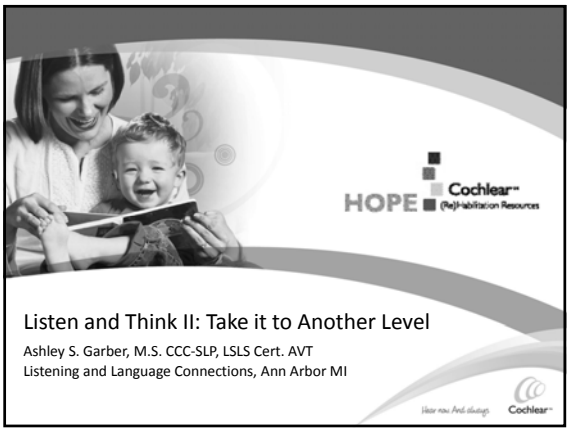

Listen and Think II: Take it to Another Level

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Listening and Language Connections, Ann Arbor MI

Introduction

Cochlear America's Commitment to Educational Outreach

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Our Presenter

HOPE Cochlear™

Ashley S. Garber, MS CCC-SLP, LSLS Cert. AVT

–Private practitioner specializing in auditory verbal therapy and aural habilitation services

–Fifteen years of experience with children and adults with hearing-impairment and cochlear implants in a variety of settings

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Agenda

- Thinking and Listening?
- Cognitive development frameworks
  - Piaget
  - Bloom's Taxonomy
- Thinking strategies
- Thinking activities for Older Learners
- Discussion and Idea Sharing

- "An individual learns to use and understand in relation to (or as a representation of) the ideas or mental concepts that have been formed through experience"

Bloom and Lahey (1978)

- In this context "thinking and listening" is all about helping the child to make connections
  - At an early age, these are connections between what a child is hearing and what he is doing, seeing, touching. We stimulate language and cognition concurrently
  - As language grows, these are connections between what he is hearing and how it relates to the greater world around him and his experience. We use language as the bridge to higher level thinking skills

Find archived session Listen and Think I for discussion of younger years

- Contemporary research has concluded that with adequate auditory access accompanied by sufficient linguistic experience, children who are deaf or hard of hearing can be expected to develop along normal trajectories.
- This includes the interaction of linguistic and cognitive development

Ling, 2002; L. Kretschmer & R. Kretschemer, 2001; Uchanski & Geers, 2003).

Auditory Learning

- The term "auditory training" is often used to refer to services children receive in order to improve their listening abilities with hearing aids or cochlear implants
- Implies a didactic, un-contextualized approach
- We should instead, strive for "Auditory Learning" where a focus on the *connection* between listening, cognition and language raises it above "auditory training"

Piaget's Stages of Cognitive Development

- Sensory Motor Period (0-24months)
- Tertiary Circular Reactions (12-18mo)
- Invention of New Means Through Mental Combination (18-24mo)
- Preoperational Period (2-7years)
  - Preoperational Phase (2-4yrs)
    - Increased use of verbal representation, beginnings of symbolic motor play
  - Intuitive Phase (4-7yrs)
    - Speech more social, less egocentric. Developing grasp of logical concepts in some areas, although still a tendency to focus on one aspect of an object while ignoring others. Perceptions dominate judgments

Piaget's Stages cont.

- Period of Concrete Operations (7-11years)
  - Organized logical thought, ability to perform multiple classification tasks, order objects in a logical sequence
  - Child is capable of concrete problem solving
  - Able to sort unlike objects into logical groups (whereas previously it was on superficial attributes such as color)

Piaget's Stages cont.

- Period of Formal Operations (11-15years)
  - More abstract thought, incorporates principles of formal logic
  - Ability to generate multiple hypotheses and their possible outcomes
  - Thinking less tied to concrete reality
  - Prepositional logic (as-if, if-then) present

Planning Framework

- Jill Duncan describes a four stage "layering system" for lesson planning to facilitate learning in an auditory verbal session
- She advocates integration of "complex linguistic, auditory and cognitive skills" as "the key to using the auditory-verbal methodology with the school-age population"

(Duncan, 2007)

Duncan's Layering System

- Layer One – Linguistic Skill
- Layer Two – Auditory Skills
- Layer Three – Cognitive Skills
  - Bloom's Taxonomy of Cognitive Processes is the suggested framework for considering cognitive approaches
- Layer Four – Psychosocial Skills
  - Application, where possible, of psychosocial parameters such as perspective taking and development of empathy

(Duncan, 2007)

Bloom's Taxonomy

- Also Known As: *Taxonomy for Educational Objectives*
- Considers 3 domains
  - Affective
  - Psychomotor
  - Cognitive

(Bloom, 1956)

Cognitive Domain

- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

} "Higher Order Thinking Skills"

(Bloom, 1956)

Knowledge

Exhibiting familiarity with previously learned materials by recalling facts, terms, basic concepts and answers

- Key words:
  - Tell
  - Define
  - Describe
  - Identify
  - Find
  - Read
  - Sequence
  - State
  - Write
  - Draw

Comprehension

Demonstrating understanding of ideas through organizing, comparing, interpreting, giving descriptions and stating main ideas

- Key words
  - Describe
  - Discuss
  - Explain
  - Give examples
  - Predict
  - Report
  - Restate
  - Summarize

Application

Using new knowledge, solving problems by applying acquired knowledge in a different way

- Key words
  - Assess
  - Choose
  - Determine
  - Predict
  - Prepare
  - Relate
  - Show
  - Use

Analysis

Examining information by identifying motives or causes, Making inferences and finding evidence to support generalizations

- Key words
  - Break down
  - Compare
  - Contrast
  - Discriminate
  - Examine
  - Prioritize
  - Relate
  - Separate

Synthesis

Compiling information in a new way by combining elements or proposing alternative solutions

- Key words
  - Adapt
  - Categorize
  - Develop
  - Generate
  - Incorporate
  - Make up
  - Organize
  - Plan
  - Pretend
  - Rearrange

Evaluation

Making judgments about information, validity of ideas etc based on a set of criteria

- Key words
  - Choose
  - Compare & Contrast
  - Conclude
  - Decide
  - Evaluate
  - Interpret
  - Judge
  - Justify
  - Predict
  - Select

Higher Order Thinking Skills

- There is not yet complete agreement in the field as to whether all 6 levels are hierarchical
- However, Knowledge, Comprehension and Application are considered to be lower level skills that must develop before Analysis, Synthesis and Evaluation

Convergent Thinking

- A problem is at the center of our focus and we pull information and knowledge together to solve it
- Often with convergent thought we are seeking *one best* answer
- Example: multiple choice test questions - we utilize information and knowledge outside of the question to narrow down to the best answer

Divergent Thinking

- One issue is at the center of our focus, but we look for multiple solutions or ideas that have impact upon the central issue
- Example: open ended question

Which Is It?

- "What do you use to unlock a door?"
- "What can you use a key for?"

- "Tell me as many fruits as you can think of?"
- "What kind of food is an apple?"

- Important for us to give children opportunities to use both kinds of thinking

Activities for Older Learners

Convergent/Divergent Thinking: Add-On Activities

- Make lists of supplies needed before playing games, making recipes or going shopping
- Think of the possible places that you could find the supplies that you need
- Consider the various reasons for:
  - A change in schedule
  - A child to be absent from group
  - Vegetables to have found their way into a child's lunchbox

The Same Game

- "The Memory Game with a Spin"
- Publisher: Binary Arts
- Spin the wheel to see which category your matches have to be
  - The same color
  - The same number
  - The same category

Make Your Own Memory

- One step further
- Use a set of cards without matches, laid out as in typical memory game
- Players determine if 2 cards can "go together" based on particular characteristics, and give their reason
- E.g. "I got a moon and a cookie. I think they go together because they are both round"

Runny Babbit

A Billy Sook by Shel Silverstein, 2005

"Way down in the green woods
Where all the animals play,
They do things and they say things
In a different sort of way-
Instead of sayin' "purple hat,"
They all say "hurple pat."
Instead of sayin' "feed the cat,"
They just say "ceed the fat."
So if you say, "Let's bead a rook
That's billy as can se,"
You're talking Runny Babbit talk
Just like mim and he."

Pantomime Projects

- Try pretend play activities without using toys
- Children are immediately challenged to imagine the setting and props that create the scene that you have described
  - A birthday party
  - Hair salon
  - Artist's studio

Thinking Strategies

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Listening and Spoken Language Strategies

- More important than the activities/materials used, are the listening strategies employed
- The basis of the auditory verbal/LSLS approach is to encourage the development of language through listening (Pollack, et al. 1997)
- To maximize language development we know that we must often support a child with hearing loss by providing a contextualized learning environment; where language, listening and cognition are emphasized
- Listening and spoken language strategies are our tools

Auditory First

- In analysis of AV Therapy there is often much discussion of "Auditory Only" approaches
- More important; however, is ensuring that we provide "*Auditory First*" stimulation
- Providing auditory information BEFORE visual support is key is to allowing a child to process/think BEFORE their eyes take over

Wait Time

- A child needs time to process incoming auditory information before it is repeated, altered or expanded
- This time allows the child to perceive the sounds/words/sentences as well as compare to known information, attach to familiar experiences etc.

Modeling

- Utilize teacher and/or parent turns to show child *how* to think and remember
- Developing meta-cognitive skills
  - Rehearsal strategies: repetition, highlighting important facts, physical cues
  - Elaboration strategies: creating mental images, paraphrasing
  - Organizational strategies: grouping, classifying, identifying main ideas

(Duncan, 2007)

Prompting

- With so many forms of prompting, the clinician has a myriad of ways to get a child thinking
- These might include:
  - Choices
  - Completing a phrase or sentence
  - Giving clues
  - Rhyming words

Questioning

- In group conversations, check in with other students to assess contributions made by the speaker
  - "What did Jayla say?
  - "Do you agree?"
  - "What do *you* think?"
- In any setting, use questions to make connections with past experiences

Sabotage

- Those little tricks designed to create teachable moments
- Why?
  - Eliminates the guessing
  - Establishes responsibility for listening
  - HI kids are not always wrong
- For older children, verbal sabotage is often the most appropriate and effective
  - Saying something silly or unexpected
  - Mismatching actions and words

Up the Ante

- Consider the concept of diagnostic teaching – probing a step further allows you to determine if children are moving forward
- Example: “My Dog’s Birthday”

Put it all Together

- Writing a narrative paragraph
  - Model writing your own
    - Describe how you chose a topic
    - Verbally plan your approach
    - Say each sentence in its entirety before writing it
  - Discuss your work with the group
    - Question students to identify the details and the summary
    - Check in with listeners to get their opinions
  - Turn the activity over to the students
    - Assess and coach both the planning process and composition

Summary

- Auditory training, outside of contextualized language and experience, limits the child with a cochlear implant
- By pairing cognitive challenges with auditory stimulation activities, professionals will better assist children in developing rich language abilities
- This focus on thinking skills has importance in individual therapy and the classroom as well as at home.

Questions and Discussion

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Upcoming Online Sessions

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- Next Up:

Tuesday November 2, 11:00am ET
Beyond Learning to Listen (Parents)
Ashley S. Garber, M.S. CCC-SLP, LSLS Cert. AVT
Listening and Language Connections, LLC

Tuesday, November 9th, 3:00 pm ET
Beyond Melody: Music and Auditory Skill Development in Young Children (Professionals/Parents)
Greta Gillmeister, MT-BC, Board Certified Music Therapist

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