

The background is a dark blue gradient with a subtle pattern of white dots. Overlaid on the left side are several concentric circles and a large circular scale with tick marks and numbers ranging from 140 to 260. Some of the circles have arrows indicating a clockwise direction.

PRACTICAL INTRODUCTION TO LISTENING AND SPOKEN LANGUAGE (LSL)

HELIX CONFERENCE

NOVEMBER 2019

SESSION #1: 1:00-3:00 PM

MICHAEL BOSTON, MA, EIPA CERT



CONSTANCE MCGROGAN SLP/L LSLs CERT. AVED

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

The background is a gradient of deep blue and purple, speckled with white dots resembling a starry sky. Overlaid on this are several faint, white geometric patterns. In the top right, there is a large circular scale with degree markings from 0 to 210 and concentric circles. In the bottom right, there are concentric circles with arrows indicating a clockwise direction. In the bottom left, there are partial concentric circles and a dashed arrow pointing left. In the top left, there is a small circular arc with an arrow pointing left.

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

BLENDED 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

AGENDA

PART 2

AFTERNOON

- 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 $\frac{1}{2}$ 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.

To go on to higher education, need to know 100,000 words! Bartel, N. (1975), Flexer, C. (1994) Sidney,D.(1997)

Need to develop a variety-**quantity** of words

▶ Need to develop a **quality** or degree of understanding of words and different meanings.

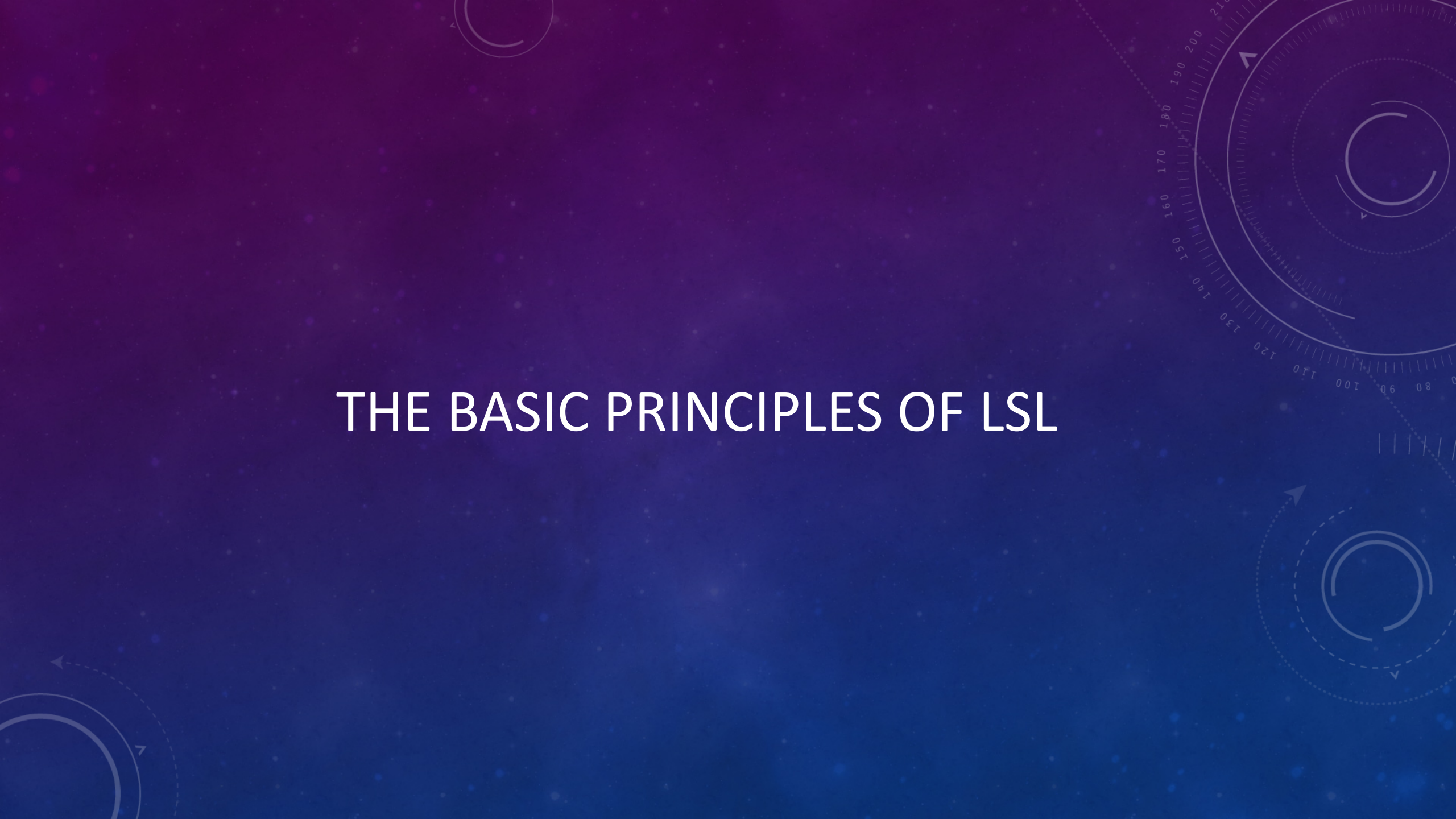
WHY CHOOSE LSL

- **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).**
 - Rhoades, E.A., & Chisholm, T.H. (2000). Global language progress with an auditory-verbal therapy approach for children who are deaf or hard of hearing. *The Volta Review*, 102, 5-25.

WHO WILL BENEFIT FROM LSL APPROACH

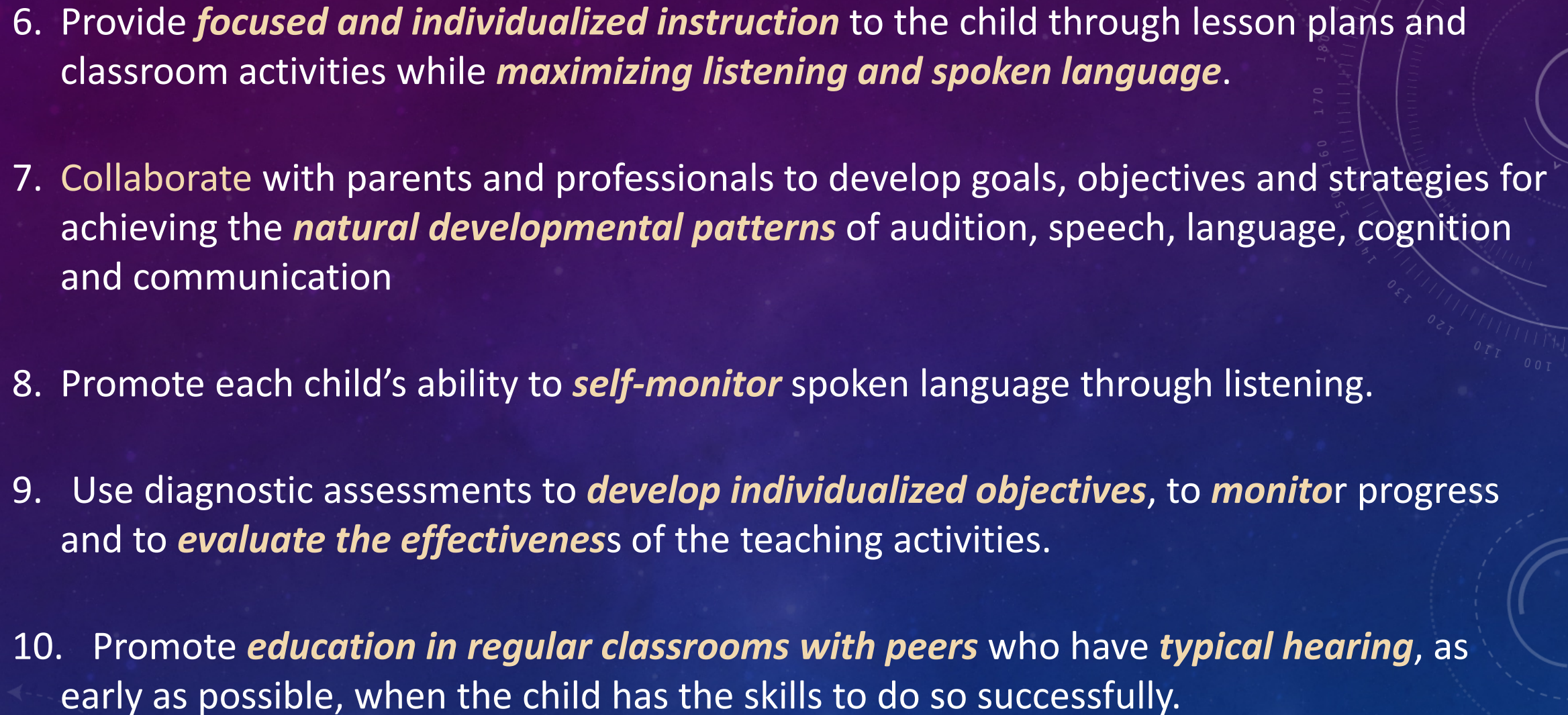
- **With advanced technology, appropriate audiological management, and access to the entire speech spectrum children with a profound to mild loss can benefit from a LSL approach.**
- **Early diagnosis and treatment are recommended for best results**
- **Late diagnosed children can also benefit if hearing 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



BASIC PRINCIPLES OF LSL

1. Promote **early diagnosis** of hearing loss in infants, toddlers and young children, followed by **immediate audiologic assessment and use of appropriate state of the art hearing technology**.
2. Promote **immediate** audiologic 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>)
- 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



EARLY EXPERIENCES SHAPE THE BRAIN

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.

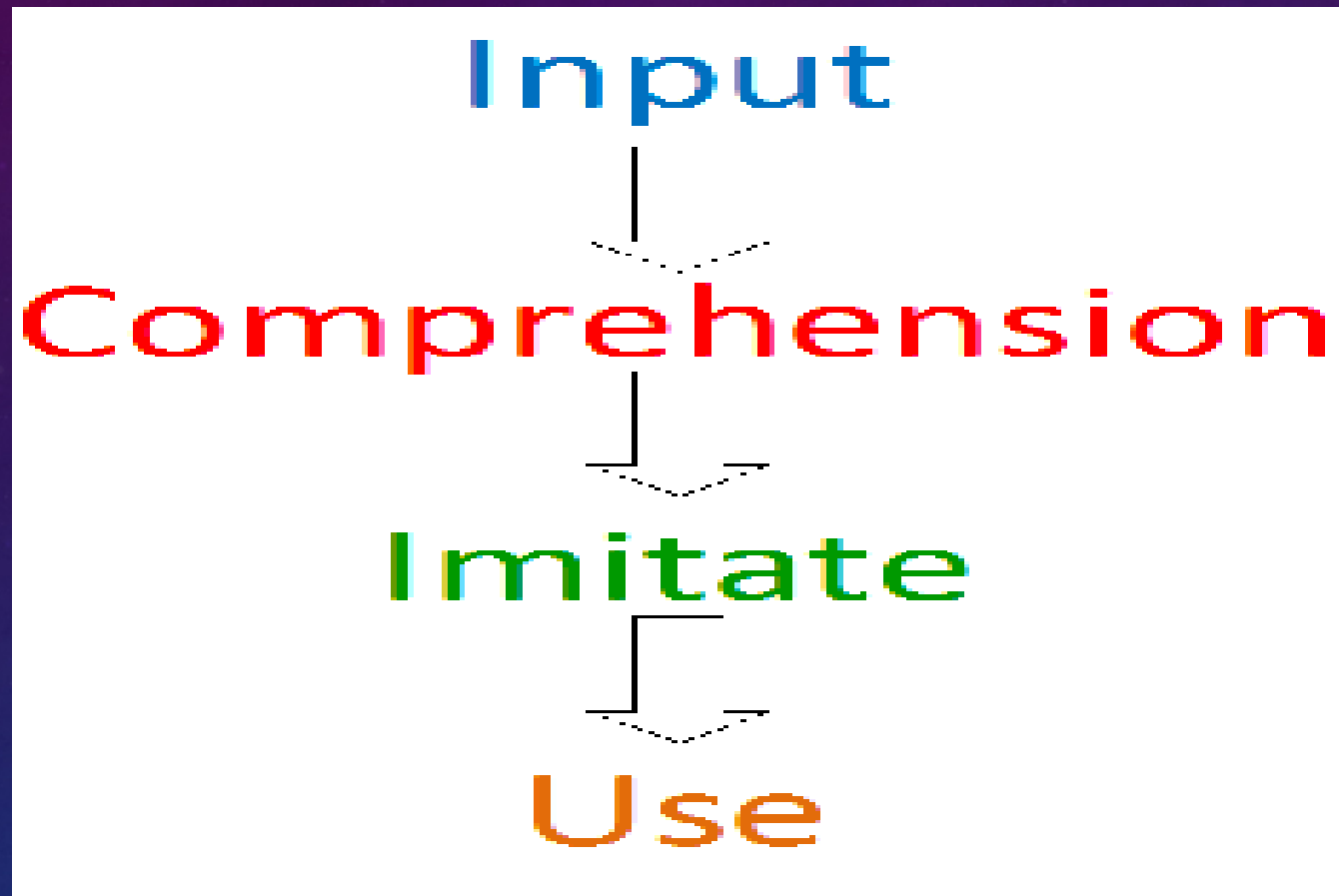
- [Hearing First | Why LSL Matters](https://hearingfirst.org/en/lsl/why-lsl-matters) (Dr. Carol Flexer, AuD)
(<https://hearingfirst.org/en/lsl/why-lsl-matters>)

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



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

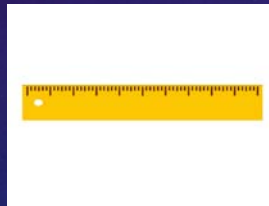
- Yardstick Level



[within 3 feet of child's height]

- Talk in Quiet, Not noise

- Yardstick Distance



[within 3 feet of child]

- **Self and Parallel Talk**

- **Expansion**

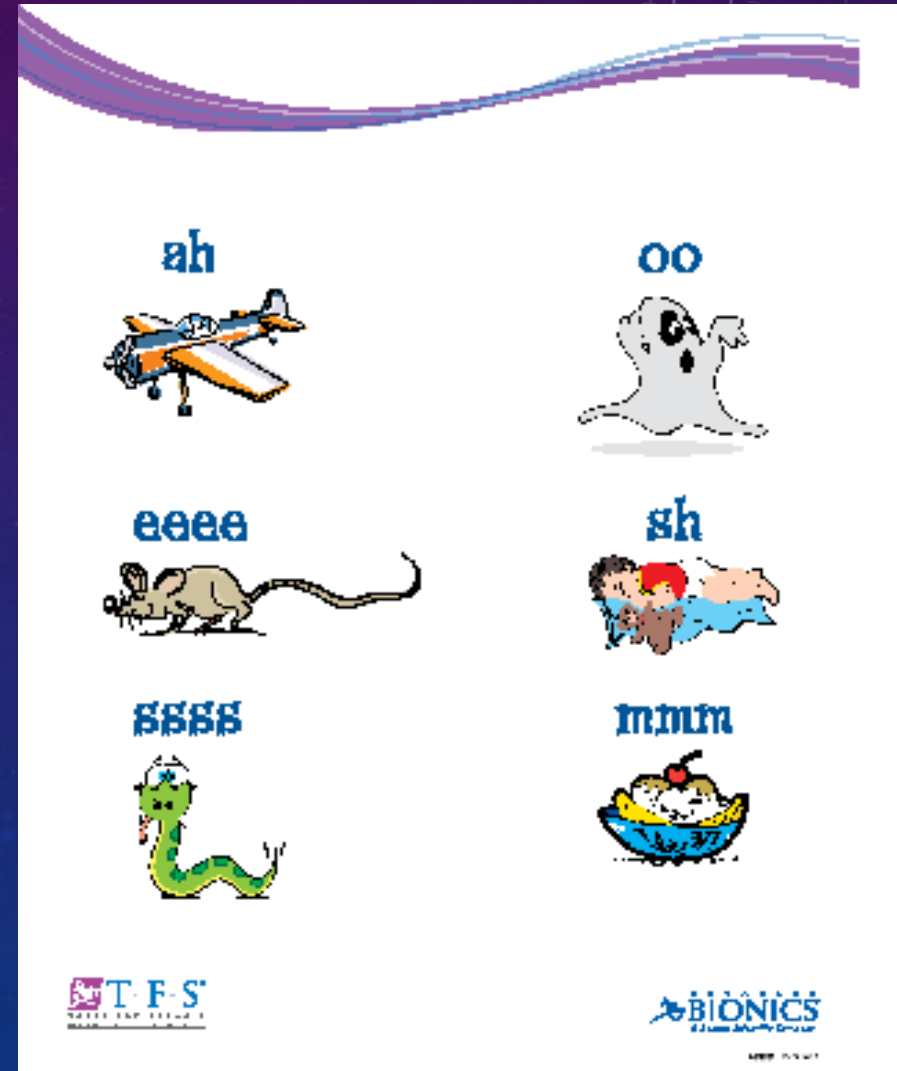
- Highlighting

- “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

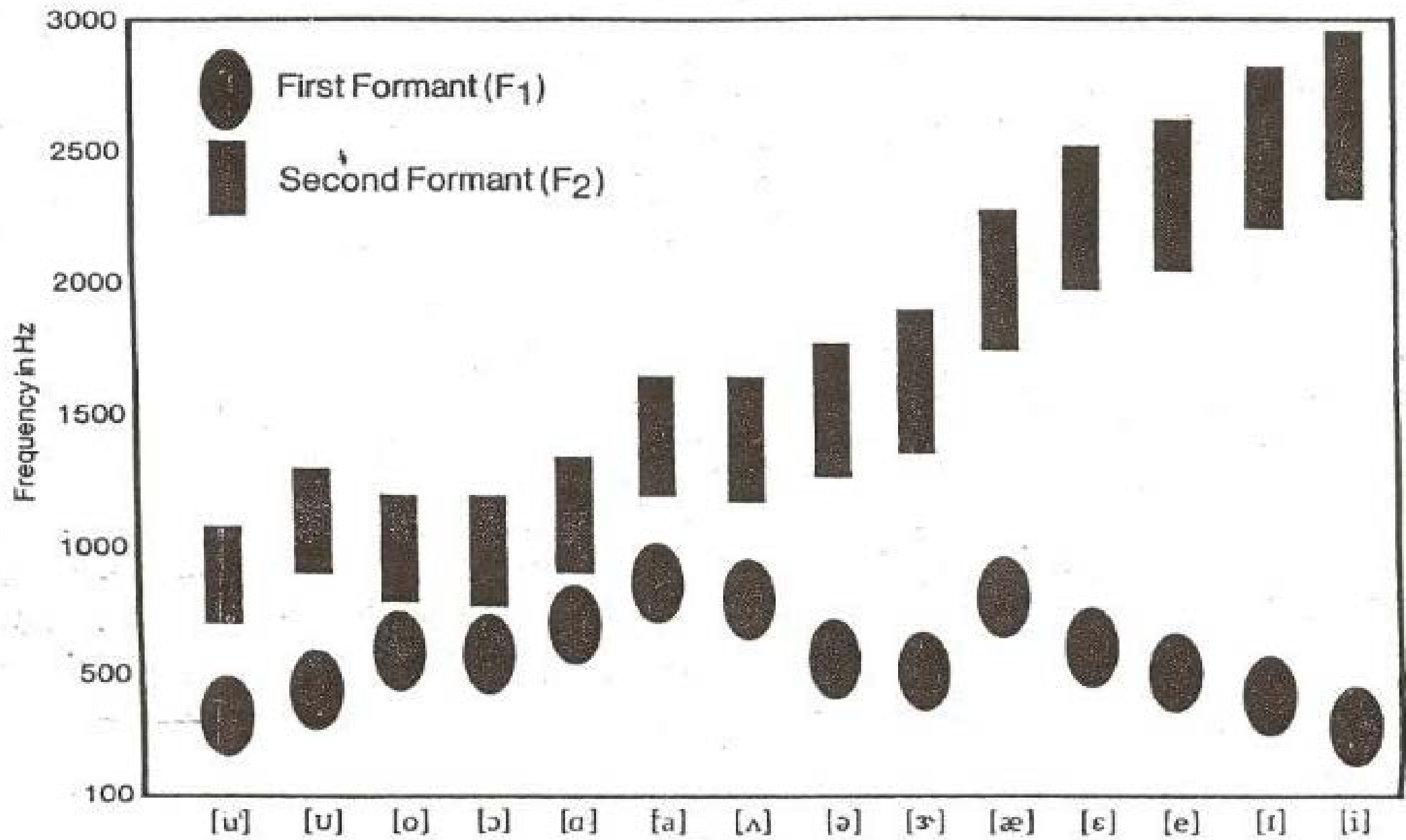
Auditory processing of connected speech

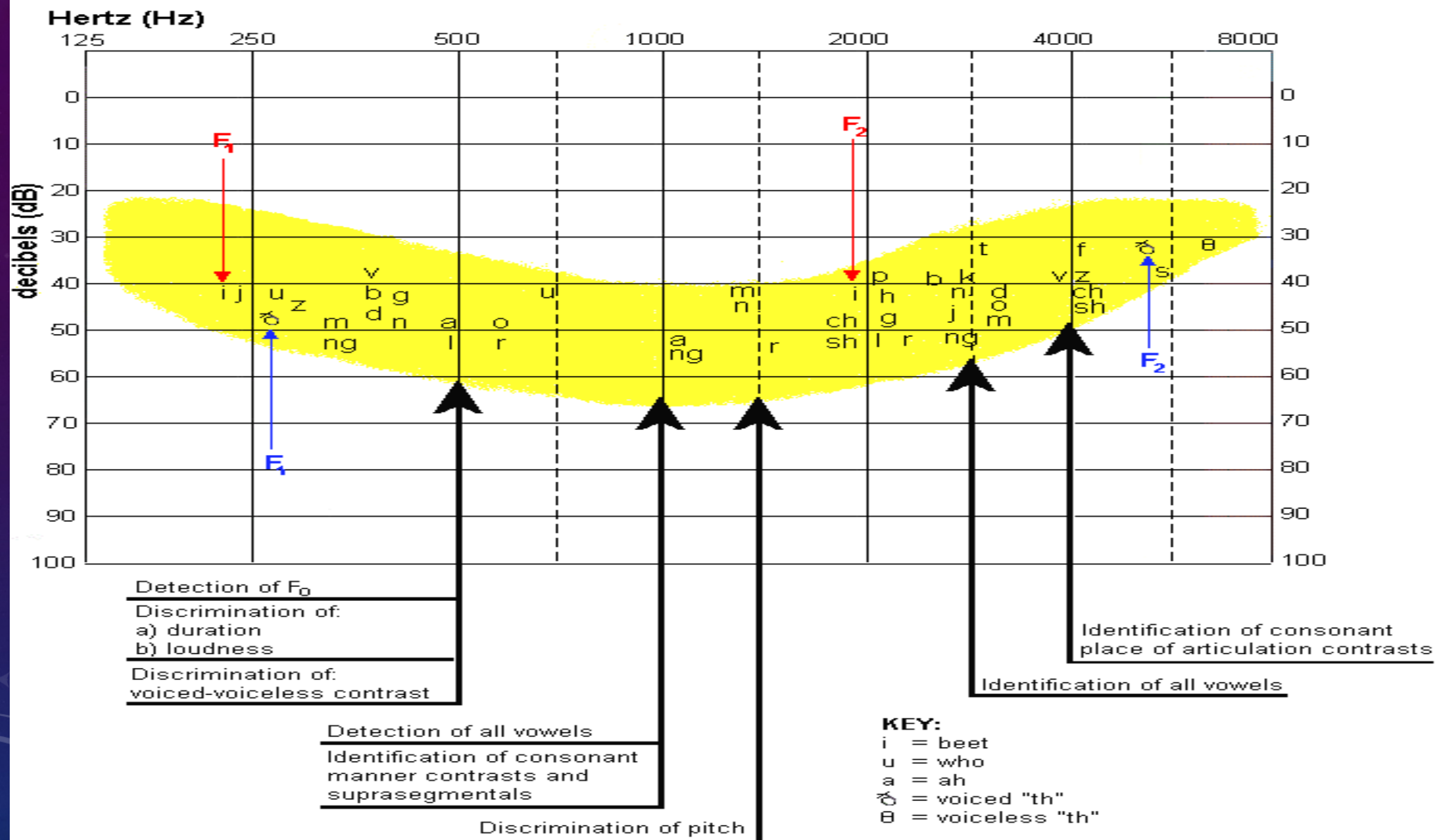
Sentence

Auditory Memory

Word

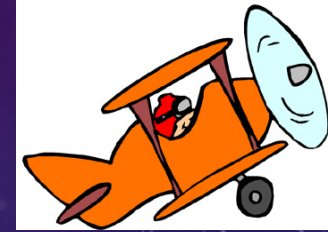
Discrimination in whole words





Suprasegmental Features

- Duration
 - Syllables
 - Rhythmic patterns
- Loudness
 - Shakers/noise makers
 - Voice variations
- Pitch
 - High to low
 - Low to high
 - Varying



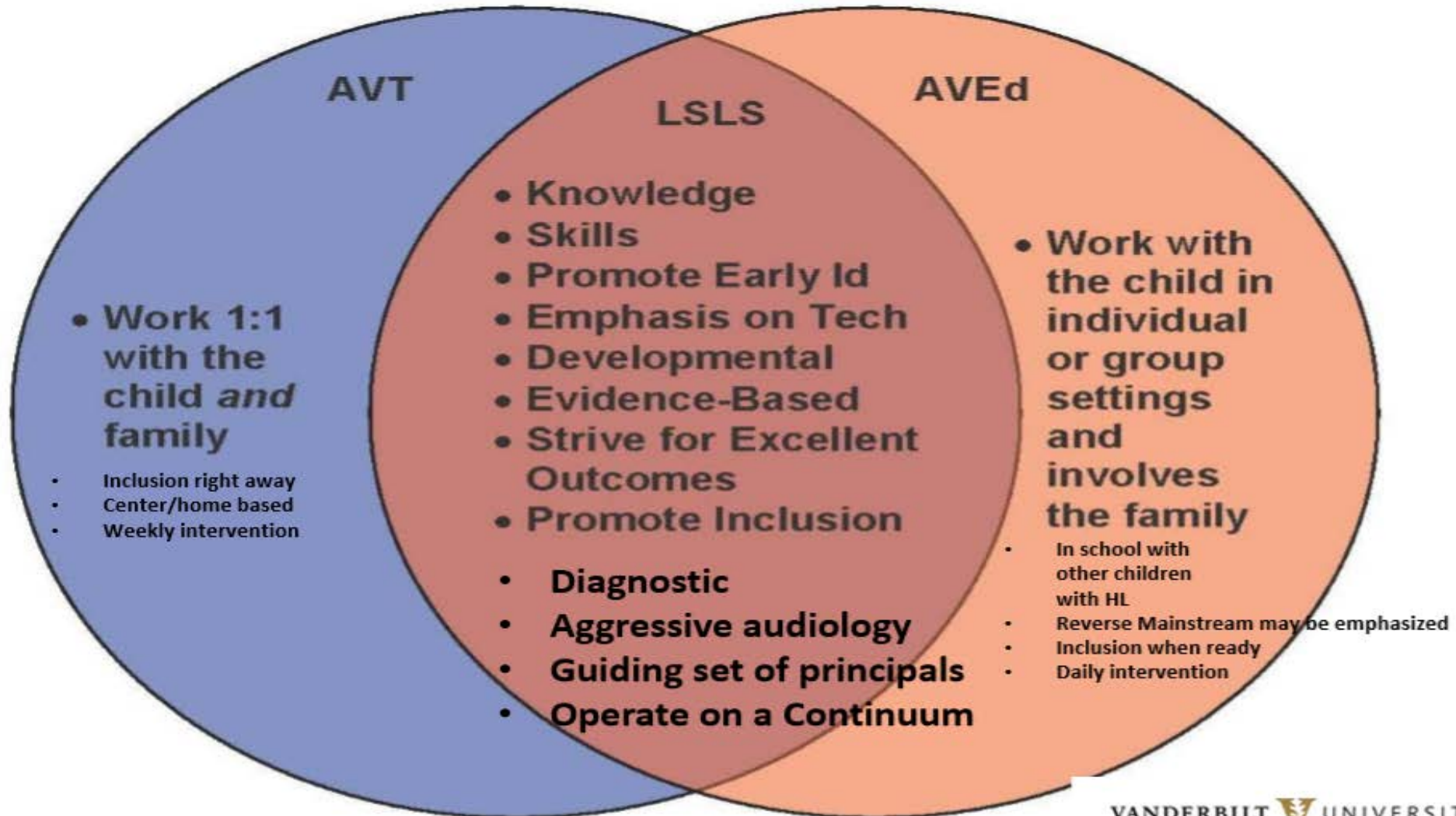
BENEFITS OF SPEECH BABBLE

- 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

The background is a gradient of dark blue and purple, speckled with small white dots resembling a starry sky. On the right side, there are faint, light blue geometric diagrams. One is a large circular protractor-like scale with degree markings from 0 to 210 and an arrow pointing upwards. Below it is a smaller circular diagram with concentric circles and an arrow. In the bottom left corner, there is another partial circular diagram with an arrow.

OBTAINING CERTIFICATION IN LISTENING AND SPOKEN LANGUAGE

AVT and AVEd Comparison



AUDITORY-VERBAL CERTIFICATION

www.AGBellAcademy.org

- 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:

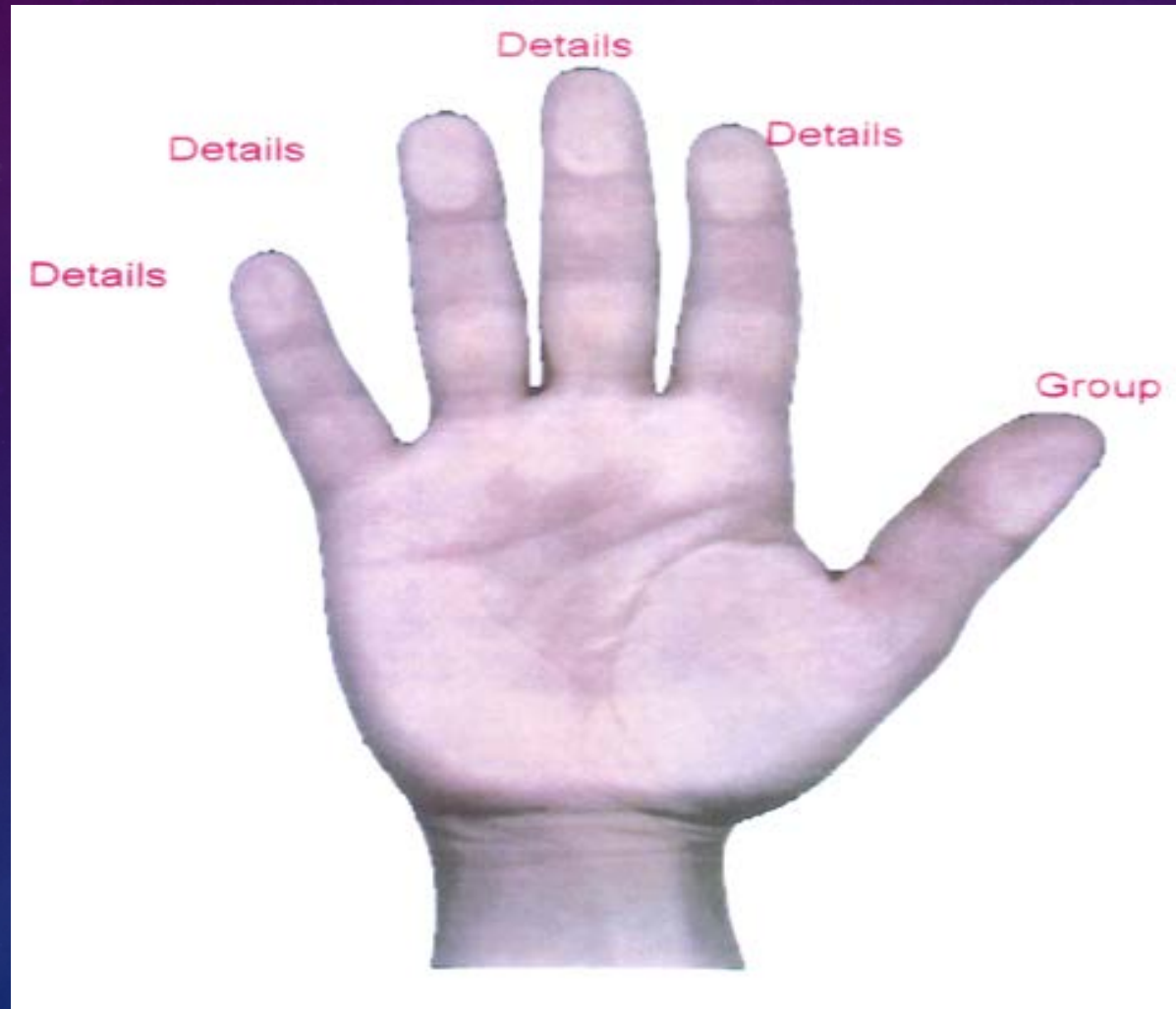
- Hearing and Hearing technology
- Auditory Functioning
- Spoken Language Communication
- Child Development
- Parent Guidance, Education and Support
- Strategies for Listening and Spoken Language Development
- History, Philosophy and Professional Issues
- Education
- Emergent Literacy

UPDATED ELEVEN CONTENT KNOWLEDGE OUTLINES

(HEARING FIRST-GUIDE FOR LISTENING AND SPOKEN LANGUAGE CONTENT KNOWLEDGE – 5/2017)

1	Hearing Science / Audiology
2	Hearing Technology
3	Auditory Function
4	Speech Communication
5	Language Communication
6	Child Development
7	Parent Guidance, Education and Support
8	Education
9	Emergent Literacy
10	Strategies for Listening and Spoken Language Development
11	Coaching and Mentoring

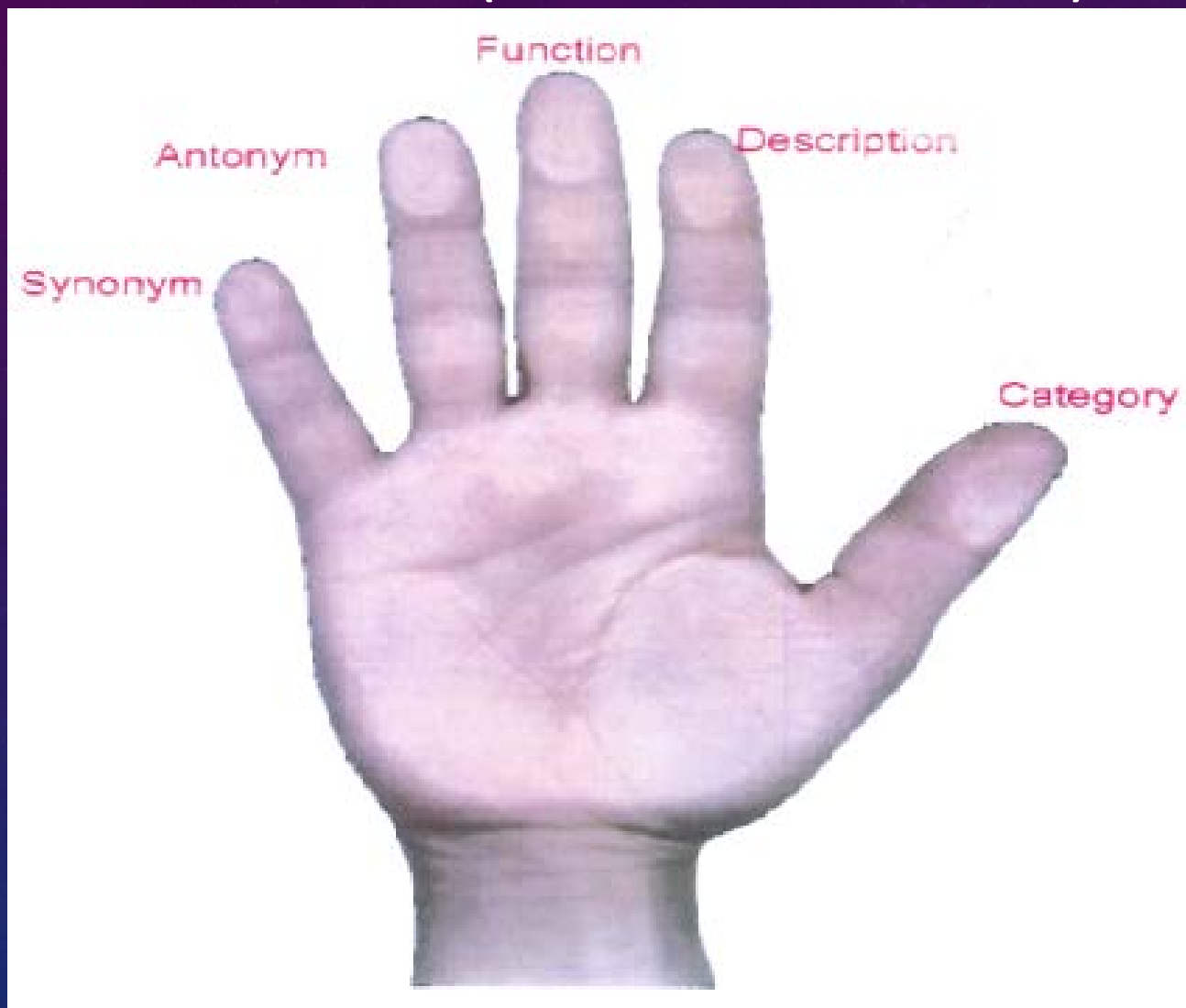
HAND CUE (DEFINE WORDS-1)



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

- American Speech-Language-Hearing Association (ASHA). (2005). "Getting Ready for Reading and Writing." Retrieved February 12, 2010 from <http://www.asha.org/slp/schools/prof-consult/slp-reading-present.htm>
- Hearing Journey (2008). The Ling Six Sound Check. Retrieved September 14, 2008, from https://www.bionicear.com/UserFiles/File/Ling_Six_Sound_Check_k-6.pdf
- Aural Habilitation : The Foundations of Verbal Learning in Hearing-Impaired Children Ling, Daniel.
- Robertson, Lyn (2009). *Literacy and Deafness Listening and Spoken Language*. San Diego, CA: Plural Publishing.

Eterbrooks, S. et. Al. (2008). Emergent Literacy Skills During Early Childhood in Children with Hearing Loss: Strengths and Weakneses. *Volta Review*, 108, 91-114.

Geers, A. & Moog, J. (1989). Factors predictive of the development of literacy in profoundly hearing-impaired adolescents. *Volta Review*, 91(2), 69-86.

Trelease, J. (2019). *The Read Aloud Handbook eighth Edition*. New York: Penquin Books.