

# Planting the Seeds of Literacy

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- Cued Language Transliterater, 11 years
- Author – Widely Published on deaf education/CS
- BA in Journalism, University of MD
- MA in Jewish Studies, Touro College
- MBA – Empire College

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## Some Fundamental Principles

- Over 90% of deaf children are born to hearing parents
- Hearing Children model the home language
- Parents are the most influential language models
- A good foundation of language is needed to learn to read
- Once you know, understand and can speak a language, learning to read and write in that same language, is another form of using that language.
- Language development depends on frequent, consistent, and accessible communication.
- Hence, the foundation for literacy is in the language a child learns and uses.

**Conclusion:** Planting the Seeds of Literacy Begins with Developing Language

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### Of 18-year old deaf students leaving high school...

- Less than half have reached a fifth grade level in reading and writing skills
  - (Traxler, 2000)
- Over 30 percent leave school functionally illiterate
  - (Waters & *Language Development in Children Who Are Deaf: A Research Synthesis* Page 33 Project FORUM at NASDSE June 4, 2001 Doehring, 1990).

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### What's The Problem?

Accessible Communication  
 Accessible Language

Children who are D/HH need  
 Accessible communication

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### How Does Language Develop in Hearing Children?




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### Elements of a Language

- Morpheme - a meaningful morphological unit of a language that cannot be further divided
- Phonemes – the smallest unit of speech that can be used to make one word different from another word.
- Semantics – word meanings
- Syntax - subject verb agreement
- Pragmatics – context, use of language in discourse

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### Language Developmental Milestones

- Infants hear and interact with caregiver, taking in information for several months before expressive communication.
- Infancy/Pre Linguistics – gestures, eye contact, cooing, babbling, crying (ex mamamama, waaah)
- One Word utterance about 10 months – (ex child points to bottle and says botty)
- Two-word Sentence about 18 months – include a noun and a verb – (ex doggy big)

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### Language Developmental Milestones

- Multi-word sentences about 2-2 ½ years – include a subject and predicate (ex Where is Ball?)
- More complex grammatical structures – age 2 ½ - 3 – elements and prepositions are added (ex Read it, by book, Take me to the Shop)
- Adult-like language – age 5-6 – complex structural distinctions are made, concepts like ask and tell and promise. (ex: Ask her what time it is.)

**Children must have experience using the language in discourse in order to be successful readers.**

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### Planting the Seeds for Literacy

- Occurs when children who are Deaf/HH have reached the language developmental milestones and have easy **access** to the spoken language.
- Occurs when they know and can use the language **they will learn to read in**

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### Is Reading Different for Deaf Individuals?

*Mayer and Trezek conclude NO.*

“phonology is an aspect of language acquisition....that provides the platform....for learning to read. It is these phonological skills that allow the reader to make the connections between “through-the-air” language and the print on the page....”

Mayer, C., & Trezek, B. J. (2014). Is reading different for deaf individuals? Reexamining the role of phonology. *American Annals of the Deaf*, 159(4), 359-371.

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### Is Reading Different for Deaf Individuals?

“For the purpose of learning to read, children must have an age-appropriate level of proficiency *in the same language that is to be read and written.*”

Mayer, C., & Trezek, B. J. (2014). Is reading different for deaf individuals? Reexamining the role of phonology. *American Annals of the Deaf*, 159(4), 359-371.

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### The Role of Phonology

“Early exposure to a communication system that makes the phonological aspects of the language **accessible** (i.e., Cued Speech) results in age-appropriate skill development in the areas of phonological awareness, reading, and spelling, although not necessarily vocabulary.”

Mayer, C., & Trezek, B. J. (2014). Is reading different for deaf individuals? Reexamining the role of phonology. *American Annals of the Deaf*, 159(4), 359–371.

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### The Role of Phonology

“a core difficulty in learning to read manifests itself as a deficiency...in mastering phonological awareness skills”

Mayer, C., & Trezek, B. J. (2014). Is reading different for deaf individuals? Reexamining the role of phonology. *American Annals of the Deaf*, 159(4), 359–371.

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### From Marschark’s Footnotes

- Research shows deaf children who are exposed to Cued Speech from an early age show impressive performance in a variety of reading sub-skills.
- Cueing at home and at school maximizes the potential of the deaf or hard of hearing child.

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### Why was Cued Speech Developed?

- Dr. R. Orin Cornett was surprised by poor reading levels of deaf students at Gallaudet in 1965.
  - If deaf students can't read, how are they getting information?




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### By spring of 1966 Cornett had developed Cued Speech.

- a phonemically-based mode of communication used to make a traditionally spoken language visually accessible
- closed system of handshapes, placements, and mouth movements

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### Cued Speech - Principle

- "If all the phonemes of speech looked clearly different from each other on the speaker's mouth, just as they sound different from each other to normal ears, a profoundly deaf child could learn language through vision almost as easily as the normal child learns it from hearing."

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### Cued Speech

- 44 Phonemes in English
- Disambiguates Lip reading
- Validates Auditory Skills
- Reinforces Speech Skills
- Makes language clear through vision alone
- Available in 70 languages and major dialects

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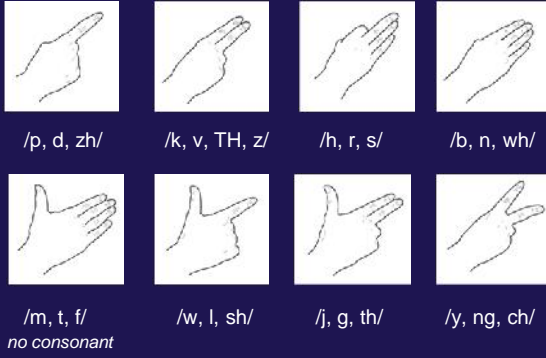
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### Consonant Handshapes




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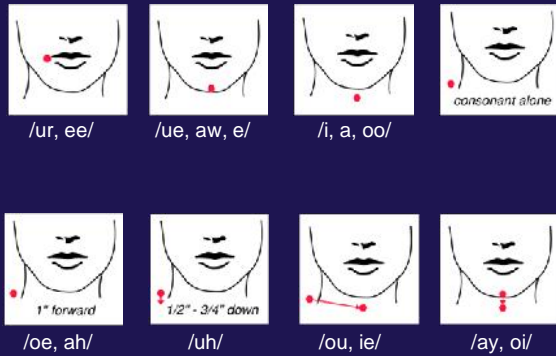
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### Vowel Placements/Movements




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## English Vocabulary

- Specificity
- Pronouns
- **Synonyms**
- Multiple meaning words
- **Contractions**
- **Modals**
- **Idioms**
- Accents
- Pronunciation

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## Hearing parents use Cued Speech to...

- provide visual access to the language of the home.
- learn to communicate visually in a relatively short period of time.
  - Classes can teach the entire system in 12 – 15 hours
  - Fluency develops within a few months to a year

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## Children of Deaf parents can use Cued Speech to ...

- learn English as a second visual language.
- manipulate the phonemic stream of English to develop phonemic awareness of the language they will learn to read and write.

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Parents of children with other language learning disabilities can cue to...

- provide visual and kinesthetic model of language.
- prompt/elicit an utterance.
- draw attention to the face and mouth for communication.
- demonstrate difference between incorrect & correct pronunciation/articulation.

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### Cued Speech and Cued Language for Deaf and Hard of Hearing Children

- Edited by: Carol LaSasso, Kelly Lamar Crain, & Jacqueline Leybaert Plural Publishing (2010)




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### Deaf cuers...

- learn English naturally
- have a large vocabulary base
- learn to read in the same manner as hearing children
- learn foreign languages as easily as hearing children
- do not rely solely on interpretation
- have an accurate phonological model of a spoken language
- have English skills which match their hearing peers



*Cuers meet or surpass hearing peers in linguistic competence.  
Cuers can access General Education programs with fewer supports than other deaf or hard of hearing students.*

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### Reading Achievement of Deaf Students

- Children who are profoundly deaf and use Cued Speech score at the same level for reading achievement as normally hearing children.
- Carefully matched oral and total communication students scored significantly lower.

Wandel, Jean E. (1989) *Use of internal speech in reading by hearing-impaired students in oral, total communication, and Cued Speech programs*. New York: Teachers College, Columbia University, Doctoral Dissertation.

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### Phonological Awareness

- In hearing children, research shows:
  - Phonological abilities are correlated with subsequent reading achievement
  - Link is causal between some phonological tasks and reading achievement
- Cued Speech children have comparable phonological awareness skills.

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### Visual Speech in the Head

- Leybaert & Charlier (1996)
- Deaf children with early exposure to CS had skills like those of hearing peers
  - Rhyming, Memory, Reading, Spelling
- Deaf cueing pre-readers had better rhyming skills than hearing pre-readers

Journal of Deaf Studies & Deaf Education, 1(4), 234-48. *The Effect of Cued Speech on Rhyming, Remembering, and Spelling.*

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### Cued Speech and Cochlear Implants: Powerful Partners - Osberger (1997)

- Exposure to Cued Speech provided benefits pre- and post-implant as compared to other groups of children.
- Tested on awareness of sound and language development.

Osberger, M.(1997) The Hearing Review. , 4(10), 28-31. *Current issues in cochlear implants in children*

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### Cued Speech and Cochlear Implants: Powerful Partners View, et al. (1998)

- All children improved in speech production and spoken syntax after implantation (oral, signing, cueing)
- Cued Speech group demonstrated more advanced syntax and language complexity than others.

View, A. Et al. (1998) International Journal of Otorhinolaryngology, 44, 15-22. *Influence of communication mode on speech intelligibility and syntactic structure of sentences in profoundly hearing impaired French children implanted between 5 and 9 years of age.*

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### Deaf cuers are like deaf signers because...

- They use a visual form of communication.
- Speech is not necessary for communication.
- The majority can sign fluently.
- They utilize many assistive devices.



*Cuers can be a part of the Deaf Community.*

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### The First Step to Literacy is Knowing the Language

- To learn and internalize a language, children must *experience*, i.e. be “bathed” in the language.
- They must *practice* and *use* the language *in conversation*, i.e. “face-to-face.”
- They must have: repetition, consistency, frequency and intensity
- Children do not learn a language effectively through print only.

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### National Cued Speech Association



- [www.cuedspeech.org](http://www.cuedspeech.org)
- [info@cuedspeech.org](mailto:info@cuedspeech.org)
- 800-459-3529
- Free first-year membership to parents
- Packets of information sent to parents upon request
- Newsletter, *On Cue*
- Network of parent/professional support

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