



Auditory Verbal Strategies to Build Listening and Spoken Language Skills



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Introduction

There are many factors that have changed the outcomes for children who are born deaf or hard of hearing today. Two of the main factors affecting outcomes for these children are Universal Newborn Hearing Screening and advances in hearing technology.

Hearing loss can have lifelong effects on a child's development when not identified, diagnosed and treated at an early age. Advances in brain imaging have made it possible for scientist to identify a sensitive period for the development of central auditory pathways in the brain (Sharma et al, 2009). The first three years of life have been shown to be the time of maximal plasticity for the central pathways in the brain. Early detection of hearing loss is critical if a young child is to reach their full potential in life.

While most developing countries have adopted some sort of newborn hearing screening (e.g. United States, Canada, United Kingdom, Australia, and Europe), Newborn hearing screenings in developing countries is in its infancy (Kamal, 2013) as there are many economical and logistical obstacles to overcome.

According to the World Health Organization, there are 32 million children (birth-14 years of age) in the world with disabling (defined as 30dB or greater) hearing loss (WHO, 2012). Statistics in the United States from the National Institute on Deafness and Other Communication Disorders reflect that 90% of the babies who fail their newborn hearing screening are born to hearing parents (Mitchell & Karchmer, 2004). When presented with a complete and clear understanding of communication approaches available to their family, 85% of parents of children who are deaf or hard of hearing will choose a listening and spoken language approach (Brown, 2006). Newborn hearing screenings across the world have created an unprecedented need for professionals skilled in spoken language outcomes to work with children who are deaf or hard of hearing and their families.

Parents who are told of their child's hearing loss are often at a loss in determining their next steps. These parents do not often envision a future for their child which includes their child learning to listen and talk. Their perception is often that the only option their child has is to learn sign language. While sign language has clearly been demonstrated as a beneficial means of communication for children with hearing loss, it is not the only option available. While teaching children who are deaf or hard of hearing to listen and speak is by no means a new concept, the advent of digital hearing aids and cochlear implants has provided children with access to speech sounds that, in the past, were often not available to those with a severe to profound hearing loss.

In the US, the Early Hearing Detection and Intervention Act of 2010 was established to ensure every newborn is screened for hearing loss by one month of age, identified by 3 months of age and receiving appropriate early intervention services by 6 months of age (<http://www.infanthearing.org/components/>). Detection of the hearing loss is not effective, however, if children are not fit early and appropriately with amplification. Left undetected and untreated, even mild or unilateral hearing loss can cause delays in speech and language development followed by lags in academic achievement (Yoshinaga-Itano, et al, 1998).

While UNHS and early access to appropriate technology are two key factors in the ability of a child to learn to listen and talk, there is a critical third key component. This component is the family's access to trained professionals.

The Listening and Spoken Language Specialist (LSLS) is a professional trained in Auditory-Verbal strategies and techniques who supports the parent as the primary teacher of their child. The LSLS guides and coaches parents to develop their child's listening and spoken language skills so their child may have the opportunity to learn alongside their hearing peers at the earliest possible age. The LSLS works in partnership with parents to achieve the best possible outcomes for each individual child (Cole & Flexer, 2007). The LSLS has the designation of either an Auditory-Verbal Therapist (LSLS Cert. AVT) or an Auditory-Verbal Educator (LSLS Cert. AVEd). The particular designation depends on the setting in which the LSLS provides services. Each designation has Guiding Principles that can be accessed through the certifying organization, the Alexander Graham Bell Academy for Listening and Spoken Language: (<http://www.listeningandspokenlanguage.org/AcademyDocument.aspx?id=541>).

The LSLS coaches and guides families to develop their child's listening and spoken languages skills through the implementation of specific strategies and techniques. The terms "strategies" and "techniques" are often used together, but they do not mean the same thing. A *strategy* is a specific plan utilized to achieve a goal. It is a plan to move from Point A to Point B. In order to choose the correct listening and spoken language strategy, the therapist must be able to continuously analyze the child's strengths and needs, anticipate the child's response, and implement the correct strategy *at the correct time* while helping the parent to develop this skill as well. Knowledge of a variety of the listening and spoken language strategies is the first step in a learning trajectory. A professional must not only know which strategy to use to reach a determined goal, but must have the ability to model for parents and other professionals, and the ability to coach the appropriate use of the strategy. A *technique* is the way a professional goes about using the strategies. A technique is a way of presenting information or a style of teaching that may vary from therapist to therapist and teacher to teacher. There are many techniques that a LSLS may utilize that are not considered strategies. Two examples of techniques are the use of Experience Books and planning sessions around the daily routines and experiences of a particular child and family.

The work presented here is focused on auditory-verbal strategies to develop listening and spoken language skills in children who are deaf or hard of hearing.

How to Use this Resource

This resource was written for a professional audience although parents will benefit from it as well. Listening and spoken language strategies are referred to consistently in the field of listening and spoken language, but not defined in one body of work. This is an attempt to consolidate strategies in one resource with research references to further define and explain the strategy. Terms were utilized that the authors felt were most commonly understood in the professional field. A professional may refer to each strategy as needed when working with a particular child or family. This is not an exhaustive body of work and is not intended as a sole means to educate professionals who are unfamiliar with listening and spoken language development.

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Acoustic Highlighting

Definition: Acoustic Highlighting is an added vocal emphasis on an identified target. A target can be important sounds, words, parts of phrases, or grammatical structures in a sentence.

How is this strategy done?

Acoustic Highlighting can be done in several ways:

- speak the target with more emphasis, increase the intensity
- pause slightly before saying the target
- whisper the target, decrease the intensity
- increase the duration of a target
- change vocal intonation or pitch

Why is this strategy important?

When a child with hearing loss learns to listen, they often benefit from extra emphasis on new sounds, words, phrases and/or grammatical structures. The added emphasis, *acoustic highlighting*, draws the child's attention to the new word, phrase, or structure (Simser, <http://firstyears.org/c4/u6/acoushigh.htm>).

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ attention to auditory signal and/or speaker
- ✓ responses from child
- ✓ turn-taking skills
- ✓ expressive language

Discussion

In the early stages of listening, *acoustic highlighting* is used to highlight a new or important word that has been said. In later stages of listening, *acoustic highlighting* can be used to correct a sound or word that is omitted or said incorrectly (Simsler, 1993).

Once the child can hear and identify the targeted word, it is important for the adult to say the sentence with natural rhythm and intonation (prosody). Sometimes, *acoustic highlighting* can lead to a pattern of speech that does not always sound natural. Therefore, it is important to remember to repeat the sentence with normal prosody once the child has picked up the target word (Luterman, 1999).

Highlighting differences between the child's production and the correct production draws the child's attention to the error. Then, the child can attempt to repeat the model with greater accuracy.

Example

A parent works on the child's receptive understanding of the color "red" while playing ball:

Parent: May I have the red ball? (no acoustic highlighting at first)

Child: Hands parent the yellow ball.

Parent: Giving child back the yellow ball: Oh, I wanted the (pause) **RED** (spoken with extra stress)

Child: Extra emphasis on the word "red" was enough input and child hands parent the red ball.

While reading a book, a child is encouraged to talk about what is seen:

Child: dog cat run.

Parent: The Dog *and* the cat are *running*.

In the sentence above, that parent *acoustically highlights* the words "and" and "running".

Acoustic Highlighting

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Ask “What did you hear?”

Definition: When a child gives an incorrect or inappropriate response, no response, or experiences a communication breakdown, the adult can ask, “*What did you hear?*” to prompt the child to give back the part of the message that was heard and attempt to repair the breakdown.

How is this strategy done?

Often a child with hearing loss falls in to the habit of responding “what?” or “huh?” without the proper auditory attention to the intended message. The purpose of this strategy is for the adult to consider asking “What did you hear?” instead of an automatic repetition of the message.

Why is this strategy important?

A child is held accountable as a listener when an adult asks “*What did you hear?*” on a regular basis. This practice signals to a child that the adults expects the child to listen and respond. The response the child gives to the adult also reveals information about what the child may or may not have heard. In this way, the adult acts as a diagnostician and has information about which part of the message the child missed or did not understand.

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ attention to auditory signal and/or speaker
- ✓ confidence in listening skills
- ✓ repair strategies for communication breakdowns

Discussion

An adult who asks “What did you hear?” sends a message to the child that he is expected to listen and respond. A child does not learn to trust their own hearing when an adult continually repeats a message after the child responds “huh?” or “what?” The child learns that it is not necessary to listen the first time! This strategy also forces the child to think about what was heard and attempt to fill in the blanks of missing information (Estabrooks, Maclver-Lux & Rhoades, 2016).

An adult should invite a child to learn along with them and asking “What did you hear?” also implies “have you been listening and learning alongside me?” Adults make listening an emphasis and hold a child accountable when they ask “What did you hear?” A child will make more of an effort to listen when the adult says something meaningful or motivational to the child (Jalongo, 2008).

Listening and Spoken Language Specialists (LSLS) must be diagnostic in their practice. The LSLS has the opportunity to evaluate what a child may or may not have heard when they ask “What did you hear?” The child may use “huh?” or “what?” to gain additional time to process the auditory information. The response the child gives will assist the LSLS in diagnosing where the child has difficulty and then pinpoint a potential area of need.

Before the use of this strategy, the adult must first take in to account factors such as background noise, distance, and whether the child really just needs to hear the message again before they ask “What did you hear?”. This strategy, when used incorrectly, can create hesitation on the part of the child to respond and negatively affect the child’s self-esteem, so the adult should be careful in the proper timing and use of this strategy. The question should be delivered in an encouraging manner.

Example

A child is assisting in washing dishes after dinner.

Mom : Was John in school today? I know he was out sick yesterday

Child: What?

Mom assess the environment and realizes that the running water may have affected her son’s ability to hear the complete message. She *does not* ask “What did you hear?”, but makes the decision to repeat the question to her son.

Child: No. He was still sick. Recess was no fun without him.

A child is in a speech session with his speech language pathologist and they are working on auditory memory skills.

Therapist: We are going to pretend to go shopping. I will tell you which items you need to put in the shopping cart. I want you to remember what I say and put the items in the cart. Now, tell me what you will do.

Child: I will listen to food you say. I will put it in the cart.

Therapist: Great! We need bread, pizza, strawberries and ice cream.

Child: Wait. What?

Therapist: What did you hear me ask for?

Child: ummm. Bread, pizza and ice cream.

Therapist: Yes. What else did you hear?

Child: Blueberries?

Therapist makes a note that the child heard ‘berries’, but may have missed the beginning part of the word. She repeats the whole message using acoustic highlighting on the word ‘straw’.

Ask “What did you hear?”

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Auditory Bombardment

Definition: Auditory Bombardment provides numerous opportunities for a child to hear the target phoneme, sound or language (Dickson, 2010).

How is this strategy done?

Auditory bombardment involves conscious planning to expose a child to specific sounds or language. It is a strategy that focuses on giving a child multiple listening opportunities throughout their day. To use *auditory bombardment*, an adult surrounds a child with meaningful sound and language with a focus on particular targets.

Why is this strategy important?

Children who are deaf or hard of hearing have not had the listening exposure of children with typical hearing. *Auditory bombardment* provides a child with the opportunities to listen to sounds and language in meaningful ways. Parents or professionals may choose a specific sound to focus on and the parent finds ways to expose the child to this sound as much as possible throughout the daily routines of the child's day or within the classroom setting.

The exposure to speech sounds through listening is a building block for the natural development of strong auditory, speech and language skills for a child who is deaf or hard of hearing.

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ attention to sound
- ✓ awareness of sound
- ✓ integration of listening into a child's personality
- ✓ comprehension through listening (Simser via firstyears.org, January 2013)
- ✓ proper articulation of speech sounds

Discussion

In order for a child to learn to speak, he or she must first learn to listen! *Auditory bombardment* is a strategy that focuses on a child's listening to sounds and words and eventually how those words are put together to make sentences. Through *auditory bombardment* a child has the opportunity to listen over and over again to sounds that may not have been heard early in his or her life due to lack of auditory access. As the adult purposefully exposes the child to a particular sound, phoneme, or grammatical structure, he has the opportunity to establish an "auditory impression" of the various targets (Caleffe-Schenck, 2007).

Auditory bombardment encourages a child to use hearing as the primary sensory modality and creates multiple meaningful opportunities for the child to be exposed to a targeted sound. The end goal of using *auditory bombardment* is that the child will use the targeted sound, word, or grammatical structure spontaneously in speech and language. The adult should be mindful, however, that speech and language are acquired developmentally and targets must be chosen that are not only meaningful for the child, but appropriate for the child's speech and language abilities as well.

Example

A child is not yet producing the /b/ sound in the initial position of words. With the idea of *auditory bombardment* in mind, the mother is encouraged to gather toys, objects, or pictures from around the house that begin with the letter /b/. These should be objects that are of interest to the child. Some ideas could be: ball, baby, bubbles, boy, boat, book, bird, etc. The idea is to expose the child to the /b/ sound multiple times over multiple days within meaningful play routines. The child is expected only to listen to the sound, not to repeat it at first. The goal is purely exposure to the /b/ sound. The mother and child could also take these objects and hide them around the house and create a treasure hunt providing fun opportunities for listening!

Timmy is inconsistently using past tense in spontaneous sentences. Daddy and the child go to the park and take pictures of all the fun activities of the morning. Later when they are home, Daddy and Timmy look at the pictures together and Daddy bombards Timmy with the past tense markers while also using acoustic highlighting on these grammatical structures. Daddy could also print the photos and make an experience book being mindful of using *auditory bombardment* of the past tense.

Daddy and Timmy **walked** to the park.

Along the way we **heard** cars and birds.

We **swung** on the swings.

We **played** tag.

We **ate** a picnic lunch.

We **had** a fun morning at the park.

For additional ideas and examples on how to use *auditory bombardment*, the reader is referred to *Speech Sounds* by Nancy Caleffe-Schenck and Dian Baker. This resource is available through Cochlear Americas.

<http://hope.cochlearamericas.com/sites/default/files/resources/Speech-Sounds-Vowels.pdf>

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Auditory Closure

Definition: *Auditory Closure* is when a speaker begins a song, rhyme, or sentence and then stops talking in order to encourage the child to fill in a verbal response.

How is this strategy done?

To utilize *auditory closure*, begin a song, rhyme or sentence and then stop and look expectantly at the child and wait for them to vocalize a response. In its purest sense, auditory closure refers to the ability of a listener to decode information that was not heard completely or was distorted in some way and to fill in the missing information (Ferre, 2006). As a listening and spoken language strategy, *auditory closure* takes advantage of the redundancy of familiar language in order to encourage a child use expressive language.

Why is this strategy important?

Auditory closure affords the adult opportunities to informally assess the child's expressive language skills. Typically, if the child knows the word that has been left out, the child will naturally fill in the word or phrase.

Auditory closure can help an adult avoid the trap of a constant flow of questions directed at the child. An adult can change a question into a statement to encourage the child to respond. For example, when looking at photos, "Who's that?" becomes "I see _____".

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ attention to speaker
- ✓ response from child
- ✓ turn-taking skills
- ✓ child's use of spontaneous language
- ✓ expressive language expansion

Discussion

Auditory Closure assists parents and teachers to improve a child's ability to use contextual information, to fill in the blank, to gain more information, or to clarify information. The ability to fill in missing or distorted portions of the auditory signal helps a child understand the whole message in difficult listening situations such as background noise, speakers with regional dialects, quiet speakers or with someone who mumbles (Ferre, 2006). A child with hearing loss often does not have the necessary language or life experience that enables them to "fill in the gaps" of missed or inferred information (Beck, 2011; Cole & Flexer, 2007). This skill can be addressed at a very young age through the use of *auditory closure*. Familiar nursery rhymes or songs may initially be one of the best ways to utilize *auditory closure* as long as the child has been exposed to the song or rhyme enough times to be able to meet with success when *auditory closure* is used. This strategy can be employed with familiar books as well. During a story, the adult pauses to see if the child will fill in the blank.

Adults who work with a child who is deaf or hard of hearing may sometimes fall in to the trap of a barrage of questions directed to child in order to gather data on the child's expressive language skills. Data collection on a child's language skills can be accomplished in a much more natural method by using *auditory closure*. This strategy helps to make the exchange much more conversational in nature.

Auditory closure should be utilized when the adult believes the child has the ability to meet with success.

Example

Mom and her toddler are in the car and sing the familiar song of "Twinkle, Twinkle Little Star".

Mom begins: Twinkle, Twinkle Little (and stops)

Toddler: star!

Mom: How I wonder what (and stops)

Toddler: you are

This turn-taking goes on for the remainder of the song with the mom paying particular attention to the number of words the child is able to fill in.

An adult and child share a book.

Adult: Oh look; I see a _____ (and points to a zebra)

Child: horse!

Adult: It does look like a horse, but try again. It's a _____.

Child: no response

Adult can give the beginning sound of the word: A z_____

Child: zebra

Adult: That's right. I see a zebra running across the field.

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Auditory First

Definition: Auditory First is an attitude as well as a set of conditions that will enable the child to have better access to speech and language.

How is this strategy done?

An *auditory first* attitude is achieved when the following conditions are met:

- Ideally a newly identified child should be seen every 4 to 6 weeks until a full audiogram is complete. From that point they should be seen every 3 months until the age of 3 when the child is typically seen every 6 months as recommended by the AG Bell Academy (Flexer, Madell & Hewitt, 2014.)
- Child wears hearing technology ALL waking hours
- Daily listening checks performed to assess the child's current listening ability and to ensure equipment functions properly
- Batteries are charged and backup batteries are available
- Backup coils/wires are available for cochlear implant users
- Magnet sites of cochlear implant users are checked regularly to ensure there is no irritation or swelling
- Hearing equipment is listened to both with and without FM connection to check for clarity

Ensure equipment functions at the optimum by doing a visual "check" of equipment:

- Ear molds fit properly and are free of wax and moisture
- Tubing is secure in ear mold
- No visible cracks, pinches, or tears in cables of cochlear implants or tubing of hearing aids

The conditions listed above are prerequisites to ensure auditory access. However, it is also important to be mindful of how to present information to a child learning to listen and speak as the goal is to build auditory skills!

Always think:

- Was the child given the best opportunity for hearing sound **before** they were expected to respond?
- Did the speaker avoid giving any visual information until the child had a chance to hear and process information?
- Does the child's behavior have anything to do with a change in their hearing?

Why is this strategy important?

A child's auditory system, in its earliest stages of development, depends on stimulation from an environment that is full of meaningful auditory input. A child with hearing loss who has had early and consistent access to speech will have better outcomes in auditory based communication than a child who has not had early and consistent access to speech. For the child with hearing loss, those that have the earliest access to the speech signal through their amplification will have better outcomes in auditory based communication. (Sininger, Grimes, & Christensen, 2010).

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ self-advocacy skills for hearing equipment
- ✓ attention to auditory signal first and foremost
- ✓ a mindset of listening in the parent and child
- ✓ integration of listening into the child's personality (Pollack et. al, 1997)

Discussion

In typical development, an infant starts to differentiate phonetic aspects of their native language from phonetic aspects of non-native languages around seven months (Kuhl, et al. 2005). As the child continues to develop, there is a critical period for language development that extends through the first six years. After this time, a child's ability to acquire language declines gradually. This critical period of development is also referred to as a time of maximal neuroplasticity. Neuroplasticity refers to structural and functional changes in the brain that are brought about by training and experience. The brain changes in response to these experiences, the peak point referred to as the critical period (Sharma, Dorman & Spahr, 2002). The effect of experiences during the critical period will result in behavior which is reflective of the particular environment of the child. For example, if the child does not have meaningful auditory exposure during the critical period, there may be a reduced effect on building auditory skills or, in some instances, no effect at all. When the critical period has passed, the brain may not be able to make big changes in neuronal connectivity. (Mundkur, 2005).

Example

A mother brings her 12-month-old child in for their scheduled therapy session. The mother reports that little Johnny has been "off" all morning and she can't figure out why. During a listening check of the equipment, the therapist finds that one of Johnny's hearing aids is not functional. She decides to take this time to talk to the mother about her continued development of an "auditory first" attitude. Oftentimes children who are deaf or hard of hearing display changes in behavior when their equipment does not function properly or when they may have wax, fluid, or developing/resolving ear infections. A person with an auditory first attitude will be sensitive to these cues and take appropriate action.

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Auditory Sandwich

Definition: Through the use of the **Auditory Sandwich**, information is presented through listening before the introduction of visual or other support information is given to a child. When visual information is needed to assist in comprehension, the information is then put back in to the auditory only presentation. The **Auditory Sandwich** is also referred to as the Listening Sandwich.

How is this strategy done?

The *auditory sandwich* follows this formula:

- 1) Auditory input is given first to ensure the focus is on listening to gain meaning
- 2) Visual/tactile input is added, when appropriate (may be eye gaze, pointing, showing a toy, etc.)
- 3) Auditory input is repeated again without the visual input

It is important to remember that a child may need to listen for 2-3 times prior to the presentation of visual/tactile information. The main point is to give the child the opportunity to learn through listening alone. Always remember to put the information back in to the auditory only presentation after the visual cue is given to ensure the last presentation has been successfully processed through audition alone.

Why is this strategy important?

The *auditory sandwich* is based on the premise that children who are deaf or hard of hearing need to learn to trust their hearing and rely on auditory input to learn spoken language. This emphasis on listening helps to strengthen the development of audition. Many aspects of speech (especially the suprasegmentals such as pitch, duration and intensity; as well as the difference between voiced/voiceless sound pairs) are not visible on the face or mouth, they are therefore best taught through listening (Listen Learn and Talk, Cochlear Limited, 2005). Visual cues are beneficial in only 30% of speech sounds in running discourse (Cole & Flexer, 2007).

The purpose of the auditory sandwich is to encourage comprehension and communication through the child's auditory abilities. Therefore, it is important to lead with auditory input, support the message with visual, or in some cases, kinesthetic input, and follow up with the auditory input only again. The addition of the auditory signal after visual support reinforces the importance of listening.

This strategy allows information to be gathered about the child's auditory abilities alone. If the child does not respond with the initial auditory input and consistently needs visual support, a discussion with the child's audiologist is recommended.

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ suprasegmentals of speech
- ✓ attention to auditory input and the speaker
- ✓ parents' belief that the child is able to gain information through listening alone
- ✓ ability to process language through audition

Discussion

Through the use of the *auditory sandwich*, the child develops and learns to recognize auditory patterns. The most natural way to develop spoken language with appropriate rate, rhythm and intonation is to learn through listening (Listen Learn and Talk, Cochlear Limited, 2005).

As with many strategies, the *auditory sandwich* is most effective when used with proper *wait time* and the expectation that the child is able to take in auditory information but may also need a visual/tactile cue at first to link meaning to sound. Oftentimes visual information is presented to a child prior to giving adequate opportunity for the child to listen first, which causes visual skills to be reinforced instead of auditory skills. By reinforcing audition, the *auditory sandwich* will bring attention to the targeted verbal input and give the child the necessary repetition and reinforcement they need for auditory learning.

It is the “rule of thumb” to use three auditory strategies before giving visual input. If three attempts to use audition do not result in the desired respond, additional input (visual or tactile) is given, followed by audition again. (Estabrooks, 2006)

Example

Adult: It's time to go outside. Let's get your coat! (auditory input first)

Child: no response

Adult: (rephrasing and attempting again): Where's your coat?

Child: no response

Adult: (providing another opportunity to listen only) Get your coat!

Child: no response

Adult: I see your coat! (giving visual information by shifting eye gaze to child's coat hanging on a hook)

Child: makes move to get coat

Adult: Let's get your coat!

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<http://www.cochlear.com/wps/wcm/connect/in/home/support/rehabilitation-resources/early-intervention/listen-learn-and-talk>

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Expansion

Definition: To *expand*, an adult repeats back what the child has said and either adds something new, or corrects syntax or grammatical structure.

How is this strategy done?

Expansions from adults incorporate part or all of the child's previous utterance in a syntactically and/or semantically improved sentence (Cole, 2011). Adults should respond to the child's spoken language in ways that encourage the child to continue to talk and not in a way that shuts down the conversation. Adults provide a language model when they expand upon and extend the child's utterances (McLean, 1999).

Why is this strategy important?

Expansions can be used in the naturally occurring context of conversation, which enables this strategy to be used effectively by parents at home as well as teachers in the classroom and therapists in auditory verbal sessions. A simple *expansion* adds or modifies grammatical details of a single target. More complex *expansions* can modify more than one target, or add or embed new clauses into the child's core utterance. *Expansions* are based directly on the child's utterance and improve or correct what the child said and therefore hold deep and inherent interest to the child (Proctor-Williams, Fey & Loeb, 2001). When some previous information is used to deliver the new information and capture the child's attention, *expansions* can lead to increases in utterance length and grammatical development (Cole & Flexer, 2007).

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ length of utterances (Cole & Flexer, 2007)
- ✓ degree of syntactic or semantic correctness
- ✓ complexity of responses from child
- ✓ auditory feedback loop

Discussion

An *expanded utterance* can provide an improved or corrected alternative and amplify the conversational topic in some way. It can also request or provide new information about the same topic or apply some previous information to a new topic.

Expanded utterances contrast the child's current form with the target form of the sound, word, or phrase. Fey, Long and Finestack (2003) discussed the effectiveness of the *expansion* depends on four assumptions:

1. The expansion is based on the child's own utterances, so the utterance is highly focused on the objects and topics to which the child is attending
2. The expansion is similar to the child's original utterance, therefore the utterance is easy for the child to analyze and comprehend.
3. The expansion poses few sentence-processing challenges, therefore the child is more likely to notice the target features that distinguish the new form from the original sentence.
4. Under conditions of joint attention, the subtle relationship between target features and semantic/pragmatic/grammatical functions are enhanced.

Example

Child: doggy brown

Adult: Yes, the doggy is brown and dirty! (use acoustic highlighting on the omitted word "is" and expand by adding 'dirty')

Child: Tommy go to lunch now

Adult: Yes. You are right. Tommy is going to lunch now. He will be back soon. (expand 'Tommy go' with 'Tommy is going' while using acoustic highlighting)

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Expectant Look

Definition: The **Expectant Look** is a non-verbal signal given to a child to indicate a response is expected.

How is this strategy done?

The *expectant look* can include any one of these physical cues or all of the cues in combination:

- Raised eyebrows
- Direct eye contact with the child
- Lean in towards the child
- Slight tilt of the head

Why is this strategy important?

Communication is a two-way street and an expectant look lets a child know that they are a partner in the exchange of information. While the expectant look is a non-verbal cue, it helps a child learn valuable turn-taking skills for conversation. The *expectant look* is meant to elicit participation from a child and send a clear signal that a response is expected (Cole & Flexer, 2007; Talbot 2002).

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ attention to speaker
- ✓ response from child
- ✓ turn-taking skills
- ✓ expressive language expansion

Discussion

The *expectant look* can be used alone or in combination with other listening and spoken language strategies. The message this strategy delivers to the child is two-fold:

1. I expect you to listen when I speak
2. I expect you to respond

The *expectant look* places social pressure on a child to give some sort of response. Communicative competence is an end goal of listening and spoken language and includes the ability to express wants and needs in a way that is socially acceptable (Gleason, 2005). As a child's language grows, an *expectant look* can also signal that the communication partner is engaged and is looking for more information. In this way, the *expectant look* can encourage longer utterances and expand language without the need to interrupt the child's thought process or the flow of the conversation. Often an adult's interruption of a child's utterances can encourage less talk from a child instead of more.

Example

A child has indicated to their parent they would like more to drink.

Parent: Holds her hand on the lid of the sippee cup and gives the child an expectant look.

Child: Looks at the parent, but gives no response.

Parent: Leans in towards the child and then gives an *expectant look*.

Child: vocalizes

Parent: You could say 'open'.

Child: attempts the word "open"

Parent: Accepts attempt if it is at expected level and says, Here you go! I opened the cup.

It is snack time in a preschool. The teacher has several choices of snacks available for the students.

Teacher: Please let me know what you would like for snack today. She turns and looks expectantly at Tommy.

Tommy: cookies

The teacher knows the child is capable of a much longer sentence and this has been modeled in the past, so she merely gives the child an *expectant look* as if to say, "I need more information from you!"

Tommy: I want cookies.

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Joint Attention

Definition: Joint Attention is the ability for two or more people to share a common focus (Woods & Wetherby, 2008).

How is this strategy done?

Joint attention occurs when an adult follows the eye gaze of an infant or child and comments on whatever the child watches. *Joint attention* can also occur when an adult attempts to gain an infant or child's attention to an object or activity (initiation of joint attention).

Joint attention is also referred to as shared attention.

Why is this strategy important?

Communication is most successful when people share a common focus or topic of discussion (Cole & Flexer, 2012). This begins in infancy when a parent follows a child's lead and talks about what is important to the child. *Joint Attention* establishes that the communication partners are focused on to the same object, action, or event. *Joint attention* is important for all babies as this strategy links concrete examples to the words heard.

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ attention to auditory input: When joint attention is established, the child is in the proper position for auditory only input as the child's gaze is on an object or an activity and not the face of the speaker.
- ✓ build social cognition (Mundy & Newell, 2007)
- ✓ assist development of theory of mind (Gavrilov et al., 2012)
- ✓ increase language development (Brooks & Meltzoff, 2005)

Discussion

Joint attention is a building block for social competence and is classified as a basic form of communication (Gavrilov et al., 2012). A child begins to establish *joint attention* between the ages of 6-9 months of age, although a parent or caregiver can certainly take advantage of a child's eye gaze and input receptive language from birth. *Joint Attention* allows caregivers to provide language to match the child's thoughts and to bathe the child in language. When caregivers encourage *joint attention* and label what a child focuses on, the child's vocabulary increases at a faster rate (Gleason, 2005). *Joint attention* is most effective when words are provided based on the child's interest and the label is given in the moment when joint attention is naturally established, rather than if the adult attempts to constantly redirect the child's attention. (Tomasello, 2005).

Joint attention with a child who is deaf or hard of hearing helps to establish context to ensure the message is clear. When a child and adult share visual focus on a particular object, the child is in an "auditory only" position and the adult has the opportunity to build both auditory skills and language skills at the same time.

Example

A mother feeds her baby a bottle and pays close attention to where her baby's eye gaze falls:

Baby: Gazes into her mother's eyes

Mother: Hello there, Anna. You are a beautiful little girl!

Baby: Changes eye gaze to her bottle

Mother: You see your bottle. You were hungry, weren't you?

Baby: Gazes back to mother

Mother: You found mommy again! I love you.

During circle time in a preschool classroom, the teacher begins to sing the weather song to indicate that it is time to talk about the day's weather. Several of the children turn their gaze to the weather pictures that the teacher has on a board and other children look out the window. By monitoring the children's eye gazes, the teacher can assess which children seem to be indicating their awareness of what she is referring to at this point.

Teacher: What weather do you see outside today Henry?

Henry: Looks directly at the picture of the rain (indicating *joint attention*) but does not give a verbal response.

Since it is raining outside, the teacher knows that Henry has receptive knowledge of this concept and must decide if Henry is capable of a verbal response or needs additional support. One response from the teacher could be:

Teacher: Henry, I see you looking at the picture of rain. Can you tell me the weather today?

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Listening and Spoken Language Strategy:

Model Language

Definition: To **model language** for a child who is deaf or hard of hearing, an adult speaks clearly at all times, uses the correct grammar, and gives appropriate and meaningful language in context.

How is this strategy done?

An adult models language appropriately when they are aware of a child's language level and purposefully exposes the child to language that is just above the child's current level of functioning. This requires the adult to have knowledge about the language development of children with typical hearing.

Why is this strategy important?

The underlying premise of this strategy is that a child who hears language that is meaningful and appropriate has a higher likelihood to use spoken language (Suskind & Suskind, 2015). Since a child who is deaf or hard of hearing may miss certain aspects of speech or language, it is imperative that adults model language to a child by speaking at an appropriate rate, volume and articulating correctly. As an adult models language, a child gains multiple opportunities to hear spoken words and to attach meaning to these words. The adult's model should be one level above the child's in order to provide exposure to more complex and complete language.

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ neural connections in the brain (Suskind & Suskind, 2015)
- ✓ auditory feedback loop
- ✓ receptive language skills
- ✓ expressive language skills
- ✓ appropriate grammatical rules

Discussion

In spoken language, speakers often talk fast, drop word endings, and run words together. For the most part, this spontaneous spoken language is understood regardless of its deviation from language rules. This may not, however, be the case for a child who is deaf or hard of hearing. Adults can help a child to hear and learn new words and phrases, as well as new grammatical structures, when language is appropriately modeled in conversational language (VanKleeck, 1994). A child with typical hearing enters kindergarten having heard 13-45 million words (Hart & Risley, 1995). The range of words heard depends on how much parents talk to their child. A child who is deaf or hard of hearing may be at risk to hear fewer words due to compromised auditory access. An adult who models language exposes a child to as many words as possible during the early years of their life. Self-Talk and Parallel Talk are two strategies to consider in order to model language.

Moog (2003) has suggested different scenarios when modeling would be useful:

- 1) To complete an utterance: the adult identifies words that were missing in an utterance and models the sentence to include the missing words
- 2) To correct: the adult models correct syntax, vocabulary or speech
- 3) To expand: the adult increases the length and complexity of the original utterance

An adult models language that the child will understand and then seeks for a child to imitate and later spontaneously use this language. The adult models the language for the child only until the child is able to produce this language independently.

Example

A child and her caregiver are at the park.

Child: swing!

Caregiver: I see the swings too!

Child: swing!

Caregiver: I think you want to go on the swing.

Child: swing!

Caregiver: You can say 'I want to swing'.

Child: want swing

Caregiver: That's right! Say 'I want to swing!' I will lift you up and you can swing. (Caregiver lifts child in to swing). Now you need a push. Say 'push me please'.

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Motherese

Definition: Motherese is the singsong voice that parents naturally use when speaking to very young babies. Motherese is also referred to as parentese, baby talk, or child directed speech.

How is this strategy done?

Motherese is characterized by short sentences that are usually repetitive and have a slower rate of speech. *Motherese* uses a singsong voice and exaggerated intonations with an abundance of variation in duration, pitch and intensity, which are called the suprasegmentals of speech. The pitch of the speaker is typically an octave higher than usual (Gopnik, Meltzoff, Kuhl 1999).

Caregivers are often positioned face-to-face with their child to create direct eye contact, so caregivers of children who are deaf or hard of hearing should be mindful to also create times when the child receives auditory input only.

Why is this strategy important?

Babies love *motherese*! It acts as an acoustic hook to capture and hold a baby's attention even if motherese is in another language (Gopnik, Meltzoff, Kuhl 1999).

Motherese seems to be a universal language that all adults use and all babies respond to equally, often with body movement which matches the intonation of the speaker (Gopnik, Meltzoff, Kuhl 1999).

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ attention to speaker
- ✓ repertoire of vowel sounds
- ✓ cooing
- ✓ response from child
- ✓ social-emotional development of baby (Bergeson-Dana, 2012)
- ✓ turn-taking skills

Discussion

Research on *motherese* indicates that it helps babies with typical hearing to ‘crack the code’ of language (Gopnik, Meltzoff, Kuhl, 1999; Bergeson-Dana, 2012). Some research reports parents of a child who is deaf or hard of hearing often use less *motherese* than parents of a child with typical hearing (Bergeson-Dana, 2012). This may mean the child who is deaf or hard of hearing, who already receives less auditory experience, may not have the richness in the language provided by *motherese*. This may not be because they do not have auditory access, but because the parent may be hesitant to use *motherese*.

One of the aspects of *motherese* is the elongation of vowels, which is important to consider when working with a child who is deaf or hard of hearing as vowel sounds are typically the most audible for a child who is properly diagnosed and amplified.

Motherese usually decreases by the time of the child’s first birthday, which is unfortunate for a child who is deaf or hard of hearing as *motherese* so naturally utilizes the suprasegmentals (duration, intensity and pitch) of speech.

Motherese should be encouraged for every child, regardless of the child’s auditory access. Activities that naturally incorporate *motherese* are: repetitive books that are rich in intonation (Brown Bear, Brown Bear by Eric Carle for example), nursery rhymes and songs. Acoustic highlighting is a component found in *motherese*.

Example

Motherese is best understood when it is heard. Follow the link below to a YouTube video of a mother engaged in *motherese* with her infant.

<https://www.youtube.com/watch?v=eZclOL7vIQQ>

References

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Open-Ended Questions

Definition: Open-ended questions are questions that require more than a yes/no or one word response (Bond & Wasik, 2009).

How is this strategy done?

An *open-ended question* allows the adult to provide opportunities for the child to engage in conversation.

Some statements that facilitate further conversation are as follows:

What happened?

Tell me more.

What do you think will happen next?

Why did that happen?

I wonder why.

These statements offer the child more flexibility in the language they use to express their thoughts and opinions (Mervyn).

If a child cannot answer an *open-ended question*, they can be taught by using scaffolding (Bond & Wasik, 2009). Scaffolding is the process of providing extra information for the child to use in order to respond to the question. The adult can provide scaffolding with choices such as a set of targets (words, phrases) to use in order to answer a question, complete a statement or complete a task.

Why is this strategy important?

When a child answers an *open-ended question*, their response offers adults insight into what the child thinks and is curious about. These questions stimulate and encourage conversational skills. Unfortunately, adults most often ask children “yes or no” questions which terminate a conversation. For example,

Adult: Do you go under the water when you are swimming?

Child: Yes.

A child does need to learn to respond to “yes or no” questions. However, once that skill is underway, it is important to help them progress to more complex question types and *open-ended questions* as their language and listening skills develop.

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ attention to auditory information
- ✓ length of utterance
- ✓ turn taking during discussion

Discussion

Open-ended questions allow the child to engage with an adult, and eventually peers, in a more meaningful way. For example, *open-ended questions* used during a book share can foster conversations while children explore the meaning of different words and interact linguistically with others (Bond & Wasik, 2009). The conversation becomes less one sided when *open-ended questions* are used because the dialogue can move beyond the adult asking questions and the child using a simple, one word answer. The child has opportunities to use more complex sentence types, a variety of grammatical structures as well as ask questions back to the adult.

The question “Tell me what is happening” is likely to elicit more spontaneous language than “What is he doing?” An *open-ended question* encourages critical thinking in order to answer higher level questions. The response to an *open-ended question* requires comprehension and analysis of a situation before a response can be formulated. The child has to think within an open set of answers instead of the easier task of two choices as presented with a Yes/No question.

Example (Texas Education Agency, 2012)

What do you think is happening?

What do you think is going to happen next?

In what ways are ___ and ___ the same?

Why did you/he feel that way?

Why did she need _____?

What would you do?

Why did you/he do that?

How might ___ affect ___?

Why do you agree/disagree?

What could change if ___?

How are we going to ___?

Tell me more about ___.

References

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Optimal Position

Definition: Proper **position** and distance between the speaker and the listener which enables the child with hearing loss to have the most optimal access to spoken language through audition.

How is this strategy done?

When building listening skills, the adult should *position* themselves naturally so that the child does not have easy access to the adult's face. This is done so that the child learns to trust their hearing and listen to the speaker instead of watching the speaker's mouth. This *position* looks different for each age group and setting. The ideal *position* for a young child is sitting in the adult's lap such that the adult's voice is six to eight inches from the microphone of the child's equipment. However, it is not practical (or possible!) to have the child in the lap at all times (Crandell & Smaldino, 1994).

In general, the speaker should *position* him or herself closest to the child's ear that has the greatest hearing acuity (the ear with better access to sound). This is an easier task when there is only one child and one speaker, however, this is more difficult when there are multiple speakers or multiple children with hearing loss. For this reason, FM (frequency modulation equipment) use should always be discussed with the child's audiologist.

Why is this strategy important?

The distance between child and speaker or sound source can strongly affect perception of spoken language. Speech perception ability can be improved by decreasing the distance between a speaker and listener. The closer the child is to the sound source, the greater the intensity and the signal becomes clearer. The goal is to give the best possible auditory signal to the brain. Every time the distance between a speaker and listener is decreased by half, the sound signal increases by 6 dB (Ling, 1989).

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ auditory attention to speaker
- ✓ responses from child
- ✓ access to subtle conversational cues, faint or distant speech

Discussion

Many parents and professionals are familiar with “preferential seating” as a classroom recommendation for a child with hearing loss. However, when all the children in a class have hearing loss, what does preferential seating really mean? An *optimal position* for a child with hearing loss can mean something different for each student, each classroom and each family situation.

Newborns are in need of face-to-face interactions with their primary caregivers. This time contributes to their social and emotional growth, which in turn contributes to their overall development. A parent or caregiver should not be concerned that a newborn is gaining visual information from watching the speaker’s face, as this is how all newborns learn. The caregiver can, however, find time to continue auditory input when the infant is not looking directly at the caregiver’s face, such as during tummy time or when walking in the stroller or carrier. When a child and adult are both looking at the same object, they are said to have shared attention or joint attention. When a baby is looking at an object, they are then in an *optimal position*!

In the home, the *optimal position* for a child with a hearing loss may be closer to the TV when watching a movie, which may seem obvious. At the dinner table or during family activities, it would be beneficial to *position* the child who is deaf or hard of hearing with their better hearing ear towards the people who are hardest to hear in the family. For instance, a younger sibling with a small voice may be harder to hear than their father with a deep voice. *Position* the child closer to the siblings so that they may have a better chance of hearing them.

In the classroom, it is important to look closely at the configuration of each student’s hearing loss and coordinate the seating arrangement such that each child has the optimal access to the speaker as well as incorporate some form of SNR (signal to noise ratio), enhancing technology such as an FM or soundfield system. While “preferential seating” does not necessarily mean the front row, certain seating arrangements can help provide children with enhanced visual and auditory cues needed for communication (Flexer, 1995). Although *optimal positioning* will take some thought and practice, the benefits are worth the time and effort.

Some additional things to consider in classroom acoustics include reverberation time, level of background noise, relationship between the level of the teacher’s voice and the background noise, as well as the distance from the teacher to the child’s amplification. When the teacher and child are relatively close to each other, the auditory input can be transmitted to the child with minimal reverberation (Crandell & Smaldino, 2000).

Example

A child with a single side implant cannot hear his sister sitting at the dinner table on his non-implanted ear. The mother swaps the children’s position so that the sister is sitting on the same side as the child’s implant. Now the child can hear his sister talking.

References

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Repetition

Definition: Repetition is an indirect or informal language stimulation technique where a targeted sound, word, phrase or sentence is said more than one time (Weybright, 1984).

How is this strategy done?

There are two types of *repetition*:

- an adult repeats back what a child has said, but models correct articulation, vocabulary usage or grammatical structure
- an adult simply repeats the command or statement for a second time after appropriate wait time, in an effort to give the child another chance to hear and respond

Why is this strategy important?

When an adult utilizes *repetition* to either model correct articulation or restate what was said, the child has another opportunity to hear the proper pronunciation of the word or the targeted vocabulary. This affords the child the chance to practise use of their auditory feedback loop to match the adult's model or to listen again to the intended message. Repetition is a valuable strategy that exposes a child naturally to the grammar of their native language. Trelease (2006) says "Grammar is more caught than taught, and the way you catch it is the same way you catch the flu: you're exposed to it." (p.40). When a child has multiple opportunities to hear proper grammar, it is more likely proper grammar will develop.

Repetition is a valuable strategy to consider during every day routines and interactions such as diaper time, peek-a-boo, story and song time. These times provide a regularity of language for a child, which acts as a springboard for learning (Cole & Flexer, 2007).

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ auditory feedback loop
- ✓ receptive language
- ✓ ability to follow commands when the child is given another chance to hear previously stated information
- ✓ expressive language
- ✓ knowledge of proper grammatical structures

Discussion

Repetition gives a child repeated opportunities to learn. A child who is deaf or hard of hearing needs to be exposed to language in multiple occasions within meaningful contexts in order to increase receptive language skills. In the early stages of language development, it appears parents naturally use *repetition* with their child in order to give positive feedback to communication attempts. Parents repeat back to their child what they have heard them say to confirm, model, prompt and often to correct (Hart & Risley, 1995).

Sound is all around and *repetition* of important sounds in a child's life links sound to meaning and words. A knock on a door comes to mean that someone is on the other side and eventually the word "knock" has meaning as well when it is paired with the sound. This connection arises through *repetition* (Ernst, 2012). Parents should be cautioned, however, it is not just the number of words heard by a child that helps grow vocabulary, but the breadth of the words that are used as well. A baby will listen longer to sounds and words they hear regularly (Suskind, 2015).

One must be careful, however, not to use *repetition* too frequently as a child's listening and language abilities increase. The overuse of *repetition* can send an incorrect message to a child that they do not need to listen the first time, for surely the adult will repeat the information! The adult must determine before using *repetition* whether the child had adequate opportunity to hear the stimulus. Background noise, distance, and complexity of language should be taken into consideration to decide if a child has the adequate auditory access to properly respond to the stimulus. Before an adult uses *repetition*, other strategies such as wait time, expectant look and optimal position should be considered.

Example

The therapist and parent target carrier phrases with the child. They have decided to work on 'I want _____' and will use the child's train set. The therapist has coached mom to gather all the trains into a box that mom will hold.

Therapist: I want the Thomas train, please. What would you like? (directed to mom)

Mom: I want the James train. What would you like? (directed to child)

Child: dus!

Therapist: Mom, acoustically highlight the /b/ sound for him and prompt with 'you could say, I want the bus'.

Child: want dus.

Mom: You want the bus! Here you go. Here's the bus.

Therapist and mom discuss other daily routines where mom can input the "I want ____" phrase using repetition.

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Sabotage

Definition: Sabotage creates an unusual or unexpected situation with familiar items or routines which is contrary to the child's expectation or understanding (Winkelkotter & Srinivasan, 2012).

How is this strategy done?

One way to use *sabotage* is when the adult creates an element of surprise with a purposeful mistake or contrived situation (Estabrooks, MacIver-Lux, & Rhoades, 2016). This starts a "cause and effect" cycle of intentional communication. The adult can elicit language from the child if they place materials just out of reach, provide fewer materials than the child needs, or "forget" materials or parts of a routine. It is then up to the child to bring the need to the adult's attention and the dialogue continues until a resolution occurs.

Why is this strategy important?

If a child's every want is provided for without spoken language, the child will have little to no need to learn to communicate. Therefore, contrived situations, in which something essential is absent or out of order, are helpful to practice certain words, phrases, and skills (Ling, 1978).

Sabotage situations create valuable moments of joint attention during which the adult can encourage a child to react and verbalize by modeling the appropriate language (Moharir, Barnett, Taras, Cole, Ford-Jones & Levin, 2014).

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ joint attention
- ✓ attention to auditory information
- ✓ length of utterance
- ✓ opportunities to practice using spoken language

Discussion

Sabotage creates more opportunities to increase conversations as well as opportunities for a child to practice a skill.

Garber, Nevins (2012) pointed out that the key to effective use of the *sabotage* strategy is awareness of the child's listening and language abilities. Verbal sabotage ("I'm going to put my ducks on my feet before we go outside.") should always be used with skills which the child has already had success. For example, if the child cannot comprehend a sentence of that length or does not have the vocabulary of "ducks", "feet" or "outside", the sabotage will not be effective.

Another way to use sabotage is to do something silly or unexpected like trying to pour the juice or distribute crackers for snack while the container is closed. Then pause, wait (with an expectant look) for the child to respond (Srinivasan, retrieved December 10, 2016 from www.evdcweb.org). The surprise of the adult's silly error typically elicits some verbal response, making the child think about what went wrong and how it can be fixed. If the child says nothing, prompt them with, "Uh oh", "What do I need to do?" , or "What happened?" and pause for a verbal response from the child.

Alternatively, sabotage can be used to teach self-advocacy skills in relation to the child's hearing equipment. After a listening check, hand the student their equipment but leave it powered off. See if they notice that something is wrong and ask for assistance. If they don't say anything, prompt them with a question such as "Can you hear me?" "What did I say?" or "Is your hearing aid/CI working?".

Example

An adult and a child are dressing to go outside to play. The adult uses *sabotage* and attempts to put the child's coat on.

Child: laughs

Adult: What's so funny? I can't get my coat on!

Child: laughs and says "my coat"

Adult: Huh? (continues to attempt to put coat on)

Child: (pulling at coat) my coat.

Adult: Oh no! I have your coat? You could say 'that's my coat'.

The adult has used sabotage to create a need for communication and cooperation.

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Self Talk/Parallel Talk

Definition: **Self-Talk** and **Parallel Talk** are indirect language stimulation techniques that do not require a response from the child.

Self-Talk: an adult talks to the child about what the adult sees, does, or hears at any particular moment in time.

Parallel Talk: an adult talks to the child about what the child does, hears or sees at any particular moment in time.

How is this strategy done?

Self-talk is often described as a narration of one's day. This means an adult talks about their actions as they perform various daily tasks.

Parallel talk is narration of the actions of another person, typically that of the child.

The adult follows the child's lead and describes in short phrases of 3-6 words what the child sees, hears, or touches (*parallel talk*) or what the adult sees, hears or touches (*self-talk*). (Weybright, 1985).

Why is this strategy important?

This strategy provides an abundant source of language input for the child who is deaf or hard of hearing. It challenges the adult who is with the child to remember the need for exposure to new vocabulary and grammatical structures throughout the child's day. A child's rate of vocabulary growth is directly related to the amount of time a parent has spent talking to that child (Hart & Risley, 1999).

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ parents' ability to interact with their child
- ✓ receptive language
- ✓ expressive language
- ✓ ability to use grammatically correct structures
- ✓ conversational skills (Raver et al, 2012)

Discussion

Play is the primary mode of learning and social exchange for a young child. Adults have the opportunity to use *self-talk* and *parallel talk* during play and daily routines, to model vocabulary, grammar, and social interactions. Since a child needs to hear language in order to learn it, adults who utilize *self-talk* and *parallel talk* become natural language models for their child and increase a child's exposure to language. Remember, "Grammar is more caught than taught." (Trelease, 2006)

When these strategies are utilized during meaningful interactions, the experience of what the child can see, touch, or manipulate is enhanced by simultaneous spoken language input from an adult (Ling, 1989). *Parallel talk* and *self-talk* provide opportunities to directly label materials and actions which will help increase vocabulary for a young child. The child is able to link the object or action with words heard which increases the likelihood that the spoken word will have meaning attached to it. The key to these strategies is the adult does not require the child to answer direct questions or produce comments. Instead, joint attention, which is a basic component of conversation, is created between the adult and child and discussion relates directly to the objects and actions at hand. Adults must also remember to keep their comments within the child's syntactical level.

Hart & Risley's landmark study points to the link between literacy success in school and the amount of talk a child heard before the age of three. The parents that reached the highest number of words spoken to their child were those who had the tendency to narrate their day (Hart & Risley, 1995).

Example

Self-Talk (the adult talks about what they do)

I'm putting on my coat. It is cold outside. I will zip my coat.

I'm washing my hands. First, I'll turn on the water. Now, I'll get some soap.

I like blue blocks. I am building with blue blocks.

Parallel Talk (the adult talks about what the child does)

A child and her caregiver are playing with baby dolls:

Caregiver: You are hugging your baby. What a lovely baby!

Now you are putting your baby in her bed. She must be tired.

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Take Turns

Definition: In order to **take turns**, adults learn to encourage a back and forth volley between themselves and the child.

How is this strategy done?

In order to *take turns*, caregivers learn to wait for a non-verbal or verbal response from a child before they take another turn in the communication exchange. Infants may coo or kick their feet as a conversational turn, while a three-year-old child is expected to give an appropriate verbal response. The goal when adults *take turns* is to elicit participation from the infant or child (Cole & Flexer, 2007).

Why is this strategy important?

When an adult responds to an infant's cries, coos, or babbles they encourage 'serve and return interactions' which foster communication and build strong relationships (National Scientific Council on the Developing Child, 2004). A child learns that communication is a two-way street when the caring adults in their life learn to *take turns*. This signals to the child that what they have to offer to the conversation is important. It also places an expectation on the child that a response is necessary and anticipated. A caregiver who actively engages with a child as they take turns also builds the bond between them (Suskind & Suskind, 2015).

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ auditory attention to speaker
- ✓ response from child
- ✓ conversational competency
- ✓ expressive language skills

Discussion

The ability to take turns is a prerequisite to conversational competency, but caregivers must not wait until a child is able to talk to practice this important strategy. A newborn's brain is primed to learn spoken language and hearing loss has the potential to interrupt this learning process, so practitioners must educate parents and caregivers about the importance of early communication strategies. The practice of taking turns is an important tool and works well in combination with the strategies of wait time and leaning in to the child with an expectant look. The ability to ask open-ended questions also promotes the continuation of conversation as the child is encouraged to not only take another turn, but to formulate a response that is more than 'yes' or 'no'.

A baby is encouraged to take turns when parents use eye contact, motherese and practice wait time for a baby to move their body, smile, or vocalize as a conversational turn. Both babies and children should be viewed as full partners in conversation and encouraged to contribute in some way to the exchange. Parents should increase their expectations of a response as the child's age and ability increase, mindful of the fact that turn taking is a precursor to adult conversation (White & Voss, 2015).

Another term that describes turn taking is 'serve and return'. While a baby is born with their own unique genetic makeup, experiences have a large impact on brain development (www.developingchild.harvard.edu). A baby has an instinct to 'serve' and when an adult responds back with a 'return', the baby is encouraged to continue communication. As a child grows, the 'serve and return' changes and the adults should model appropriate responses to a child's 'serve' that encourage another response from the child. Positive responses build responsive relationships between the child and the caregiver. Researchers at the Center on the Developing Child at Harvard University list this 'serve and return' interaction as one of the most important influences on early brain development (www.developingchild.harvard.edu). In addition to this benefit, the ability to take turns also encourages expressive language development.

Example

A father and his baby are looking in to each other's eyes:

Father: Hello my beautiful little girl

Baby: kicks feet

Father: You heard me! Are you happy today?

Baby: does not respond, so father waits a few seconds before taking another conversational turn

Father: Come on. Tell me. Are you happy today? Can I have a smile?

Baby: coos

Father: Oh. There you go. You are happy now!

A teacher greets one of her students as she arrives at school.

Teacher: (stooping down to the child's level) Good morning, Katie! I'm happy to see you.

Child: no response

Teacher: Gives an expectant look and utilizes wait time, then says: You could say 'Good morning Miss Smith'

Child: Hi.

Teacher: Hi! I see you have your hair in pigtails today. Who did that for you?

Child: my mom!

Teacher: Well your mommy did a great job. Let's empty your backpack and start our day.

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Wait Time

Definition: **Wait time** is the pause used between an adult's interaction with a child and the child's expected response that allows the child time to process the auditory information and formulate a response (Dickson, 2010).

How is this strategy done?

When engaged in vocal play or conversations, communication partners practise waiting for a response from the child before taking another turn themselves. This pause signals to the child that they are supposed to say, or do, something (Winkelkotter & Srinivasan, 2012). When information is repeated without proper *wait time*, a child learns they don't have to listen the first time. They are also denied the opportunity to trust their own hearing! When using wait time, before a command or comment is repeated:

- Count to 8
- Look expectantly at the child
- Lean in toward the child (as if to hear them, indicating an expected response)
- Practise patience!

Why is this strategy important?

The ability to remain quiet for appropriate times and durations facilitates verbal interactions. Adults must provide ample wait time for the child to respond before the adult gives the answer, asks another question, or repeats what was said. This means the adult *waits* long enough for the child to process the auditory message and then respond to it. Adults must leave "empty space" to signal to the child that it is their turn to contribute something to the back and forth volley that becomes conversation.

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ length of a response
- ✓ speaker's confidence
- ✓ likelihood of a response from child
- ✓ communicative intent
- ✓ turn-taking skills (Cole & Flexer, 2007)

Discussion

Wait time is perhaps the most underutilized, but one of the most important skills to develop in a teacher, therapist, or parent. Purposeful pauses (*wait time*) teach children how to engage in conversational turn taking when the speaker sends a message that a response is expected. Sometimes in an effort to input as much language as possible, the chance for the child to respond is forgotten. Teachers, therapists, and parents must learn how to be comfortable with silence!

Any auditory information that is presented; whether a new action, sound, word, or phrase; should be followed by *wait time*. Extended pauses after the presentation of information allow the listener time to process and also allow the adult to consider whether clarification or repetition is necessary before another conversational turn is taken. An adult who thinks diagnostically will wait for a child's response in order to determine an appropriate next step. The adult may choose to model the desired response or use a variety of prompting techniques to build toward the desired response (Garber & Nevins, 2012).

Example

A child wants to play with playdoh, but cannot open the container. The child hands the container to the adult without any vocalization.

Adult: Looks at child while placing hand on lid and *waits*...

Child: Looks at adult

Adult: *Waits* some more while looking expectantly at child

Child: vocalizes

Adult: depending on the expected response of the child, vocalization alone may be accepted. If more is expected, the adult could say "What should I do?" and *waits* again

Child: no response

Adult: You could say 'open'! (and then *waits*)

Child: Open.

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Whisper

Definition: A **Whisper** is accomplished when the speaker turns off the voice and reduces the suprasegmental of intensity. Whispering is a form of acoustic highlighting.

How is this strategy done?

In order to whisper, a person uses their breath to speak softly without the use of the vocal cords. This affects the suprasegmental of intensity (loudness) which gives extra power to consonant sounds.

Why is this strategy important?

In the English language, vowels carry the power of speech as well as the prosody (Ling, 1989) while consonants carry the meaning, or intelligibility, of speech. The vowel sounds can often overpower the less intense consonant sounds which makes them more difficult to hear for a child with hearing loss. A *whisper* can make the consonants easier to hear (more acoustically salient) and give the child a chance to focus on the consonant sound as opposed to the vowel sound.

This Auditory Verbal strategy helps build the following Listening and Spoken Language skills:

- ✓ auditory attention
- ✓ auditory accessibility
- ✓ auditory feedback loop

Discussion

The voice can be used in many in different ways to capture the attention of listeners. Children are much more interested in listening to a storyteller who uses their voice to intrigue the listener. A *whisper* can add an element of surprise and call attention to the speaker. Children will often lean in and focus on what is being said when a *whisper* is utilized correctly. It may take a few repetitions, but the *whisper* will cue the child to focus intently on the speaker's message. A *whisper* also allows the higher frequency sounds of speech to be heard more clearly.

Try a whisper for a word that a child has misarticulated and see if the child is able to change that error after the word or sound has been whispered.

Example

Child: I saw two cat

Adult: Hmm. There were two? Listen.....I saw two *cats*. (whisper only the word *cats*)

Give the child a chance to repeat the phrase including “cats” with the /s/ sound on the end

References

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