“Roadmaps to Language Development for Children who are Deaf or Hard of Hearing”

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Who Are You?

Teacher of the Deaf & Hard of Hearing

General Education Teacher

Speech Language Pathologist

EC Teacher

Audiologist
Workshop Outcomes

The learner will....

• Identify At least 2 resources to assess and track spoken language development

• Identify the vocabulary and language teaching hierarchy

• Create lesson plans to teach language and vocabulary targets for their students who are deaf and hard of hearing
Disclosure Statement

There is no relationship, financial or otherwise, between the presenters and the developers of any materials we discuss.
The **WHAT** is more important than the **HOW**
The “WHAT”

which is ___________ ____________

is

MORE IMPORTANT

than

the “HOW”

which is the _____________ _____________

Barbara Lee
“Regardless of whether an individual communicates primarily via a signed system, an oral system or a combination of both, it is a maxim that literacy skills are essential in order to succeed in today’s highly literate and technically driven society.”

Spencer, Barker & Tomblin (2003)
What do we know?

“Unless the language levels of deaf children are within 1 or 2 years of the levels of those in the regular class in which they are placed, they are virtually cut off from the entire verbal input process that is basic to educational experiences.”

A. McConkey Robbins, 2000
“Progress in academic subjects among hearing-impaired children under eight or even nine years of age is much less important than the development of their spoken language. Once children can communicate, they can catch up academically.”

So What Does All This Mean?

Knowledge about the world **precedes** language about the world.

(McLean and McLean, 1999, p. 145)
Which Means...

“The limits of my language mean the limits of my world.”

Ludwig Wittgenstein, Tractatus Logico-Philosophicus (1922)
Austrian philosopher (1889 - 1951)
What Can We Do About It?

A sense of urgency and a feeling of irrereplaceable time being lost must permeate all of our efforts with young children.

Mark Ross
“The goal is not to place cochlear implant children in regular classrooms at all costs but to choose that environment because the child has the skills to succeed there while expanding their cognitive and linguistic repertoire . . .

A. McConkey Robbins, 2000
The Developmental Sequence

- Precursory Skills
- Single Words
- Two Words
- Multi-word Utterances
- Grammatical Maturity
The Developmental Sequence

• Early Language
  – Precursory skills
  – Receptive language/vocab
  – Expressive language/vocab

• Expanding Language
  – Receptive language/vocab
  – Expressive language/vocab
  – Discourse

• Complex Language
  – Receptive language/vocab
  – Expressive language/vocab
  – Discourse
Early Language Development

- Soaking up the world around them
- Listening, watching, doing
- Pre-verbal behaviors
  - Reciprocal gaze
  - Joint attention
  - Turn taking
  - Calling attention to objects
  - Regulating the behavior of others
  - Etc...
Expanding Language Development

- “Critical Link” between early and complex language
- Children are developing complete simple sentences
- Bulk of language development
- Begin to talk about past and future events
  - recent experiences or will be experienced soon
- Increase in the number of questions asked
- Become verb lovers
- Development of conversation
Expanding Language Development

- Emergence of prepositions and pronouns
- Plural – s
- Expression of intention – “gonna/wanna”
- Infinitive “to”
- Irregular past tense
- Regular past tense
- Development of ‘ing’
- Possessive – s
- Copula development
- Two verbs coding the same subject (I like to eat cookies)
- Simple relative clauses
Complex Language

• Developing more sophisticated language
• Increase in use of relative clauses
• Asking increasingly difficult questions
• Conjunctions “so” and “because”
• Comparatives, superlatives and irregular comparatives/superlatives
• Modal verbs + additional tenses
• More difficult tense development examples:
  – Future: will be
  – Present perfect: has eaten
  – Future progressive: will be eating
  – Present perfect progressive: have/has been eating
  – Modal + progressive: should be eating
  – Past perfect progressive: had been swimming
Vocabulary

BIG
GIGANTIC
HUGE
VAST
LARGE
WHOPPING
ENORMOUS
Vocabulary

• 1 year old  _____expressive words
• 18 month old _____expressive words
• 2 year old  _____expressive words
• 3 year old  _____expressive words
• 4 year old  _____expressive words
• 5 year old  _____expressive words

• Vocabulary Resources

To know where we are going....

We must know where we are!
Assessment

- To whom do we compare?
- Recommended Assessments
  - Formal
  - Informal
The Roadmaps

• Cottage Acquisition Scales of Listening, Language & Speech (CASLLS)

• Bloom & Lahey Model for Typical Language Development

• Intervention Hierarchy
The CASLLS
Basis for the CASLLS

- Language and cognition are mutually dependent upon one another.

- Language acquisition is interactional and, along with cognition, leads to growth in aspects of content, form, use, discourse, and speech.

- Language acquisition comes easiest when there is a close correspondence between chronological age and cognitive potential. (That is, typical children make a make one year of language progress in one year.)
Basis for the CASLLS

• For children who have large gaps (3+years) between their chronological age and their language age, it is harder to close the gap: They must make a faster-than-average rate of progress to catch up with their peers.

• The child's caregivers should receive support to facilitate developmentally appropriate interactions to maximize language growth.

Yoshinaga-Itano (1994)
Orientation to the CASLLS Model

Five separate criterion-referenced scales based on normal child development and developed for use with children with hearing loss.

- Pre-verbal
- Pre-sentence
- Simple sentences
- Complex Sentence
- Sounds and Speech (based on D. Ling)

- tracking documents are color coded
- Includes cognition, play, and conversational skills
CASLLS Pre-Verbal Level

• Designed for children with no words, it allows the professional to monitor the progress of pre-verbal behaviors.

• Covers a developmental and/or listening age of ____ to ____ months
  - Cognition/Play
  - Social Interaction
  - Listening
  - Emerging Meaning
  - Vocal Expression
  - Learning to Listen Sounds

• Multi-handicapped
CASLLS Pre-Sentence Level

• For children who have started speaking, it monitors the emergence of a full range of semantic intentions through 2-3 word combinations.

• Covers a developmental and/or listening age of _____ to _____ months.
  – Cognition/Play
  – Social Interaction
  – Listening
  – New Semantic Content and Syntactical Forms
    • Linguistic Meaning
    • Expressive Syntax
    • Receptive and expressive first words
CASLLS Simple Sentence Level

• Designed for children who are ready to develop complete simple sentences

• Covers a developmental and/or listening age of ____ to ____ months
  – Listening
  – Cognition/play

  – New Syntactical Forms
    • Nouns & Noun Modifiers
    • Prepositions & Pronouns
    • Verbs & Modals
    • Tense & Negation
    • Emerging Complexity

  – Discourse
    • Questions
    • Conversation
CASLLS Complex Sentence Level

– Used with children who are ready to develop more sophisticated language abilities
– Covers a developmental and/or listening age of ______ to ______ years

• New Syntactic Forms
  – Adverbs & Infinitives
  – Relative Clauses
  – Coordination, Nominals and Adverbials
The Bloom & Lahey Model
The Bloom & Lahey Model

• By Lois Bloom and Margaret Lahey—1978
• Revised by Margaret Lahey—1988
• Identified the normal developmental sequence for learning language followed by typically developing children
• Apply it to other populations because typically developing children do it best
Orientation to the Bloom & Lahey Model

- Offers a list of precursory skills as they relate to content, form, and use
- 8 phases – single words to complex sentences
- Semantic/Syntactical Relationships
- Recognizes and allows for non-grammatical utterances
- Progresses in small steps
- Does not address vocabulary development
- Does not address phonologic development
<table>
<thead>
<tr>
<th>INPUT</th>
<th>PRECURSOR</th>
<th>GOALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I ball</td>
<td>man</td>
<td>all gone</td>
</tr>
<tr>
<td>2. I ball</td>
<td>there</td>
<td>no more</td>
</tr>
<tr>
<td>3. I ball</td>
<td>in</td>
<td>dirty hot</td>
</tr>
<tr>
<td>4. I ball</td>
<td>in</td>
<td>dirty hot</td>
</tr>
<tr>
<td>5. I ball</td>
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<td>dirty hot</td>
</tr>
<tr>
<td>6. I ball</td>
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</tr>
<tr>
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<tr>
<td>9. I ball</td>
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</tr>
<tr>
<td>10. I ball</td>
<td>in</td>
<td>dirty hot</td>
</tr>
</tbody>
</table>

**This chart identifies the normal developmental sequence of utterances that a child learning English expresses, i.e., says, signs, or does.**

In most children, comprehension develops before expression, meaning that more children are likely to comprehend utterances much more complex than the utterances they are able to spontaneously express at the same time.

Input by a person fluent in English should be abundant throughout the language acquisition process and is absolutely necessary for both comprehension and expression to develop.

* This specific utterance is not in the book, but it is the type of utterance specified in the book.
** This utterance is from the first edition of the book.
**Similarities of the Roadmaps: Bloom and Lahey and CASLLS**

<table>
<thead>
<tr>
<th>Based on the sequence of typically developing language in children without language impairments.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide a foundation that we can use in order to better facilitate the language learning process for children with language impairments.</td>
</tr>
<tr>
<td>Start at birth and progress from single words through non-grammatical phrases to complex sentences.</td>
</tr>
<tr>
<td>Initially recognize the need to temporarily focus on only one facet of language acquisition at a given time.</td>
</tr>
<tr>
<td>Ultimately, both programs recognize the necessity for the integration of content, form, use, semantics, syntax, pragmatics.</td>
</tr>
</tbody>
</table>
## Differences Between the Roadmaps

<table>
<thead>
<tr>
<th>Bloom &amp; Lahey</th>
<th>CASLLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus primarily on language structures</td>
<td>Includes other areas of development</td>
</tr>
<tr>
<td>Organization</td>
<td>Organization</td>
</tr>
<tr>
<td>Utterances</td>
<td>Sentences</td>
</tr>
<tr>
<td>Ends at age 5</td>
<td>Ends at age 8</td>
</tr>
</tbody>
</table>
Summary

The organization is different. The sequence and content are basically the same. The sameness of the sequence and content is far more important than the organizational differences. Neither program is a curriculum. Teachers still have to plan their own assessment, identify appropriate goals, design their own lessons, gather their own materials and determine when goals are met, so that they can plan their assessment, goals, lessons, etc....Until deaf education professionals have a full-blown language curriculum that follows the sequence of typically developing language acquisition, either one of these models is light years ahead of anything else that is currently available.

Barbara Lee
Intervention Hierarchy for Vocabulary and Language

Comprehension Check → Meaningful Imitation → Spontaneous Use → Input
Types of Learners

• Three types of learners
  – Developmental
  – Delayed
  – Remedial
## Types of Learners

<table>
<thead>
<tr>
<th>Developmental</th>
<th>Delayed</th>
<th>Remedial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language abilities are within _____ year of typically developing peers</td>
<td>Language abilities are greater than _____ year behind typically developing peers BUT no more than _____ years behind</td>
<td>Language abilities are _____ or _____ years behind typically developing peers</td>
</tr>
</tbody>
</table>
Types of Learners

Delayed and Remedial Learners **CAN** “catch up” with **focused language** intervention that follows a developmental sequence.
What the Research Says About “Playing Catch-up”

• Children have to “catch up” at above-average rates when vocabulary (and language) limitations exist.  
  Biemiller (2001)

  – Students who are behind do not learn faster than those students who are ahead
  – Catch-up growth is driven primarily by proportional increases in direct instructional time
  – Catch-up growth is so difficult to achieve that it can be the product only of quality of instruction in great quantity  
    Fielding (2011)
Informal Learning

to

Formal Teaching
## Learning Contexts & Teaching Approaches

<table>
<thead>
<tr>
<th>Informal Learning</th>
<th>Embellished Informal Teaching</th>
<th>Semi-Formal Teaching</th>
<th>Formal Teaching</th>
</tr>
</thead>
</table>
| • Happens in normal, everyday events and interactions  
• Should occur at home and school  
• All learner types | • Seize the moment  
• Use of strategies to embellish the normal situation  
• Should occur at home and school  
• All learner types | • Adult directed, pre-planned activities  
• Developmentally appropriate  
• Specific goals and objectives  
• Use of strategies  
• Typically done at school  
• Delayed & remedial learners | • Adult directed  
• Deliberate, direct, methodical  
• Specific goals and objectives  
• Use of strategies  
• Happens in traditional educational setting  
• School age remedial learners |
Using the Roadmaps to Guide Language Instruction

• **Goal Selection**
  – Have appropriate documentation of child’s PLAAFP
    • Formal/informal assessment information
    • Marked CASLLS forms w/ documentation of spontaneous utterances
  – Keep the sequence in sequence
    • Determine appropriate targets/goals based on normal sequence of development
  – Determine the teaching level
    • Input, comprehension, imitation, spontaneous use
Using the Roadmaps to Guide Instruction

• The 3 C’s of Planning
  – Cognition
    • Cognitive basis of any linguistic target

  – Context
    • Natural context or environment to *meaningfully* teach or elicit the target

  – Conversation
    • The interactional basis that makes the target most useful
Using the Roadmaps to Guide Instruction

• The 3 C’s of Intervention
  
  – Clear
    • Any language and vocabulary MUST be presented clearly
  
  – Complete
    • Any language and vocabulary MUST be presented in a complete form
  
  – Consistent
    • Any language and vocabulary presented MUST be presented consistently
Using the Roadmaps to Guide Instruction

• One new learning at a time (delayed and remedial learners)
  – Content = semantics, vocabulary, concepts
  – Forms = syntax, pragmatics

  – Ex: when beginning to work on present progressive –ing (new form) use known vocabulary (old content)

  – Ex: when introducing the process of metamorphosis (new content) use familiar language (old forms).
Writing the Lesson Plan

– What does a lesson plan include?
  • A measurable goal
  • A developmentally appropriate activity
  • Strategies to promote the intended goal
  • Carryover Activities
    – School Wide Extensions
    – Home ideas (if appropriate)
  • Evaluation and next steps
Writing the Lesson Plan

A measurable goal

• A specific target from the model
• Identify the teaching level
  – Input
  – Comprehension
  – Imitation
  – Use
• Accuracy rate

– Example: M. will use on her own “some” with non-count nouns 9 out of 10 times with known vocabulary
Writing the Lesson Plan

– Activity
  • Plan meaningful and **FUN**ctional activity
  • List materials
  • Describe procedure
    – Should match your goal

**Materials:**
Sugar, milk, juice, butter, cups, food coloring, spoons, bowls

**Procedure:**
Tell student we are going to decorate cup cakes for snack and we are going to make different colored icing. We have sugar, milk and butter and food coloring to make the icing but they have to ask for it. Goal is for student to ask for “some” sugar, “some” butter, “some” milk – without hearing an adult model first.
Writing the Lesson Plan

– Strategies
  • Plan at least 3 strategies that you will use to promote the target
  • Strategies should match the teaching level
  • List them in the order that you will use them (optional)

1. Wait time + expectant look
2. Tell me more
3. Move to imitation only if necessary: tell Susie, “I want some sugar”
Writing the Lesson Plan

– Carryover Activities
  
  • Come up with 2-3 activities to promote the same goal in the total school environment and/or home
  
  • Activities/procedure should match the teaching level

1. Have child tell what he wants at lunch (e.g. I want some milk, some juice, some potatoes)
2. During free play child should ask for “some sand, some water, some paint, some chalk”
Writing the Lesson Plan

– Evaluate / next steps
  • Diagnostically assess the lesson
  • Adapt the current activity as needed
  • Determine the next step or goal
## Writing the Lesson Plan

<table>
<thead>
<tr>
<th>Goal</th>
<th>Activity</th>
<th>Strategies to promote target appropriately</th>
<th>Carryover Activities</th>
<th>Evaluation Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language: M. will use on her own “some” with non-count nouns 9 out of 10 times with known vocabulary</td>
<td>Materials: Sugar, milk, juice, butter, cups, food coloring, spoons, bowls</td>
<td>1. Wait time + Expectant look&lt;br&gt;2. Tell me more&lt;br&gt;3. Give a phonemic cue&lt;br&gt;4. Move to imitation only if necessary: tell Susie, “I want some sugar”</td>
<td>Have child tell what he wants at lunch (e.g. I want some milk, some juice)</td>
<td>Next step: input adverb of place: around</td>
</tr>
<tr>
<td>Procedure: Tell student we are going to decorate cupcakes for snack and we are going to make different colored icing. We have sugar, milk and butter and food coloring to make the icing but they have to ask for it. Goal is for student to ask for “some” sugar, “some” butter, “some” milk – without hearing an adult model first.</td>
<td></td>
<td></td>
<td>During free play child should ask for “some sand, some water, some paint, some chalk”</td>
<td>Eval. of todays lesson: M. Used “some” with non-count nouns on her own consistently</td>
</tr>
</tbody>
</table>
Writing the Lesson Plan

• Let’s do one together

• Do one on your own
Questions
THANK YOU

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