PRACTICAL INTRODUCTION TO LISTENING AND SPOKEN LANGUAGE (LSL)

HELIX CONFERENCE

NOVEMBER 2019

SESSION #1: 1:00-3:00 PM
ROLE CALL 😊

• TEACHERS OF THE DEAF AND HARD-OF-HEARING
• SPEECH-LANGUAGE PATHOLOGISTS
• AUDIOLOGISTS
• REGULAR TEACHERS
• SPECIAL EDUCATION TEACHERS
• PARENTS
• SUPERVISORS, PSYCHOLOGISTS, ADMINISTRATION OF SPECIAL EDUCATION
• OTHERS
HOW TO SURVIVE OUR SESSION

CREATE NOTECARDS WITH QUESTIONS
WHAT DO YOU RECALL?
CONNECTIONS ARE DEVELOPED IN A CHILD’S BRAIN THROUGH EACH AND EVERY INTERACTION

100 billion neurons
300 trillion links
Quad trillion links developed

1 trillion Web pages
100 trillion links
quad billion connections
DISCLAIMER

ORAL METHOD -- TODAY’S FOCUS
MANUAL METHOD
BLENDDED APPROACH

**PARENTS CHOICE DRIVES THIS
AGENDA. PART 1 MORNING

• Introduction to Listening and Spoken language
  What    Why    Who

• Principles for Listening and Spoken Language

• Strategies

• The Auditory Learning Guide (ALG)

• Certification process for AVT and AVEd
Identify and label strategies with roleplay demonstration and sabotaging to teach skills.

Match description to auditory strategy

Develop an age appropriate activity with and appropriate strategy for a given Case Study

Evaluate application of strategies

Troubleshoot and discuss atypical scenarios

Get creative!
INTRODUCTION TO LSL
LSLS – THE IMPACT

- (Video)
THE AUDITORY – VERBAL APPROACH

• In Auditory –verbal therapy the parent/caretaker is the client and is present at all sessions.

• Audition is integrated into the child’s lifestyle.

• **A Developmental** rather than a remedial approach is emphasized.

• Therapy is diagnostic.
DEVELOPMENTAL APPROACH IN VOCABULARY

- Example: Normal Expressive Vocabulary development
- 1 yr. – first word
- 18 mths – 75 words
- 2 yrs. – 300 words
- 3 yrs. – 900 words
- 4 yrs. – 1500 words
- 5 yrs. – 2500 words

If a child tests at 2 years, she is functioning with using 300 words. She will need to learn ___ more words to gain a full year and ___ words to gain 1 and ½ years growth.
A typical 5-year-old learns 10 new words a day and use 50 new words per week.

Typically developing school-age children develop 3000 new words per year.


Need to develop a variety-quantity of words

Need to develop a quality or degree of understanding of words and different meanings.
WHY CHOOSE LSL

• Oral Method is Possible (even with a significant hearing loss)
• Part of Parents’ Informed Choice (Communication Plan)
• A “highly viable communication option” (demonstrating results of AVT impacting the closing the chronological age gap on various language assessments).
WHO WILL BENEFIT FROM LSL APPROACH

• With advanced technology, appropriate audiological management, and access to the entire speech spectrum children with a profound to mild loss can benefit from a LSL approach.

• Early diagnosis and treatment are recommended for best results.

• Late diagnosed children can also benefit if hearing technology is appropriate for the child’s loss, and intensive well-planned therapy is provided. Parental/family involvement is necessary for optimal development.
THE BASIC PRINCIPLES OF LSL
1. Promote *early diagnosis* of hearing loss in infants, toddlers and young children, followed by *immediate audiological assessment and use of appropriate state of the art hearing technology*.

2. Promote *immediate* audiological management *and* development of *listening and spoken language* for children as their primary mode of communication.

3. Create and maintain *acoustically controlled environments* that support listening and talking for the acquisition of spoken language throughout the child’s daily activities.

4. *Guide and coach parents* to become effective facilitators of their child’s listening and spoken language development in all aspects of the child’s life.

5. Provide *effective teaching with families and children* in settings such as homes, classrooms, therapy rooms, hospitals or clinics.
6. Provide **focused and individualized instruction** to the child through lesson plans and classroom activities while **maximizing listening and spoken language**.

7. Collaborate with parents and professionals to develop goals, objectives and strategies for achieving the **natural developmental patterns** of audition, speech, language, cognition and communication.

8. Promote each child’s ability to **self-monitor** spoken language through listening.

9. Use diagnostic assessments to **develop individualized objectives**, to **monitor** progress and to **evaluate the effectiveness** of the teaching activities.

10. Promote **education in regular classrooms with peers** who have **typical hearing**, as early as possible, when the child has the skills to do so successfully.
DIFFERENCES FROM TYPICAL TODHH & SLP SESSIONS

• Length of sessions (60 minutes)

• Positioning

• Auditory strategies are routine (and supports are aligned to favor “auditory-first”)

• Highly integrated use of listening equipment and access to listening (regular diagnostic testing, evaluations, and adjustments)
  • IDEA Section 300.113 ([https://sites.ed.gov/idea/regs/b/b/300.113](https://sites.ed.gov/idea/regs/b/b/300.113))

• Significant focus on parent involvement (and carry-over involvement of IEP Team).
  ** Be sure parents are aware of this. **
AUDITORY-VERBAL LESSON PLANS INCORPORATE GOALS IN:

1. Audition
   a) SA, PL, DL, SL, Word
2. Language input and expression
3. Vocabulary
4. Speech/Articulation
5. Cognitive Development (i.e.: comprehension and reasoning)
6. Literacy (both reading and writing)
7. Self-Advocacy
8. Carry-over to social situations and home life
STUDIES

1. Geers et al. (2017)

2. University of Melbourne Research Evaluating Outcomes of Children with Cochlear Implants (OCHI)

3. Longitudinal Outcomes of Children with Hearing Loss studies (LOCHI)
STRATEGIES IN LSL
The ears are like a doorway to the brain that lets sound and language in. The child’s brain needs sound as early as possible to build the neural connections.

- [Hearing First | Why LSL Matters](https://hearingfirst.org/en/isl/why-isl-matters) (Dr. Carol Flexer, AuD)
SERVE AND RETURN

• Serve starts with the child
  Ex: Child babbles, uses facial expressions, and gestures

• Return comes from the parent/caregiver

• Result: New neural connections form in all areas of the brain each time serve & return happens

This builds healthy emotional and self-regulation skills
TEACHING HIERARCHY FOR LANGUAGE

Input

Comprehension

Imitate

Use
GENERAL LISTENING GUIDELINES

- Auditory-Verbal Approach – learning is done through listening

- Access to the Speech Spectrum is crucial.

- Be conscious of your acoustic environment – make sure it is optimal for learning spoken language and listening skills

- **Listening Posture** may include: moving closer & sitting beside the child and slightly behind the child/using best ear
  **This is used when optimal auditory input is needed.**

- Present auditory information first
INPUT STRATEGIES

• Create a listening environment
• “Best Hearing” side
• Highlight acoustic features
• Lowlight
• Direct child’s attention to “listen”
• Point to ear, “I heard that”
• Tell then Show
• Pause time
• Modeling
• Repetition / Redundancy
• Use of parentese
COMPREHENSION
(QUICK CHECK)

• “Best hearing” side
• Sound source near ear
• Pause Time
• Expectant look
• Integrate directions into natural routines
• Ask a yes/no question about the target
IMITATION
(METHOD OF PRACTICE TO GET TO USE)

• “Tell Me”
• Give a Choice
• Model targeted behaviors
• Handcue
SPONTANEOUS USE

(The Goal)

• **Pause time** – Providing time for the child to process the language heard and giving time to formulate a response to contribute to the conversation.
SPONTANEOUS USE (CONTINUED)

• Expectant look
• Sabotage
• Role reversal
• Give a reason to communicate
The Auditory Sandwich

- Auditory information
- Visual or tactile
- Auditory information
Providing choices
- Easiest to present the correct choice at the end

Example - “Is the elephant small or big?”

Auditory Closure
- Helps to ensure ideas are learned
- Assists with auditory problem-solving and reinforces confidence in listening
Natural Teaching Strategies

Some **natural ways** to encourage communication and to teach the **value** of the communicative process include:

1. Sabotage/forgetfulness
2. Visible but unreachable
3. Violation of expectations – change something that is expected
4. Require assistance – give the child something that requires assistance
5. Delay – this pause allows time for child to initiate communication
MORE STRATEGIES

• Yardstick Level
  [within 3 feet of child’s height]

• Talk in Quiet, Not noise

• Yardstick Distance
  [within 3 feet of child]

• Self and Parallel Talk

  • Expansion

  • Highlighting

  • “Tell me more”

  • “Try again”
LING 6 SOUND TEST

- These sounds are used to determine if a child is hearing across the speech spectrum.
- Consists of /a/, /i/, /u/, /s/, /ʃ/, /m/, and no sound.
AUDITORY LEARNING GUIDE (ALG)

Levels of the ALG

**Sound Awareness**
Speech and environmental sounds

**Phoneme**
Speech Babble

**Discourse**
Auditory processing of connected speech

**Sentence**
Auditory Memory

**Word**
Discrimination in whole words
Suprasegmental Features

- **Duration**
  - Syllables
  - Rhythmic patterns

- **Loudness**
  - Shakers/noise makers
  - Voice variations

- **Pitch**
  - High to low
  - Low to high
  - Varying
BENEFITS OF SPEECH BABBLE

• Requires child to fine tune listening skills
• Helps the child to breakdown multisyllabic words when heard
• Helps child produce multisyllabic words with more ease
• Helps child to monitor their own speech
OBTAINING CERTIFICATION IN LISTENING AND SPOKEN LANGUAGE
AVT and AVEd Comparison

AVT
- Work 1:1 with the child and family
  - Inclusion right away
  - Center/home based
  - Weekly Intervention

AVEd
- Work with the child in individual or group settings and involves the family
  - In school with other children with HL
  - Reverse Mainstream may be emphasized
  - Inclusion when ready
  - Daily intervention

LSLS
- Knowledge
- Skills
- Promote Early Id
- Emphasis on Tech
- Developmental
- Evidence-Based
- Strive for Excellent Outcomes
- Promote Inclusion
- Diagnostic
- Aggressive audiology
- Guiding set of principals
- Operate on a Continuum
• Academic: Professional degree (or equivalent) in Audiology, Deaf Education, or Speech-Language Pathology

• Credentialed/licensed

• Continuing education: 80 hours within 9 domains of LSLS knowledge

• Mentoring: Mentored by a certified LSL Specialist while conducting a series of listening and spoken language sessions.

• Structured observations of other LSL professionals

• Commit to the Principles of LSLS (AVT or AVEd)
AG BELL ACADEMY CORE COMPETENCIES

The AG Bell Academy nine domains correspond to the following topics:

• Hearing and Hearing technology
• Auditory Functioning
• Spoken Language Communication
• Child Development
• Parent Guidance, Education and Support
• Strategies for Listening and Spoken Language Development
• History, Philosophy and Professional Issues
• Education
• Emergent Literacy
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HAND CUE (DEFINE WORDS-1)
HAND CUE (DEFINE WORDS 2)
HAND CUE (DEFINE WORDS 3)
LISTENING ROOM – HEARING JOURNEY

- “Hearing Journey” by Advanced Bionics
- The Listening Room (infants, kids, adults)
- Free listening activities for all levels
- www.hearingjourney.com
Professional Resources

- AG Bell Materials
- Listen, Learn and Talk, Cochlear
- Listening for Littles, D. Sindrey
- Tools for Schools, Advanced Bionics
- Speech and the Hearing Impaired Child: Theory and Practice, Daniel Ling
- Foundations of Spoken Language for Hearing-Impaired Children, Daniel Ling
- Talk Around the Clock, K. Rossi
- Cottage Acquisition Scales for Listening, Language, and Speech (CASLLS), E. Wilkes

- Tools for Schools, Advanced Bionics.
- Hearing Journey, D. Sindrey
- Speech Perception Instructional Curriculum and Evaluation (SPICE), Central Institute for the Deaf.
- Speech that Works, Sunshine Cottage School for Deaf Children
- My Baby and Me, B. Moog
- SKI-HI Curriculum, S. Watkins
REFERENCES


