A MODEL OF LITERACY EDUCATION FOR DHH LEARNERS

Gear Up! March 8, 2013
Concurrent Session 9:15-10:45 am
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Our focus in this session will be on describing the requisites for literacy development in DHH learners, and the particular challenges they may face in developing language and learning to read and write. This discussion will provide the background necessary for considering strategies and approaches most effective for teaching literacy to DHH children.

Focus Questions

- How do DHH children develop as readers and writers?
- What are the language and code related abilities that support literacy development?
- What is the research evidence base?
- What do we know about learners with cochlear implants? About bilingual education?

Rather than giving you a copy of selected slides from the PP presentation, I have created this handout that includes the main ideas we will be discussing. I have left room for you to make notes.

THEORETICAL FRAMEWORKS

Underlying Principles
Literacy development of DHH children viewed as qualitatively similar to that of hearing children (Mayer, 2007; Paul & Lee, 2010; Paul, Wang, Trezek, & Luckner, 2009; Mayer & Trezek, 2011)

- Foundational reading & writing requisites documented for hearing learners also apply to learners with hearing loss.
- The differences are in the learner and nature of the instruction - not the activity.

Foundations of Literacy Education – see attached sheet (the Inukshuk Model)

Code-related Constructs
- phonological processing (i.e., phonological awareness, phonemic awareness, alphabetic principle etc.)
- print awareness & print principles (i.e., directionality, sight vocabulary etc.)

Language-related Constructs
- the intuitive knowledge and use of the components of English (i.e., phonology, morphology, syntax, semantics, and pragmatics)
- BICS & CALP
A Focus on Language

1. Language as the Basis for Literacy

Reading and writing processes are fundamentally rooted in the face to face form of the language in which they are written.

“Language is unique among precursor abilities in its pervasiveness for both early and later reading competencies and for the duration of its effect on reading comprehension as code breaking turns into meaning making” (Dickinson, Golinkoff & Hirsh-Pasek, 2010)

Language mediates literacy at the sublexical, lexical and syntactic levels

**Acquiring the First Language** (Mayer, 2007)
To acquire language a learner must have:

- Exposure in quality and quantity
- To an accessible language
- While engaged in meaningful activity
- With others who are already capable users of the language

**Quantity & Quality** = Threshold level of input, adequate exposure to the target language, Basic Interpersonal Communication Skills (BICS) + Cognitive Academic Language Proficiency (CALP) (Cummins, 2000; Mayer, 2010)

**Accessibility** = Input is available

**Meaningful Activity** = Using language to mediate activities in life that are relevant for the learner

**Capable Users** = Contingently responsive conversational partners who can use/model the language

2. Beyond the Basics - All Language not Created Equal

- Must have a knowledge of language beyond conversational proficiency (BICS)
- Synoptic genre and grammatical metaphor (Halliday, 1975, 1993; Wells, 1994)
- Cognitive academic language proficiency (CALP) (Cummins, 2000; Mayer, 2010)
- Phase 4 (Mayer & Wells, 1996; Mayer, 2007)
Basic Interpersonal Communication Skills (BICS)
- Maintain a face to face conversation
- Talk/sign, read, write about familiar content
- Basic/high frequency vocabulary
- Simpler sentence structure and grammar
- Active voice
- Can be written but more often spoken or signed
- Generally more readily acquired

Cognitive Academic Language Proficiency (CALP)
- Communicate when there is less face to face interaction
- Talk/sign, read, write about less familiar, more abstract, more distant topics
- Low frequency vocabulary
- Complex sentence structure and grammar
- Passive voice
- Can be spoken or signed/written but has a strong relationship to print
- Many hearing children also struggle with this use of language

3. Bilingualism - Can L1 stand in for L2?

Expectations and Assumptions - see attached sheet (Linguistic Interdependence Model)

- L1 proficiency (e.g., ASL) underpins English language and literacy (L2) abilities - based on the interdependence hypothesis (Cummins, 1981)
- Conceptual and linguistic knowledge would transfer across languages (forty years of research evidence from hearing contexts)
- Literacy will be learned via the print form of the L2 – bypassing the primary spoken form
- There would be age-appropriate development in reading and writing (Wilbur, 2000)

The Roles of L1 and L2 (see Mayer, 2009; Mayer & Leigh, 2010)

- “Policy makers need to realize that conceptual and linguistic growth are dependent upon opportunities for interaction in both the target language and the L1” (Cummins, 1991)
- “In order to read [and write] in a second language, a level of second language ability must be achieved” (Bernhardt & Kamil, 1995)
- “It is not the presence of ASL but the absence of some form of face-to-face English that is at issue, and the challenge for educators in bilingual programs is to sort out the balance between the two languages that allows for sufficient opportunities for the development of both.” (Mayer, 2007)
A Focus on Code

1. Print Principles
   - Concepts of print
   - Letter recognition
   - Directionality
   - Book holding

2. Phonological Principles

Phonological awareness
   - Broad term
   - Awareness of the phonological structure or sound structure of English
   - Manipulating larger segments of language (e.g., syllables) “through the air”
   - Includes rhyme, alliteration, etc.

Alphabetic Principle
   - Foundation of learning to read and write any alphabetic system
   - Understanding the systematic and predictable relationship between letters (graphemes) and sounds (phonemes) of the language
   - Modern languages with nearly perfect phonemic orthography include Finnish, Estonian, Italian and Spanish

Aspects of the Alphabetic Principle

Letter knowledge
   - Different than letter recognition
   - Naming letters in a random order

Phonemic awareness
   - Learning to manipulate phonemes “through the air”

Phonics
   - Learning the letter and/or letter combinations that represent the sounds of the language

Challenge of the English Code

For all learners
   - Deep orthography
   - Approximately 40-44 phonemes and 26 graphemes
   - Many ways to combine graphemes to represent a single phoneme (e.g., /f/ in fan, tough and elephant)
   - Grapheme can represent more than one phoneme (e.g. s in daisy /z/ and sun /s/)

For DHH learners
   - Access to the phonology
PUBLICATIONS


