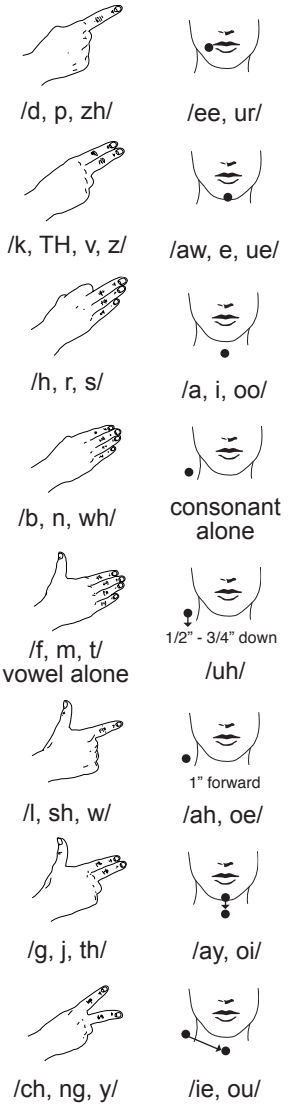
National Cued Speech Association

Cued American English:
Why is it important in deaf education?

Cued Speech for American English

Visually providing the building blocks needed for communication, language development, and literacy.



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Spoken English has more than 40 phonemes, some of which look similar on the mouth, and therefore are difficult to distinguish visually. Consequently, the amount of information a skilled lipreader can discern during conversational discourse ranges from about 20% to 60%.[1] In the best-case scenarios, hearing aid amplification or cochlear implants provide the aided listener access to most speech sounds in a quiet setting. When background noise is added, it interferes greatly with a person's ability to **discriminate** speech sounds.

The system of Cued Speech is designed to remove ambiguity from lipreading by assigning similar-looking phonemes to different handshapes and placements. For example, the phonemes /m/, /b/, and /p/ look very similar on the mouth. If you were to say one of the following sentences, without voice or in a high-noise situation, it would be nearly impossible for the lipreader to figure out which sentence is which:

I made the bet with Matt.
I made the bet with Pat.

If you have more context and/or powers of deduction, it can be possible to figure out sentences, such as the following, just through logic:

I went to the park with Mark.

You're not likely to say "I went to the mark with park."

However, a child who is 2, 3, or 4 years old will not have that ability to process higher-level language and logic. If part of the information is missing or unclear, it becomes difficult to stay on track, even with good language ability. A cue-reader has access to 100% of the information through visual means. This complete and total access to language ensures that a child can develop language skills appropriate to his age.

Listening & Spoken Language Education

While it is important in providing the child who is deaf or hard-of-hearing with strategies to listen to and identify as much auditory information as possible and use that for developing speech skills, it is also important to realize that not all auditory information is accessible or clear even with the best assistive listening technology available. Learning or acquiring a spoken language is a struggle when some information is missing as a result of insufficient auditory potential and ambiguous visual stimuli.

American Sign Language

American Sign Language (ASL) is a language with its own grammar, syntax and community; however, one must be exposed to native and/or fluent users of ASL to

acquire it. Since the majority of children who are deaf or hard-of-hearing have hearing parents (90%), these children usually have limited access to appropriate ASL language models. It typically takes several years to become fluent in any new language. A family that chooses to learn how to sign and does not have ASL models consistently available may place their deaf child at risk for an additional several years of first-language delay from the time of diagnosis. Deaf children of Deaf parents or other fluent signers are not at risk for language delay and have access to a solid foundation for learning English as a second language.

Signed English and Other Sign Systems

Signed English, Seeing Essential English (SEE 1), Signing Exact English (SEE 2), Conceptually Accurate Signed English (CASE), and Linguistics of Visual English (LOVE) are all types of Manually Coded English (MCE) systems. None of them are languages. They are all systems that were developed to try to show English through signs. However, they show English at the word-meaning level, not at the phonemic level. For example, the signs for *cat* do not show the phonemic properties of the word as /k, a, t/. The signs for the word *book* do not show the phonemes /b, oo, k/. Cued American English conveys the complete English language phonemically.

How Cueing Helps Solve Weaknesses in Deaf Education

Children who are deaf or hard-of-hearing and use either the listening and speaking or signing approach to communication and language typically struggle with decoding the phonemic information needed to process written English. Signing does not provide phonemic awareness for spoken languages. Students who use a sign system or ASL struggle with connecting the signs to printed words.

Children who use aided hearing (either with hearing aids or cochlear implants) to communicate do not receive complete information about the spoken language, as many of the phonemes look identical on the mouth (such as /t, d, n, l/ or /i, e/). Cueing a spoken language provides information at the phonemic level, so the process for cuers to connect spoken words to print is similar to the process used by hearing children. One interesting study showed that deaf cuers and hearing children make similar spelling mistakes. For example, they might write *blue* as "bloo" or *done* as "dun." However, deaf signers' spelling mistakes tend to be related to sequencing, such as "bule" instead of *blue*.[2]

Also, deaf or hard-of-hearing signers typically struggle with the idea of rhyming and don't understand how words such as *bird* and *word* are rhymes, but *here* and *where* are not. A deaf signer's interaction and understanding of English is largely based on the printed word. However, deaf cuers typically have the same understanding of rhyming as their hearing peers and can identify rhyme pairs as well as produce spontaneous rhymes.[3] Rhyming is often used as a predictor of future reading success in hearing children. Without the ability to rhyme and manipulate the phonemes of the language, reading will plateau at the third- or fourth-grade level.[4]

Conclusion

Having access to a complete language from the earliest time possible allows a child who is deaf or hard-of-hearing to develop that language naturally and use it in school to develop reading and writing skills. Cueing enables children to establish this strong foundation needed for developing literacy skills.

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1 Jeffers, J., & Barley, M. (1971). *Speechreading (lipreading)*. Springfield, IL: Charles C. Thomas.

2 LaSasso, C., Crain, K. L., & Leybaert, J. (2003). Rhyme generation in deaf students: The effect of exposure to Cued Speech. *Journal of Deaf Studies & Deaf Education*, *8*(3), 250-270.

3 LaSasso, C., & Crain, K. L. (2003). Research and theory support Cued Speech. *Odyssey*. Fall, 30-36.

4 Lyon, G. Reid. 2003. What principals need to know about reading. *Principal. 83*(2), 14-18.

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