Building Listening and Spoken Language

It’s a “Piece of Cake”

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Early Intervention

- Best practice recommendations in the field of deaf and hard of hearing early intervention states that families should be provided with information on ALL communication and learning options prior to entering early intervention by the age of 6 months.

- Recent surveys have indicated that 70% of new or expectant parents said they were not sufficiently informed about spoken language as an option for children with hearing loss, even though 98% of them said they would be inclined to explore that option.

- One of these options is **Auditory-Verbal Therapy (AVT)**, a Listening and Spoken Language (LSL) approach
5 ½ years old

Severe-profound progressive hearing loss

Cochlear implant in left ear, hearing aid in right ear

Received CI just before 3rd birthday

Started AVT at 2 ½ years

In a typical class

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Auditory-Verbal Therapy

- Uses a logical set of guiding principles to teach children who are deaf or hard-of-hearing to use their hearing devices to listen, process spoken language, and to speak in a regular learning and living environment, in order to become independent, contributing citizens.
What is Auditory-Verbal Therapy?

- Teaches the child to maximize the use of residual hearing with hearing aids or access to sound provided by a cochlear implant
- Centers on the Parents/Family along with the child: Parents observe and participate in order to learn techniques and methods to continue the therapy at home on a daily basis
- Uses diagnostic information in each session as part of the ongoing process of evaluation of the child’s current needs
- Teaches the child to monitor his own voice and the voices of others resulting in natural voice quality
- Helps the child to integrate listening and hearing into his full personality
- Allows the child to “Learn to Listen” so he can develop spoken language and “Listen to Learn”
Principles of LSLS
Auditory-Verbal Therapy

1) Promote early diagnosis of hearing loss in newborns, infants, toddlers, and young children, followed by immediate audiologic management and Auditory-Verbal Therapy.

2) Recommend immediate assessment and use of appropriate, state-of-the-art hearing technology to obtain maximum benefits of auditory stimulation.
Principles of LSLS
Auditory-Verbal Therapy

3) Guide and coach parents to help their child use hearing as the primary sensory modality in developing spoken language without the use of sign language or emphasis on lip-reading.

4) Guide and coach parents to become the primary facilitators of their child’s listening and spoken language development through active, consistent participation in individualized Auditory-Verbal therapy.
Principles of LSLS
Auditory-Verbal Therapy

5) Guide and coach parents to create environments that support listening for the acquisition of spoken language throughout the child’s daily activities.

6) Guide and coach parents to help their child integrate listening and spoken language into all aspects of the child’s life.
Principles of LSLS
Auditory-Verbal Therapy

- 7) Guide and coach parents to use natural developmental patterns of audition, speech, language, cognition, and communication.

- 8) Guide and coach parents to help their child self-monitor spoken language through listening.
Principles of LSLS
Auditory-Verbal Therapy

- 9) Administer ongoing formal and informal diagnostic assessments to develop individualized Auditory-Verbal treatment plans, to monitor progress, and to evaluate the effectiveness of the plans for the child and family.

- 10) Promote education in regular classrooms with typical hearing peers and with appropriate support services from early childhood onwards.
How is AV therapy different from traditional Speech Therapy?

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<tr>
<th>AV Therapy</th>
<th>Speech Therapy</th>
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<tr>
<td>• Parents are involved in every session and are the primary models</td>
<td>• Parents may or may not be involved in the session directly</td>
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<td>• Hearing is emphasized as the primary sensory modality</td>
<td>• Vision and Touch are often emphasized as much or more than hearing</td>
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<td>• Takes a developmental approach to learning</td>
<td>• Often takes a remedial approach to learning</td>
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<td>• LSLS therapists have additional training in developing auditory skills and language through listening</td>
<td>• SLPs generally do not have specific training in developing auditory skills as a way to develop language</td>
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Baking the “Cake” of Listening and Spoken Language

Layer 1: Auditory Skills
Layer 2: Receptive Language
Layer 3: Expressive Language
Layer 4: Speech/Articulation
Layer 1: Auditory Skills

- Using Erber’s hierarchy of Detection, Discrimination, Identification, and Comprehension, we want the child to “learn to listen” so they can later “listen to learn.”

- Examples of this might include:
  - Sound awareness (detection)
  - Pattern perception (discrimination)
  - Selection of a named item through listening (identification)
  - Following multi-element directions (comprehension)
  - Following and responding to a conversation on a known topic (comprehension)
Why is the Development of Auditory Skills Important?

- The development of the auditory system for spoken language involves more than discrete auditory tasks performed during “auditory training” sessions. (Nancy Caleffe-Schenk, LSLS Cert. AVT)
- “Audition does not develop as an independent skill. It is interrelated with both maturation of sensory-motor integration and the development of other communication skills, namely motor speech and receptive and expressive language.” (Dr. Daniel Ling)
- Auditory development triggers spoken language, natural speech development, cognitive and social growth, as well as personality.
- Long before the emergence of language and speech, there are specific auditory skills which can be observed to develop sequentially in the first year or two of a typically hearing child.
Layer 2: Receptive Language

- **Receptive Language**: Generally refers to the understanding of semantics (vocabulary), morphology (word endings), and syntax (grammatical structure) of language.

- Since AVT is developmental, we want a child to express his own ideas in a novel form. This is preferable to imitations or repetitions of rote language taught by an adult.

- Generation of new ideas will only come about when the child has an adequate receptive language bank from which to draw.
Layer 3: Expressive Language

- **Expressive language**: Generally refers to spontaneously generated novel language productions.
- A child’s spontaneous expressive language relies on his/her underlying knowledge and receptive language base.
- You will find very little cueing for direct verbatim imitation in an AV session.
- You are more likely to see an activity that models a structure which allows the child to “pick it up” after hearing that structure enough times, the way a typically-hearing child would.
Layer 4: Speech/Articulation

- **Articulation**: Refers to the production of speech sounds and how they are made.
- This is the last layer of the cake, no matter what the age of the child may be.
- You must have all other foundation layers in place before you address speech production or articulation.
- AVT approaches articulation from a developmental perspective rather than a “sounds in error” perspective.
- The child is encouraged to develop his “auditory feedback loop” by listening to his own productions and the productions of others. The child attempts to match this model.
Myths or Popular Perceptions of AV Therapy

• Myth: AV Therapy is only for children with cochlear implants.
  ◦ Children with **all** degrees of hearing loss can benefit from AV Therapy: mild through profound hearing loss, unilateral hearing loss, and auditory neuropathy spectrum disorders. This includes children with hearing aids as well as cochlear implants.
  ◦ Most children begin AV Therapy before considering a cochlear implant.
  ◦ AV Therapy can help to determine a child’s progress with hearing aids and if a cochlear implant is needed.
Myths or Popular Perceptions of AV Therapy

• Myth: Gestures and visual information are not allowed.
  ◦ The therapist will use natural gestures throughout the therapy process and will encourage them from the parent and child as well.
  ◦ Pictures and toys are used to support what is provided through listening in order to promote understanding and learning.
  ◦ If supporting visual information is used (such as: a gesture, a toy, a picture), the therapist will always put the message “back into hearing” to reinforce auditory learning as primary.
  ◦ This is sometimes referred to as the “auditory sandwich”: auditory—visual—auditory
Myths or Popular Perceptions of AV Therapy

- Myth: The therapist must always cover her mouth.
  - The “hand cue” is used only sparingly by AV therapists. If it is used, it is only in the early stages of therapy and only when the child looks directly at the therapist’s face.
  - AV therapists prefer to sit beside the child or to focus on the toy/activity in order to promote listening and reduce the need for covering the mouth.
  - As the child integrates listening into his personality, he will not feel the need to gain as much visual information and will trust his hearing.
Final Thoughts…

- “Hearing is a first-order event for the development of spoken communication and literacy skills. *Listening* is the cornerstone of the educational system. Children spend up to 70% of their school day listening.” (Carol Flexer, Ph. D., LSLS Cert. AVT)

- “Think of hearing as the Velcro to which other skills such as attention, spoken language, reading, and academic competencies are attached.” (Carol Flexer, Ph. D., LSLS Cert. AVT)