

A Model of Literacy Education for DHH Learners

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With the advent of earlier identification through newborn hearing screening and the opportunities afforded by earlier intervention and advances in amplification technologies, come expectations - and the real possibility - that greater numbers of learners with hearing loss will achieve language and literacy outcomes that are comparable to their hearing age peers. But along with these enhanced expectations, come new challenges with implications for educational programming and planning, particularly as they pertain to the preschool and primary years. It will be argued that we need to revisit some of our assumptions about the nature of language and literacy education for D/HH learners, and the extent to which the literacy learning trajectory of children with hearing loss is similar to that of their hearing counterparts. Discussion will include a consideration of how early intervention and communication modality impact on later literacy development, and the role that specific interventions such as reading recovery and visual phonics could play in this changing environment. Data on the literacy achievements of children with cochlear implants will also be discussed including recent studies from New Zealand and Canada.

Questions to frame our discussion

1. What are the relationships between language and literacy in any language?
2. How do D/HH children develop as readers and writers?
3. What are the language and code-related abilities that most strongly support literacy development?
4. How does literacy develop in learners with cochlear implants? In bilingual situations?
5. What are the implications for research, policy and practice in literacy education for D/HH learners? In inclusive settings?

Theoretical Framework - Qualitatively Similar Hypothesis

- 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 D/HH learners
- The differences are in the nature of the learner and in the nature of the instruction - not in the activity

What are the Foundational Requisites?

Code-related constructs

- phonological processing (i.e., phonological awareness, phonemic awareness, alphabetic principle etc.)
- print awareness/principles (i.e., directionality, sight vocabulary etc.)

Language-related constructs

- intuitive knowledge and use of the components of English (i.e., phonology, morphology, syntax, semantics, and pragmatics)

Implications for Practice

Consideration #1: Developing an Age-Appropriate Language Base

Literacy development is predicated on the assumption that the learner has an age-appropriate foundation in **a face-to-face form of the language that is to be read and written**

“... literacy development is inexorably linked to language proficiency, attempting to teach reading and writing in the absence of a threshold level of language competence can be a futile and frustrating endeavor” (Mayer & Trezek, 2011)

A key consideration is how to provide access to a face to face form of English. Possible avenues are auditory (i.e., amplification) and/or visual (i.e., speechreading, cued speech, contact sign).

Consideration #2: Teaching Code-Related Skills

The teaching of code-related skills is relatively easy compared with the broader more complex set of language skills (Dickinson et al., 2010)

- Not possible to learn to read/write by memorizing lists of sight words
- Challenge of the “deep” orthography of English
- Need to teach decoding/encoding skills
- Invented spelling is a strong and consistent predictor of progress in a phonological training program

A key consideration is that phonology needs to be made accessible in order to teach it.

Consideration #3: Effective Literacy Instruction

Field typified by a paucity of research evidence to inform practice (Schirmer & McGough, 2005; Luckner et al., 2005/2006)

- Language acquired but literacy must be taught
- In survey data, many teachers report a lack of knowledge in designing literacy programs
- As is the case for all ‘struggling’ readers and writers, interventions need to be selected to suit the specific needs of individual children
- The DHH population is increasingly heterogeneous

A key consideration is that instruction is *differentiated* not different.

Teaching Resources

Developing Language

The Listening Room

http://www.hearingjourney.com/Listening_Room/preview.cfm?langid=1

Teaching Reading & Writing

Florida Center for Reading Research

<http://www.fcrr.org/>

eworkshops

<http://www.eworkshop.on.ca/edu/core.cfm>

Reading Rockets

<http://www.readingrockets.org/>

Starfall

<http://www.starfall.com/>

Read, Write, Think

<http://www.readwritethink.org/>

Learners with Cochlear Implants

The Ear Foundation

<http://www.earfoundation.org.uk/index.php>

Professional Readings related to the Presentation

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Wang, Y., Trezek, B. J., Luckner, J. L. & Paul, P. V. (2008). The role of phonology and phonological-related skills in reading instruction for students who are deaf or hard of hearing. *American Annals of the Deaf*, 153 (4), 396-407.

