, or visual cues may be added as needed. As with other activities, the game may be made into a closed-set listening task if the child's open-set skills are still emerging.

9. "Don't Say ____ Today"

Children and teachers try to catch each other using a word that is off-limits for the day. If they do, the listener who heard the word receives a star. Extra-credit is given if the listener identified the word through listening alone. This game is played effectively in a classroom, where each morning the teacher writes a target word on the board that may NOT be used that day. Teachers purposely select a word that their hearing-impaired students over-use, such as "pretty." Because this word must be avoided, the game encourages children to learn

and use synonyms and antonyms (e.g., lovely, beautiful, attractive, not ugly) thereby increasing the richness of their vocabularies. When a student uses an effective substitute for the off-limit word, the teacher also writes these on the board. Students may keep a record of these words in a special notebook. If this game were played every day of the school year, a child with an implant could compile a "thesaurus" of about 170 words, with corresponding antonyms and synonyms, in one year's time.

10. "Keep Saying More"

This auditory/language game focuses on conversational skills and language pragmatics. The goal is to help the child understand how parts of a conversation are related by continuing a topic. Pictures are used to set the scene. The clinician might show a picture of a child asking another child, "May I play with your ball?" The listener is presented with various responses and must determine which are pragmatically appropriate. Response choices might include, "It's not my ball," "Yes, let's play together," and "I like to swing." For an open-set listener, these stimuli could all be presented through listening alone and the child must decide which are appropriate responses. For other children, a closed set of responses is used. In either case, the task allows explicit practice with conversational pragmatic rules that often elude

deaf children. These rules typically are learned implicitly by children with normal hearing. Mannix provides multiple stimuli for this game.

Conclusion

These suggestions represent only a starting point for clinicians as they "sneak" language into auditory activities. By doing so, clinicians should find that, not only are listening games more motivating and meaningful for the child, they are more interesting for the clinician as well! Auditory games that incorporate meaningful language also reflect real-world communication fairly well, thereby giving clinicians a better view of how the child with a cochlear implant functions in everyday situations. After all, isn't that our goal?

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