



## Auditory Teaching Strategies and Techniques to Facilitate Spoken Language through Listening

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### Complete this Sentence....

For our time together to be considered successful,  
I would like to learn more about...



### New...Better...Different



### Architecture Determined by Stimulation Received

### The Science of Early Childhood Development



- 1 Plasticity, or the ability for the brain to reorganize and adapt, is greatest in the first years of life and decreases with age.
- 2 The interactive influences of genes and experience shape the developing brain.
- 3 Supportive relationships and positive learning experiences begin at home. Babies' brains require stable, caring, interactive relationships with adults.

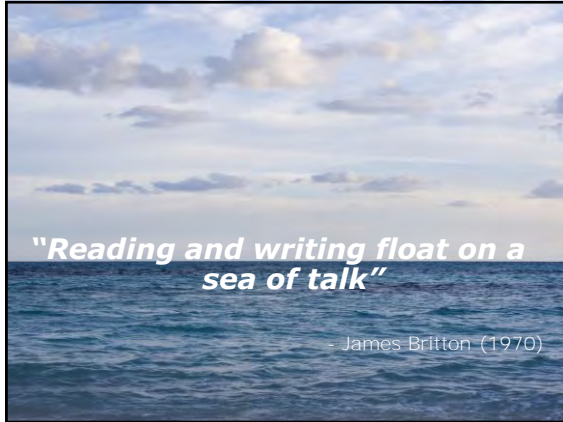
### A Whole Lot of Talking



Howard (2000) estimated that a child with typical hearing learns approximately

**1 New Word  
every  
90 Minutes  
10 New Words per Day!**

Howard, P. (2000). *The Owners' Manual for the Brain: Everyday Applications from Mind-Brain Research* (2nd Edition). Austin, TX: Bard Press.



- Dehaene: **20,000 hours** of listening is the basis for reading
- Pittman: Children with hearing loss need **three times the exposure** to learn new words and concepts due to reduced acoustic bandwidth caused by hearing loss



*"I asked you to play **Romeo**.....**NOT Rodeo!**"*



**One letter changes the meaning of everything!**



**" Muddy in ....Muddy out"**



Children must have access to audible and intelligible speech



If a child only wears hearing aids for

**4 hours** each day...

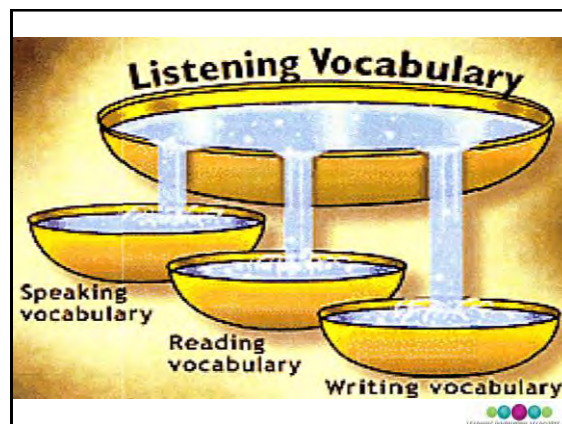
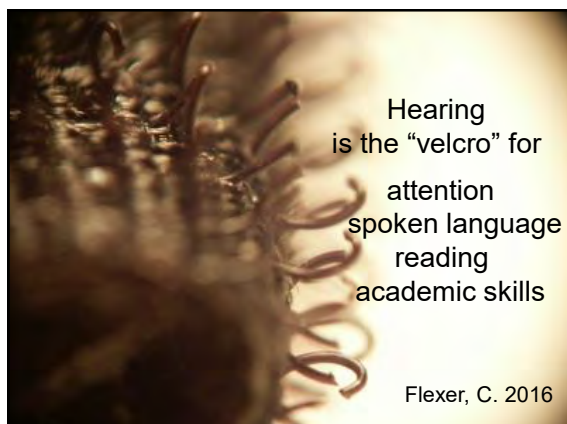
it will take the child **6 YEARS** to hear what a child with typical hearing hears in


**1 YEAR**



**Begin With The End In Mind**






  
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Because of EHDI, hearing technology  
**and brain neuroplasticity....**

When clear programmatic alternatives are available, the choices made by parents of children who are DHH have changed dramatically over time.

- In 1995: 40% chose spoken language outcome, compared to 60% who chose sign-language outcomes
- In 2005: 85% chose spoken language outcomes, compared to 15% who chose sign-language outcomes  
Brown, C. (2006)
- In 2012: Beginnings in North Carolina reporting 89% chose spoken language; Hearts for Hearing 95%

  
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**Changing Paradigm...**  
**Today's Best Practice for Listening  
and Spoken Language Outcomes**

- Creating an auditory accessible world filled with *auditory living*
- Partnering with parents and instructional team members

  
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- **AG Bell Academy of Listening and Spoken Language**
- Now Listening and Spoken Language rather than traditionally known as Auditory Oral and Auditory-Verbal
- Creation of certification in Listening and Spoken Language

**LSLS Cert. AVEd**  
**LSLS Cert. AVT**

  
**AG Bell Academy**  
FOR LISTENING AND  
SPOKEN LANGUAGE

  
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To learn more about LSLS Certification from the  
AG Bell Academy for  
Listening and Spoken Language:

[www.agbellacademy.org](http://www.agbellacademy.org)

  
**AG Bell Academy**  
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## A Word About Progress....

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### 12 Strategies to "Grow the Brain"

For Listening, Spoken Language, & Literacy

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**Be a Director**



Direct the child to Listen!

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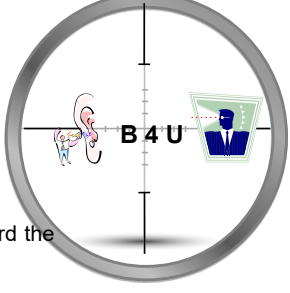
**Be A Bird Dog**



Point out sound:  
"I hear that!"

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**Hear It Before You See It**

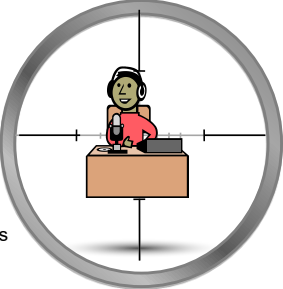


- Audition first
- Direct attention toward the object
- Use the handcue

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## Play By Play

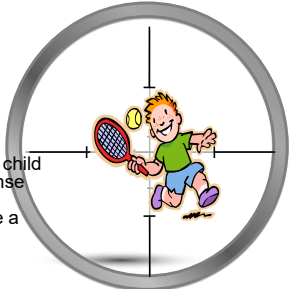
- Use familiar phrases
- Comment on what child is doing.
- Be a radio commentator



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## It's Your Turn!

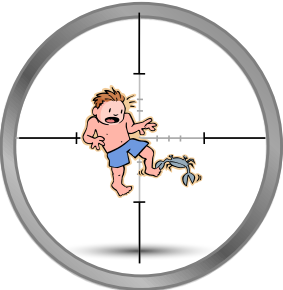
- Expect a response from the child
- Pause and wait for a response
- Look expectantly ..lean in
- Use the handcue to indicate a turn
- Use the parent as a model
- Use 'You could say....'
- Use Auditory Closure



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## Keep 'Em On Their Toes!

- Use sabotage
- Use others to model
- Use "You could ask..."
- Use embellishment



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## Make It Easier

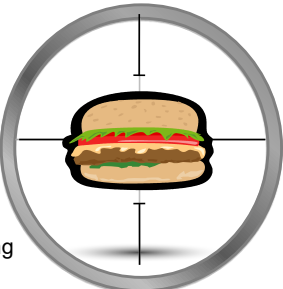
- Control the listening environment
- Move closer to the child
- Change task from open set to closed set
- Use acoustic highlighting: whisper, sing, vary pitch or intonation, emphasis sound or word.



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## Create a Listening Sandwich

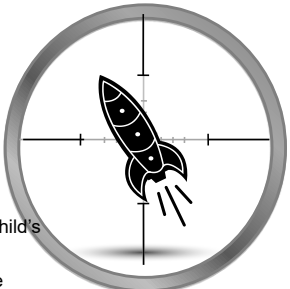
Put it back into Listening



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## Beyond the Here and Now

- Model and expand the child's utterances
- Provide extensions to the child's utterances



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### It's All About Me!

- Use family member names in place of the character names in a story or book
- Link past experiences to the topic of the book or new experiences



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### Help Me But Don't Tell Me


- Label by category
- Ask for or provide information
- Provide rhyming words
- Suggest opposites



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### What Did You Hear?



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Implementing the 12 Strategies and Techniques

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Let's Talk....

What Do You Think Should be the  
**Top Ten Teaching Topics...**  
With Parents of children with hearing loss?

**Top Ten  
Beginning Teaching Activities**  
Adapted from DeMoss, W. 2011

10. Level of hearing loss
9. Parent Outcome Expectations
8. Hearing Technology wear time all waking hours – Hearing loss is about the brain NOT the ears!
7. Ear Mold Tutorial
6. Observing child's alerting responses

## Top Ten Beginning Teaching Activities

Adapted from DeMoss, W. 2011

5. Principles of AVT
4. Responding to vocalizations
3. Using a sing song voice: Being a “drama mamma” and a “dramatic daddy”
2. Face to face interaction
1. Optimizing listening environment when child is alert and talk, talk, talk, talk....!

## Listening and Learning

### • Daily Routines

Acts of care-giving; they happen no matter what the day is like

### • Play Routines

Use of age appropriate objects, phrases that support parent-infant interactions



### • Social Routines

Incidental interactions that occur in the life of the family

### • School Routines



## Daily Routines



- Diaper changing
- Feeding
- Bathing
- Dressing
- Rocking and Singing

## Play Routines

Use play routines to teach listening:

- Blowing Bubbles
- Knocking and entering doors
- **Calling Games:** I'm gonna get you!
- Nursery Rhymes and Songs
- Reading to baby
- Using age-appropriate toys
- Play routines: Peek-a-boo; How big is baby? Sooo big; Tickling



## Beginning Play Routines

- Listening Walks
- Peek-a-Boo
- Wake Up Game
- Where Are You?
- Knock-Knock Game
- Freeze Dance
- I'm Gonna Get You!
- Don't Bite!
- Bubbles
- Give You Kisses



## Social Routines

Use social routines to teach listening and encourage incidental learning:

- Greetings
- Going places
- Family gatherings





## School Routines



## Use of Multiple Strategies to Establish a Hierarchical Teaching Order

Basic Premise:

Adjust skill levels and AV Strategies

- Spontaneous to imitation
- Three strikes and you're out
- Expect a response



Caraway, T. 2010



## Facilitating Listening and Talking



- Avoid **"the rut"**
- Avoid **"the hot seat"**
- Avoid **"test questions"**

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How Can the 12 Auditory Strategies be Used with Other Techniques to Facilitate Higher Order Thinking and Language Skills?

## Developing Conversational Abilities

### Theory of Mind

People knowledge

Understanding that people have thoughts, feelings and desires that may be different from his or her own.



***Open a Book...***



***....Fall Into a Conversation***

## Techniques to Facilitate Advanced Language & Higher Order Thinking

- What if...
- If I were...
- I wonder...
- What could happen...
- What do you think...
- When I grow up...
- When I was...



Caraway, T. et al, 2004



## Techniques to Facilitate Advanced Language & Higher Order Thinking

- One time...
- You won't believe...
- This reminds me...
- Bet you can't guess...
- Remember...
- This is like...
- What do you see...



Caraway, T. et al, 2004



## Techniques to Facilitate Advanced Language & Higher Order Thinking

- I think...
- Have you ever...
- How do you...
- Where could he be...
- When you...
- Maybe your mommy knows...



Caraway, T. et al, 2004



## collaboration



"The act of working together with one or more people in order to achieve a common goal."

- Webster Collegiate Dictionary



## Collaborative Partners or NOT?

The Decorator

## Formulating a Plan for Collaboration

Triggering Resistance

Triggering Rapport



**New...Better...Different**



# Hearing First

## Powering Potential

### How is Hearing First Powering Potential?



**Supporting  
Families**



**Equipping  
Professionals**



**Promoting  
LSL**

We connect families and professionals to the information, knowledge and skills needed to improve LSL outcomes for children

### Building Community



**Professional  
Learning  
Community**



**Family  
Support  
Community**



**Learning  
Experiences**



**Coaching &  
Mentoring**

We're building online communities for families and professionals

### Join us! Let's Power Potential Together

[www.hearingfirst.org](http://www.hearingfirst.org)



## Summary

- We are **Brain Ambassadors!**
- Parents are the primary language teachers for their child.
- Specific and purposeful LSL strategies and techniques teach a child who is deaf or hard of hearing to learn spoken language through listening.
- Children's literature is a valuable tool in LSL Practice to integrate auditory, speech, language and cognitive targets.



## Summary Continued

- Use of children's literature can assist in the development of a child's social cognition, story telling ability and conversational discourse skills which are highly correlated to later reading comprehension.
- When AV Practice is carried out with the necessary thoughtfulness, expertise, guidance, and love, many children who are deaf and hard of hearing learn to develop exceptional conversational competence.



- When professionals and parents work together the sky is the limit for today's children who are D/HH!

## A Few Resources

Resource and downloadables to use to support families in their LSL journey  
<http://www.hearingfirst.org>

Forty lessons for the first year:

<http://www.cochlear.com/au/sound-foundation-course-babies>

HOPE Series Getting Started Brochure:

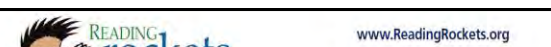
<http://hope.cochlearamericas.com>

Learn to Talk Around the Clock: Monthly newsletters by K. Rossi

<http://www.learn totalkaroundtheclock.com>

The Learn to Listen Sounds: Listen-Up & E. Rhoades

<http://www.listen-up.org/dnload/listen.pdf>




### TIPS for parents of Babies

It's never too early to read to your baby. As soon as your baby is born, he or she starts learning. Just by talking to, playing with, and caring for your baby every day, you help your baby develop language skills necessary to become a reader. By reading with your baby, you foster a love of books and reading right from the start. The tips below offer some fun ways you can help your child become a happy and confident reader. Try a new tip each week. See what works best for your child.

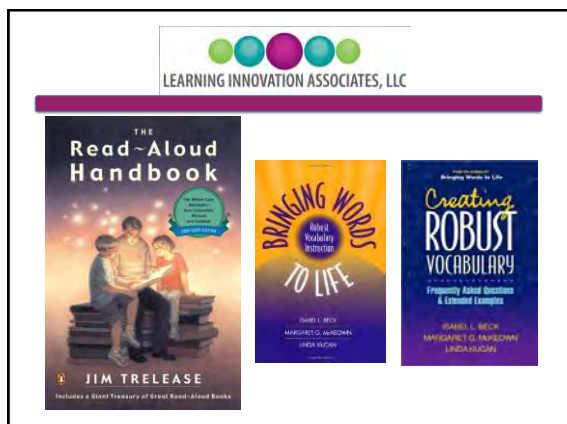
- **Snuggle up with a book**  
When you hold your baby close and look at a book together, your baby will enjoy the snuggling and hearing your voice as well as the story. Feeling safe and secure will help your baby learn to read.
- **Encourage your baby's coos, growls, and gurgles**  
They are your baby's way of communicating with you, and are important first steps toward speech. Encourage your baby's sounds by responding to them.

**Tips by Age Group in 11 Languages!**



### Getting Ready to Read:

Helping Your Child Become a Confident Reader and Writer Starting from Birth



## Contact Information



[tcaraway@hearingfirst.org](mailto:tcaraway@hearingfirst.org)  
[www.hearingfirst.org](http://www.hearingfirst.org)

## Selected References

- Brown, C. (2006). Early intervention: *Strategies for public and private sector collaboration*. Paper presented at the 2006 Convention of the Alexander Graham Bell Association for the Deaf and Hard of Hearing, Pittsburgh PA.
- Caraway, T. & Madell, J. (Produced by ASHA). (2012). Current Trends in Pediatric Cochlear Implantation: Creating Auditory Opportunities [Web Workshop]. Workshop submitted for publication.
- Caraway, T. (2010). Lend Me Your Ears: Auditory-Verbal Strategies and Techniques. A short course presented at the 2010 Convention of the Alexander Graham Bell Association for the Deaf and Hard of Hearing, Orlando, FL.
- Caraway, T. (2008). Facilitating Conversational Competency through Auditory-Verbal Strategies and Techniques. Cochlear HOPE workshops.
- Caraway, T., Smith, J., & Clemmons, K. (2004). Open a Book – Fall Into a Conversation. A short course at AG Bell International Convention, Anaheim, CA



## Selected References

- Cole, E. & Flexer, C. (2010). Children with hearing loss: Developing listening and talking—birth to six. 2<sup>nd</sup> Edition. San Diego, CA: Plural Publishing.
- Dehaene, S. (2009). Reading in the brain: The science and evolution of a human invention. New York: Penguin Group.
- Doidge, N (2007) *The Brain that Changes Itself*; Penguin Books NY
- Estabrooks, W. (2006). *Auditory-verbal therapy and practice*. (2006). Washington, DC: A.G. Bell Association for the Deaf and Hard of Hearing.
- Hart, B and Risley, T. R. (1999). *The social world of children learning to talk*. Baltimore, Brookes.
- Howard, P. (2000). *The Owners' Manual for the Brain: Everyday Applications from Mind-Brain Research* (2<sup>nd</sup> Edition). Austin, TX: Bard Press
- Moeller, M.P. & Schick, B. (2006). Relations between maternal input and theory of understanding in deaf children. *Child Development*, 77, 751-766.
- Sharma, A., Nash, A., and Dorman, M (2009) Cortical development, plasticity, and reorganization in children with cochlear implants. *Journal of Communication Disorders*, 42(4), 272-279.

