Effects of Hearing Loss on Child Development

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Alisa Demico, M.S., CCC-SLP, LSLS, Cert. AVT
Presentation Outline

• Provide an introduction to Clarke Schools for Hearing and Speech
• Provide an overview of Florida’s Early Intervention Program
• Review normal hearing development
• Discuss the impacts of hearing loss on child development
• Importance of minimizing impacts of hearing loss on child development
• Detail a “Catch-Up” plan and ways to enhance auditory learning
• Share intervention strategies used to promote auditory memory and listening skills
Clarke Schools for Hearing and Speech
Auditory/Oral Intervention and Education

• Auditory/Oral Education is an approach based on the principle that most deaf and hard of hearing children can be taught to listen and speak with appropriate technology, early intervention and consistent training to develop their hearing potential.
Clarke’s Auditory/Oral Program

The state of Florida defines an auditory/oral program as a program in which there is staff certified as Listening and Spoken Language Specialists.
Clarke Schools-Past and Present

• Clarke provides children who are deaf and hard of hearing with the listening, learning and spoken language skills they need to succeed.
• Since 1867 Clarke Schools has been committed to listening and spoken language for deaf children.
• Annually, more than 800 children and their families benefit from programs and services at our five campus locations: Boston, Jacksonville, New York City, Northampton and Philadelphia.
Clarke Jacksonville-Who We Serve

• Clarke opened its doors in the winter of 1996
• The first preschool class opened the fall of 1997.
• The first kindergarten class started in the fall of 1998.
• Today we focus on early intervention-birth to three- and preschool and early education with the goal for a child to enter a mainstream classroom no later than age seven.
Our Programs

• Infant/Toddler
• Preschool
• VPK/SIS
• Kindergarten/First grade
• Speech and Language Therapy
• Mainstream Services
• Distance Services
• Parent Education
• Professional Development
Professional Development

- Train speech and language pathologists
- Train teachers of the deaf and hard of hearing from across the country
- Participate in national and international conferences presenting courses for professionals for continuing education
Eligibility For Clarke Services

• Eligibility for birth to three is determined through the Early Steps program or through private referral based on identification of a hearing loss or deafness.

• Eligibility for children three and older is determined by their school district.
Costs for Families

There is no out-of-pocket cost for a family.
Currently our staff serves

- 33 children on our Mandarin Campus
- More than 20 babies through Early Intervention
- 10 outpatients with Auditory/Verbal or Speech Therapy or Mainstream Services.
Florida Newborn Hearing Screening and Early Steps Program
Frequency of Hearing Loss

Hearing loss is the most frequently occurring birth anomaly with 3 children identified for every 1000 live births.
97% of babies are now screened for hearing loss each year in Florida
Early Intervention

• Children identified with hearing loss at birth are being fitted with amplification between 3-6 months.

• Children with profound hearing loss are receiving cochlear implants around 12 months of age.
Early Intervention

– More than 90% of deaf children are born to hearing parents (CDC, 2009)
– When fully informed of their options, 85% of parents want their children to listen and talk (Brown, 2006)
Children with hearing loss identified at birth are receiving early intervention services before 6 months of age. With appropriate early intervention services, children are not demonstrating significant delays in auditory, speech, and language skills.
Newborn Hearing Screening in Florida: Initial Referral

Newborns failing two or more hearing screening tests will be referred to an audiologist.
Referral to Service Providers

A referral to Early Intervention within 2 days of confirmation of a child’s hearing loss
Loss to Follow-Up

In Florida, approximately 26% of children identified as deaf or hard of hearing do not enroll in Early Steps.
Loss to Follow-Up

In Florida, approximately 8% of children who are referred from newborn hearing screening are not being retested.
Loss to Follow-Up

- Eight hundred babies referred from newborn screening are never scheduled for follow-up testing.
- Many more young children are misdiagnosed or provided with intervention strategies that do not support the outcomes parents have chosen.
Loss to Follow-Up

In Florida, the Center for Disease Control reports that 40%-50% of children identified are not making it into the 1-3-6 target for Early Intervention.
Early Intervention News in Florida

• FL Statute 383.146
  – At the time of diagnosis, the audiologist or audiologist designee will ask the parent or legal guardian he or she would like to provide contact information to receive direct communication from qualified Early Steps providers that offer early services and specialize in serving children with hearing loss.
The Role of Hearing in Speech and Language Development
Importance of Hearing

• Hearing is necessary for the proper development of speech and language.
• Language is an act of communication that allows people to exchange ideas and emotions
Normal Hearing Development

- **Prenatal Stimulation**
  - The human fetus has rudimentary hearing from 20 weeks of gestation.
  - Babies begin to hear in the last few months of pregnancy.
  - A birth an infant enters with world with a well equipped hearing system.
The Listening Year

• The first year, a hearing baby listens for 10 waking hours a day, 365 days a year which equals 3,650 listening hours before trying to communicate with words

– Talk Around the Clock
The First Three Months

• Auditory Awareness and Detection
  – A visual response to the presence and absence of sound
  – Occurs in hearing children at 0-2 months of age
  – Responses include a change in eye gaze, eye blinks, a change in rhythm while sucking a pacifier, or a head turn

(Pollack 1985)
Olivia

• **Hearing Loss**
  – Moderate to Severe diagnosed at birth
  – Hearing aids at 4 weeks

• **Chronological Age**
  – 4 months

• **Hearing Age**
  – 3 months
Amelia

- Failed Newborn Hearing Screening
- Chronological Age
  - 9 months
- Hearing Age
  - 4 months
- Degree of Hearing Loss
  - Moderate to severe
The First Three Months

• Distance Hearing
  – Responses to sound with added distance
  – 4 to 6 ft.
  – Distance hearing occurs between 2-3 months of age

(Pollack 1985)
Developmental Auditory Skills

- **Auditory Discrimination**
  - Auditory discrimination is the ability to tell the difference between 2 different sounds
  - Auditory discrimination occurs between 3-5 months of age

(Pollack 1985)
Three Through Six Months

• The Auditory Feedback
  – The ability for the baby to monitor his own sound productions
  – Auditory Feedback occurs between 3-5 months of age and corresponds with vocalizing, cooing and babbling a limited number of phonemes

(Pollack 1985)
Six Through Nine Months

• Localization and Babbling
  – Localization is the ability to locate a sound source by turning
  – This corresponds with the motor skill of sitting
  – Words are often associated with the sounds they make

(Pollack 1985)
Nine Through Twelve Months

- Auditory Memory and Sequencing
  - These skills help a baby store and recall images of the sounds, words they hear and the correct sequence of vocal patterns hearing through vocalizations
  - Auditory Memory develops between 9-12 months and sequencing between 12-18 months

(Pollack 1985)
Amelia H.

• Hearing Loss
  – Profound hearing loss diagnosed at birth
  – Cochlear implant at 13 months

• Chronological Age
  – 1 year, 11 months

• Hearing Age
  – 9 months
Developmental Auditory Skills

• In summary:
  – In one full year, a baby has developed the ability to listen, attach meaning to sound and process language

(Pollack 1985)
Developmental Auditory Skills

• Auditory Processing
  – Hearing Age: 18-48 months

• Auditory Understanding
  – Hearing Age: 48-72 months
Amelia

• Chronological Age
  – 4 years, 3 months

• Educational Placement
  – Toddler and Preschool Program at Clarke Schools for Hearing and Speech
  – Mainstreamed with her typically hearing peers with no support services
The Impact of Hearing Loss on Child Development
Impacts of Hearing Loss on Development

• Hearing loss affects children in the following areas:
  – Speech and language delays
  – Delays in academic achievement
  – Social emotional development

American Speech Language Hearing Association
Effects of Hearing Loss

• Speech Development
  – May have difficulty hearing quiet sounds such as /k, p, s, “sh”, f, t, k/
  – Poor speech intelligibility
  – Poor self monitoring of their own speech patterns

American Speech Language Hearing Association
Effects of Hearing Loss

• Vocabulary Development
  – Develops more slowly in children with hearing loss
  – Are concrete learners of vocabulary
  – Gaps widen and kids will not catch up without intervention

American Speech Language Hearing Association
Effects of Hearing Loss

• Language development
  – May comprehend and produce shorter sentences missing many morphological markers
  – Have difficulty comprehending and writing more complex sentences (relative clauses, passive voice)

American Speech Language Hearing Association
Affects of Hearing Loss

• Social-Emotional Development
  – Social Functioning: Children with severe to profound hearing losses often report feeling isolated, without friends, and unhappy in school, particularly when their socialization with other children with hearing loss is limited.
  – These social problems appear to be more frequent in children with a mild or moderate hearing losses than in those with a severe to profound loss.

-ASHA
Effects of Hearing Loss

• Academic Achievement
  – Will have difficulties will all areas of academic development especially reading and math
  – Children with mild to moderate hearing losses, on average, achieve one to four grade levels lower than their peers with normal hearing, unless appropriate management occurs

American Speech Language Hearing Association
Effects of Hearing Loss

• Academic Achievement
  – Children with severe to profound hearing loss usually achieve skills no higher than the third- or fourth-grade level, if appropriate educational intervention does not occur early.
  – Gaps between hearing children and children with hearing loss widens as they progress through school
  – Achievement depends on quality, quantity and timing of support services

American Speech Language Hearing Association
Minimizing the Impact of Hearing Loss on Child Development
Minimizing Impact of Hearing Loss on Child Development

• Early Intervention is the key to minimizing the effects of hearing loss on child development
Minimizing the Impact of Hearing Loss on Child Development

- Research shows that children identified with hearing loss who begin services before 6 months old develop spoken language on par with their hearing peers.

American Speech Language Hearing Association
Minimizing the Impact of Hearing Loss on Child Development

• Children with hearing loss who being early intervention earlier have significantly better developmental outcomes than similar children who begin intervention later.

  – (Holt & Svirsky, 2008; Moeller, 2000; Nicholas & Geers, 2006)
Minimizing the Impact of Hearing Loss on Child Development

• Most children with hearing loss who receive appropriate services from trained staff are able to progress at age-appropriate rates

- (Geers et al, 2009)
Early Intervention
Components of Early Intervention

• To provide early intervention services to children with hearing loss following 1-3-6 EDHI guidelines
• To provide parent support and guidance on hearing loss and intervention strategies
• To help children “Catch-up” to their hearing peers
• To help children follow a pattern of normal development to “Keep-up” to their hearing peers
The Early Intervention Team

• The Early Intervention Team should be centered around the desired outcomes of the family for their child.

• All families who have a child with hearing loss should have an individual on their team with knowledge, experience, and expertise with children with hearing loss in the communication method chosen by the family. (JCIH 2013)
The Early Intervention Team

- The Family
- Audiologist
- Early Steps-SHINE Coordinator
- Parent Infant Advisor
- Teachers of the Deaf-ITDS
- Speech Language Pathologist
- Auditory Verbal Therapist/Educator
- Other Health Care professionals (OT, PT)
The Natural Environment

• The Natural Environment is not a “place” but is actually the “process” that children learn through participating in their everyday activities and meaningful experiences with their family and caregivers.

• This model uses daily routines as meaningful and functional opportunities.

(Juliann Woods, ASHA 2008)
Center Based Services

• Provides children and parents a structured setting to learn and practice auditory, speech and language skills
• Allows children and parents to interact and socialize with other children with hearing loss
Goal Setting and Intervention in Children Birth to Three
Goal Setting

• **Assessment**
  – Listening
  – Speech
  – Vocabulary
  – Language
Goal Setting

• Goals need to be based on developmental:
  – auditory skills
  – speech skills
  – vocabulary skills
  – language skills
  – Cognitive skills
Intervention

• The key to early intervention is establishing:
  – Sound Object Association
  – Identifying familiar songs through listening
  – Waiting
  – Fine motor imitation
  – Speech imitation on demand
Intervention

• Step 1: Use of Learning to Listen Sounds
  – Airplane Ahh
  – Spider Eeee
  – Ice cream Mmm
  – Elephant Ooo
  – Snake Ssss
  – Baby “Ssh”
Intervention

• Step 2: Add consonants, vowels, diphthongs and durational patterns
  – Hammer and snake: Ow
  – Train: Oo-oo
  – Duck: Quack-quack
  – Ladder: up-up
  – Slide: up-up, wee
  – Bus: bu-bu
  – Boat: p-p-p
  – Shoes: walk-walk
Intervention

- Step 3: A variety of consonant and vowel combinations
  - /b/
    - ghost  boo
    - Sheep  baa
    - Car  beep-beep
Intervention

• Step 3: A variety of consonant and vowel combinations

- /m/
  Cow    Moo
  Goat   Maa-maa

- /h/
  Clown  ha-ha
  Owl    hoo-hoo
  Witch  hee-hee
Intervention

• Speech Babble
  – Develops auditory feedback loop and speech imitation
P.L.A.Y

• Pick play-based and daily routines
• Language is built through repetition and play
• Auditory learning should be integrated in all activities
• Yields results!

Alisa Demico, M.S., CCC-SLP, LSLS, Cert. AVT
Pick Play-Based and Daily Routines

• Play based routines
  – Blocks
  – Bubbles
  – Cars
  – Play dough
  – Balls
  – Simple games
  – Household objects

• Daily Routines
  – Meal time
  – Snack time
  – Diaper changes
  – Bath time
  – Bed time
  – Grocery shopping
  – Going to the park
Language is Built Through Repetition and Play

- Pick “power words”
- Think about what language to use with each toy
- Provide your child the same language during play exchanges
- Use natural phrases
- Pause and give your child processing time
- Give your child the opportunity to “talk”
Auditory Learning Should be Integrated in all Activities

• The first year, a hearing baby listens for 10 waking hours a day, 365 days a year which equals 3,650 listening hours before trying to communicate with words.

(Talk Around the Clock)
Auditory Learning Should be Integrated in all Activities

- Follow the normal pattern of hearing development
- Talk, read, sing!
- Suprasegmentals
  - Duration
  - Intensity
  - Pitch
- Use motherese
- Acoustic highlighting
- Check for auditory comprehension
  - Words
  - Simple phrases
Yields Results

- Parents become the facilitators of listening and spoken language in all settings.
- Parents become accurate reporters of their child’s auditory, speech and language skills.
- Children can “keep-up” not “catch-up” to their peers.
Participants In Action

• Pick play-based and daily routines
• Language is built through repetition and play
• Auditory learning should be integrated in all activities
• Yields results!
Academic Success in Children with Hearing Loss
Predictors of Academic Success

• “The development of oral language is crucial to a child’s literacy development, including listening, speaking, reading and writing.” Kirkland and Patterson (2005, pg. 3)
Keys to Academic Success

• Listening skills

• Oral Language skills
  – Intelligible speech
  – Age Appropriate vocabulary skills
  – Age Appropriate language skills
  – Phonemic awareness skills
Hearing vs. Listening

- Hearing is simply the act of perceiving sound by the ear
- Listening requires that your brain processes meaning from words and sentences
- Listening leads to learning
Importance of Listening

• Listening is the language skill that develops the earliest and is practiced most frequently
• In music and literature, listening is the major activity of young children

(Palmer 2004; Roskos, Christie, & Richgels 2003)
Importance of Listening

• Listening is the language skill that children use the most but is taught the least in the classroom (Smith 2003)
• Listening has been referred to as the forgotten art (Thompkins 2005).
Importance of Listening

• In basic education, only 8% of instructional time is devoted to teaching listening skills (Cramond 1998)

• Listening comprehension is considered one of the skills most predictive of overall long-term school success (Brigman, Lane, & Switzer 2001)
Importance of Listening

• Studies found that problems with listening comprehension predict difficulties with reading later on for typically developing children and children with special needs (Heath & Hogben 2004)
Predictors of Academic Success

• Language skills of the child with hearing loss need to be within the range exhibited by other class mates in the mainstream. (Maxon, 1992)

• “Unless the language levels of deaf children are within 1-2 years of those in the mainstream, they are virtually cut off from the entire verbal input process that is basic to educational experiences”. (Robbins, 2009, p.298)
Ready or Not?

• Birth to age 5 is the key to developing oral speech and language skills
• By age 5 children are expected to become language experts to the form of language

-Cynthia Robinson
Preparing for Academics

• What vocabulary skills does a typical 5 year old child have?
• What language skills does a typical 5 year old child have?
• What structures are needed to access the curriculum?
Group Activity
Language and Literacy Planning
Catching Up
Developing a Plan
Developing a “Catch-Up Plan”

"You've got to know where you are to know where you are going"

Steps to Developing a “Catch Up Plan”

• Step #1:
  – Assessment to identify deficits
    Auditory skills
    Speech skills
    Vocabulary skills
    Language skills
Steps to Developing a “Catch Up Plan”

• Step # 2: Increase direct instructional service time
  – Direct services should be proportionate to the level of deficiency
Steps to Developing a “Catch Up Plan”

• Step #3: Teach to the deficits
  – Intervention should be planned around teaching to the deficits
  – Children are set up for failure when they are pressured to “run faster”

Catch-up Growth for Those Who Are Behind, by Lynn Fielding, Nancy Kerr, and Paul Rosier
Steps to Developing a “Catch Up Plan”

• Step #4: Retest
  – Informally retest skills to make sure the skills have been learned
  – Formally retest every 6 months to ensure that “catch up” growth is occurring
Classroom Support
Classroom Support

- Seating
- Auditory Distractions
- Enhance speech-reading conditions (no gum chewing, avoid hands in front of your face)
- Repeat/Rephrase
- Use of a Tutor
- Obtain child’s attention before speaking
- Check for understanding
- Noise Reduction

(Martin, Williams and Gassen, 2011)
Classroom Support

Study by The University of South Dakota (2011) reported that:

• 5 Most implemented accommodations and modifications
  --Seating
  --Visual support
  --Repeating
  --Checking for understanding (following directions)
  --Checking for understanding (communication)
Classroom Support

Study by The University of South Dakota (2011) reported that:

- 5 least implemented accommodations and modifications:
  --special lighting
  --reduce quantity of tests,
  --counseling,
  --room design
  --tutor
Classroom Support

- Study by The University of South Dakota (2011) suggested:
  1) Avoid giving teachers checklists without further explanation about how to implement them.
  2) Involve IEP members when selecting and implementing modifications
  3) Recommendations should be prioritized for each child
  4) Frequent follow-up
Classroom Support

• Use of visual supplements

• Note taker/ Buddy System

• Pre-tutor Vocabulary

» (Martin, Williams and Gassen, 2011)
Additional Classroom Support

• Create a “secret signal” so that the child can indicate when they do not understand

• Write keywords, due dates and announcements on the board

• Repeat student answers to teacher directed questions
  » (Archer & Crosby-Quinatoa, 2009)
Classroom Support

• Group Discussions
  – Call on child by name
  – Rephrase/Repeat what others have said
  – Draw attention to changes in subjects
  – Encourage children to look at speaker

(Archer & Crosby-Quinatoa, 2009)
Therapy Techniques (Cont.)

- Academics
- Seating
- FM System
- Ensure that the teacher is:
  --- comfortable with the FM system and can troubleshoot (e.g., batteries)
  --- knowledgeable about hearing aids
    Humpty Dumpty Effect—knows how to put the hearing aids together again once the child tears them apart (Austin & Thomas)
- Changing the Batteries
  Can turn them off and on
Developing an Intervention Plan
Management for Success

Auditory Intervention is critical for success

• The hearing technology provides the hearing sensation and Therapy provides the tools for learning to listen and talk

• The development of oral communication depends upon the individual student’s access to a maximized and consistent auditory signal

(Archer & Crosby-Quinatoa, 2009)
Intervention Strategies

• Development of auditory memory skills through critical element activities
• Develop a good listening posture
• Develop an auditory feedback loop
• Present listening first
• Use auditory tracking to improve listening
• The “Circle of Listening”
Definition of Auditory Memory

• Remembering what one is hearing to perform cognitive functions
• Short term and long term memory are needed to attach meaning to sound and must be developed to remember the sequence of sounds for understanding words, phrases, sentences and stories.
Auditory Memory

- Auditory memory and auditory integration are critical to the reception and encoding of language skills and learning to follow directions.
Auditory Memory

• Success in learning to follow directions and learning language is two fold:
  – The child’s ability to remember critical elements in sequential order
  – The child’s ability to associate or integrate sound with other sensory experiences
Auditory Memory

• There appears to be a correlation between the child’s ability to be successful in remembering single items in sequence and their ability to follow directions.
Auditory Memory

• Always include in your lessons and “Auditory sequential memory activity” where you ask the child to remember an object that is in their receptive language vocabulary. This may be one item, two items, three items, four items, etc.
Critical Elements

• Critical elements are pieces of information, presented auditorally, that the child must hold in their working memory.
Where to Start?

– Assess the child’s functional vocabulary
– Determine if the child can identify items by their label and/or function
– Use familiar vocabulary including a variety of nouns, verbs, adjectives and prepositions
Where to Start?

• **One Critical Element (Single Item Memory):**
  • Find out where the child is in their auditory memory skills at any age and stage.
    – Is the child able to remember items based on their sound-object association.
    – If they can’t this is where you start.
Memory: One Critical Element

Example: “I want the bird”, “Show me the duck”, “Blow”, “push”
Memory: Two Critical Elements

– Unfamiliar vocabulary can be mistaken for a child not having “auditory memory”.
– There are a variety of word combinations that child must master in to move to the next level.
– Children must learn to process and produce elements in the order that they hear them.
Memory: Two Critical Elements

Noun + Noun in sequence

   Examples: “I want the bird and shoe”, “Put away mommy and daddy”

Noun + Verb

   Examples: “Make mommy sit down”. “Make daddy eat”, “Make mommy walk”

Verb + Noun

   Examples: “Wash the baby”, “Push the car”, “blow the bubbles”, “Cut the apple”, “Open the box”

Adjective + Noun

   Examples: I want the _____ “Big baby”, “Yellow boat”, “little bear”
Memory: Two Critical Elements

Preposition + Noun
   Example: on table

Negative + Noun
   Example: not ball

Negative + Verb
   Example: not throw

Who + Verb
   Example: Who eat?

Where + Noun
   Example: where daddy?

Negative + Adjective
   Example: not red
Memory: 3 Critical Elements

- Noun + Noun + Noun (ex. “I want the hat, ball and shoes” “Show me the bird, ball and ice cream”)
- Noun + Noun + Verb (ex. “Make mommy and daddy sit down”)
- Noun + Verb + Noun (ex. “Make mommy wash the baby”)
- Noun + Preposition + Noun (ex. Ball on table)
- Noun + Copula + Noun (ex. “Mommy is (the) doctor”).
Memory: 3 Critical Elements

– Preposition + Adjective + Noun (ex. “on little table”)
– Adjective + Adjective + Noun (ex. “I want the big, blue bear”)
– Noun + Negative + Adjective (ex. “ball not blue”)
– Noun + conjunction + Noun (ex. “boy and girl”)
– Verb + Conjunction + Noun (ex. “run and jump”)

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Memory: 4 Critical Elements

- Noun + Noun + Noun + Noun (e.g., “I want the ball, shoe, airplane and hat”)
- Verb + Noun + Verb + Noun (e.g., “Cut the apple and eat the cookie”)
- Noun + Verb + Noun + Verb (e.g., “Make the dog walk and the bunny hop”)
- Adjective + Noun + Adjective + Noun (e.g., “Give me the blue boat and the yellow bus”)
- Noun + Prepositional Phrase + Noun + Prepositional Phrase (e.g., “Put mommy on the chair and daddy in the car”)
What’s So Critical?

• Processing critical elements helps children systematically learn to process and produce language.
• Difficulties with the ability to process critical elements may be red flags for processing disorders or other issues.
• Use familiar vocabulary familiar or difficulties could be mistaken as “memory issues.”
How Many Critical Elements?

- Put your backpack in your cubby.
- Write your name on the upper right hand corner of the paper.
- Cut the paper.
- Open the book to page 32 and read the first chapter.
- Cut out the purple triangle and yellow circle.
- Walk to the table and sit down on the chair.
How Many Critical Elements?

• Put your backpack in your cubby. 3 elements
• Write your name on the upper right hand corner of the paper. 6 elements
• Cut the paper. 2 elements
• Open the book to page 32 and read the first chapter. 5 elements
• Cut out the purple triangle and yellow circle. 5 elements
• Walk to the table and sit down on the chair. 4 elements
Strategies to Promote Listening

• Develop a good listening posture
• Develop an auditory feedback loop
• Present listening first
• Use auditory tracking to improve listening
Developing a Listening Posture

• Listening posture develops with consistency over time
• Listening and attention are intertwined and you must build attention before you build listening
• Cue kids to “listen” rather than “look”
Auditory Feedback Loop

• A tool that is developed to help children develop and monitor their speech production skills
• It is a great tool to help improve articulation skills
• It is presented through listening first
Present Listening First

• Present listening first before using written support
• Is a great tool in teaching new language structures
Auditory Tracking

• Auditory Tracking is an essential tool to help a child build auditory memory skills
• It provides the clinician an opportunity to determine how a child processes language
• It provides an opportunity for a child to self-monitor and be held accountable for listening
Circle of Listening

- Circle of Listening

Original auditory stimulus

Get auditory attention and repeat original

Repeat original with highlighting

Remake original into simpler form

Couple simple form with original, repeat original and continue conversation

Give a quick visual clue

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Circle of Listening (Cont.)

- Give the child to opportunity to “listen” and wait for their response
- Get the child’s attention and repeat the original message
- Repeat the original message with acoustic highlighting
- Simplify the original message
Circle of Listening (Cont.)

• Pair the simple form with original message
• Repeat the original and continue conversation or
• Give a quick look or visual cue
• Pair the simple form with the original message
• Listen for the child’s production to reinforce listening skills and complete the “loop.”
• Repeat the original and continue conversation
Thank You!

THE END

Ademico@clarke schools.org
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