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Cued Speech:

An Opportunity Worth Recognizing

By Karla Giese

When I first visited the Alexander Graham Bell Montessori School (AGBMS) several years ago, I was not sure what to think about Cued Speech. I asked a lot of questions, and I requested to see unedited writing samples from several deaf students there. What I saw astonished me. Each sample was written in age-appropriate English. I wanted to know why, so I started exploring and researching Cued Speech.

What Is Cued Speech?

English, as every speechreader knows, is only partially visible on the lips. In fact, the amount of English that is clearly distinguishable, even should a speaker talk slowly and clearly, has been estimated to be as low as 30 percent. Certain sounds such as “pah” and “bah,” and even whole words such as *mat*, *bat*, and *pat* or *mark*, *bark*, and *park* are indistinguishable when seen on the lips. When these words occur together (e.g., *Pat, put the bat on the mat.*” or “*Mark, why did the dog bark at the park?*”), whole sentences can look the same.

In 1965, Dr. Orin Cornett, a professor at Gallaudet University, invented a visual system to address this issue. Cornett paired handshapes with sounds. By using these handshapes near the mouth in conjunction with speech, spoken language would attain a visible form. Deaf and hard of hearing individuals would not be dependent on the guesswork inherent in lipreading. Cornett reasoned that when distinct speech sounds—called phonemes—could be made to look different from each other, then a deaf or hard of hearing child could understand the speaker. With the systematic use of accompanying handshapes, a young deaf or hard of hearing child could have visual access to spoken English or any other spoken language.

Using hands to code English spoken “through the air” would allow deaf and hard of hearing children to learn it through vision almost as easily as hearing children learned it through listening (Cornett, 2000). Cornett’s system became known as Cued Speech.

Photos courtesy of Karla Giese



The National Cued Speech Association (www.cuedspeech.org) provides the following definition:

Cued Speech is a visual mode of communication in which mouth movements of speech combine with “cues” to make the sounds (phonemes) of traditional spoken languages look different. Cueing allows users who are deaf, hard of hearing, or who have language/communication disorders, to access the basic, fundamental properties of spoken languages through the use of vision.

Today about 8 percent of deaf and hard of hearing students enrolled in programs throughout the United States use Cued Speech, according to Gallaudet University’s *Regional and National Summary Report of Data from the 2013-14 Annual Survey of Deaf and Hard of Hearing Children and Youth* (Office of Research Support and International Affairs, 2014). While this constitutes a small number, these students, like all of our students, deserve support in their choice of communication.

Cued Speech makes each sound-based unit of speech visible by using eight handshapes in four positions near the mouth, provides visual access to the sounds of spoken English, and allows users to internalize its phonemic patterns. Phonemes, the building blocks of words, are the smallest unit of speech that make one word different from another word. For example, the sounds “puh,” “mmm,” and “buh” (represented by the letters *p*, *m*, and *b*) comprise different phonemes that when joined with “at” produce the words *pat*, *mat*, and *bat*.

One of the most important goals of Cued Speech is to

Above, clockwise from left: A teacher cues “moo” with a student; a student cues /ee/ at the beginning of the word “eat”; another student cues the word “turkey” (the first phoneme is /tur/ and the second is /kee).

support student’s development of literacy. The National Reading Panel (2000) stated that knowledge and understanding of the phonemic pattern of English is an integral part of learning to read English. Cued Speech provides a pathway to that phonemic pattern through vision, completely bypassing auditory channels. Cued Speech is not a language but a code for sound patterns that can be used to support the process of learning to read and write. For users of Cued Speech, reading becomes learning a visual consonant-vowel code via print to match the language they already know via cued English.

In addition to English, Cued Speech has been adapted to over 65 languages worldwide. It was never designed to replace American Sign Language (ASL). In fact, Cornett, the inventor of Cued Speech who advocated for it during his entire lifetime, encouraged those who used Cued Speech to also learn and use ASL. ASL allows full linguistic and emotional expression and connection to other people—deaf and hearing—who use ASL; it also supports connection to Deaf culture and the Deaf community.



Above: Giese cues /b aw/ at the beginning of the word “ball.”

Far right: Examples of phonemes in English.

Using Cued Speech in addition to ASL or other communication philosophies, such as Sign Supported Speech or Simultaneous Communication, can be beneficial in a multitude of ways:

- Spoken languages are acquired naturally through daily interaction and not explicitly taught. The use of Cued Speech allows deaf and hard of hearing children to experience language immersion through vision and supports the natural acquisition of English (Kyllo, 2003).
- Cueing is distinct from ASL. Using Cued Speech preserves the linguistic and structural integrity of ASL and allows for a clear separation of two languages: English and ASL.
- Cueing supports bilingualism. With English and ASL confirmed as two distinct languages, cueing provides access to English in its spoken form while allowing ASL to be used without interference.

Uses of Cued Speech

While Cued Speech can be used for full spoken language immersion and to support the development of the phonemic awareness critical to learning to read, it can also support lipreading, auditory discrimination, speech, and pronunciation (Cornett, 2000; LeBlanc, 2004; Wang, Trezek, Luckner, & Paul, 2008).

Areas in which Cued Speech has been shown to have an impact:

- **Language**—As Cued Speech makes spoken language accessible through vision, it allows hearing families to share the native language(s) of the home with their deaf and hard of hearing members; these families can provide language access to a language they already know so their children are not deprived of language at a young age.
- **Literacy**—As Cued Speech provides visual access to the phonemic code of spoken language, it provides students with a critical component in learning to read. Cued Speech can be paired with phonics-based instruction often used in the schools.
- **Lipreading**—As Cued Speech disambiguates lip movements, it removes confusion of look-alike sounds, words, and sentences.
- **Auditory discrimination**—As Cued Speech validates or clarifies what was heard, it can be used to train the brain to discriminate between specific sounds for those who use hearing aids or cochlear implants and are working on their listening skills.
- **Speech and pronunciation**—As Cued Speech can visually show proper pronunciation, it can reinforce speech skills. Since Cued Speech is phonetically based, the deaf or hard of hearing child is completely aware of all the sounds that make up each word, which can support the articulation process.

Cued Speech in Schools: AGBMS

AGBMS prides itself on providing unique educational options for deaf, hard of hearing, and hearing students. Located in the suburbs of Chicago, AGBMS is a full-inclusion program providing a Montessori curriculum with both individualized and small-group instruction that allows students unlimited opportunities for interaction with their same-age peers—deaf, hard of hearing, and hearing. Cued Speech is used throughout

Want to Learn More?

We are happy to share more information about Cued Speech. You can contact the **National Cued Speech Association** (www.cuedspeech.org), **AGBMS-AEHI** (www.agbms.org), the **Illinois School for the Deaf** (www.illinoisdeaf.org), or **CueSign, Inc.** (www.cuesigncamp.com). Feel free to ask about upcoming workshop opportunities or to join any of the annual Cued Speech Camps!

the school with *all* the students, and ASL is used as a supplement. Each teacher receives formal instruction in Cued Speech and uses cues with the students, allowing for direct communication access in any classroom regardless of a student's hearing status. Cued Speech is used throughout the day but especially during lessons in language and literacy. A teacher of the deaf and hard of hearing, a speech-language pathologist, and a language enrichment specialist work closely with staff to ensure language immersion and accessible communication are ongoing.

AGBMS provides support services for deaf and hard of hearing children from birth to 15 years old and designs an Individualized Education Program (IEP) for each student based on his or her language and communication needs. Due to the specialized nature of the team and design of the school, AGBMS is able to provide a range of educational opportunities, from one-on-one assistance, to self-contained classroom support, to full inclusion. AGBMS is approved by the Illinois State Board of Education to provide services to deaf and hard of hearing children as well as children with speech and language delays.

The IEP team closely monitors the reading and writing progress of each deaf or hard of hearing student. Our goal is to close the gap that deaf and hard of hearing students often experience between their own reading and writing levels by using Cued Speech so our students leave AGBMS using age-appropriate (or above!) reading and writing skills. Goals incorporated into the IEP have a heavy emphasis on language development, and we work with each student individually to ensure he or she is making appropriate gains.

AGBMS, through its Alternatives in Education for Hard of Hearing and Deaf Individuals (AEHI) component, provides statewide outreach, including Cued Speech workshops, individualized parental training and support, educational consulting, professional development opportunities, and access to a wide variety of information on the benefits of Cued Speech.

Cued Speech at ISD

The Illinois School for the Deaf (ISD) began to incorporate Cued Speech into its bilingual program during the 2010-2011 school year. Cued Speech was incorporated when data collected by ISD teachers indicated that ISD students, while making progress in phonics and reading with the support of Visual Phonics, were still experiencing issues with comprehension. Working in collaboration with a literacy consultant, ISD administrators came to believe that the students' lack of English knowledge was the primary cause for their deficiencies in reading comprehension. To address this concern, ISD educators decided to increase the use of spoken English with sign support, to use English as the primary language of instruction during literacy lessons, to increase the

writing activities completed by students, and to explore Cued Speech.

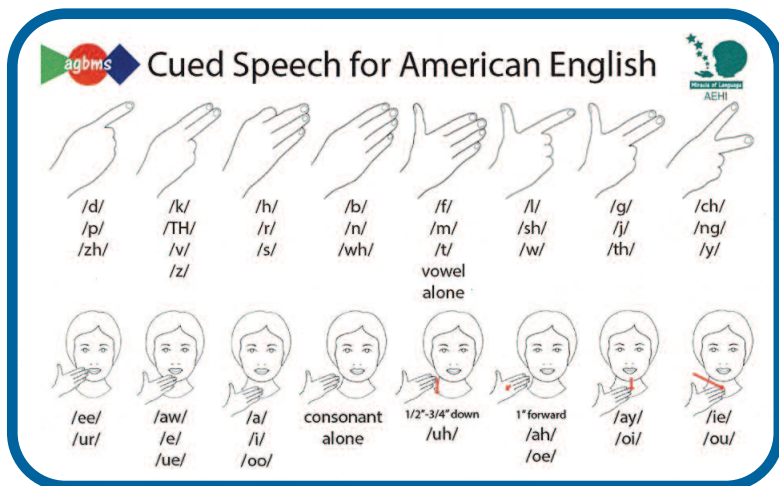
After attending a formal Cued Speech training, two experienced high school educators requested permission to look at the use of Cued Speech and Visual Phonics in two high school reading classes. Both educators would teach the same program. One educator taught using Cued Speech; the other educator taught using Visual Phonics. At the completion of the program, the outcomes were compared. While the experiment did not meet the parameters of a formal study, results indicated that students who were instructed using Cued Speech outperformed the students who were using Visual Phonics. This improved performance occurred in the following areas: generalization, ability to chunk/segment and blend sounds, retention of irregular pronunciations, and ability to receptively



understand cued information. The teachers noted that when Cued Speech was used, there were increased opportunities for repetition and practice of content in the classroom. The ISD administration made the decision to move forward with expanding the use of Cued Speech in reading and language classes across all grade levels. The purpose: to provide students with a complete visual representation of the English language, allowing them the opportunity to acquire English naturally through face-to-face communication in adherence with ISD's bilingual program goals.

Today Cued Speech is used—but with wide variance—in classrooms and subject areas throughout ISD, pre-kindergarten through post-high school. The language of instruction in a given class is based on several factors, including educators considering the language needs of the students in the classroom, the target language of the lesson, the language in which the information presented will be assessed, and the requirements set forth in the IEP of each student.

Below: Cued Speech handshapes and positions.



from all walks of life, with diverse backgrounds and native languages. According to its website, CueSign’s membership includes deaf and hard of hearing children, teenagers, adults, Cued Speech transliterators, ASL interpreters, parents of deaf and hard of hearing children, counselors, teachers, and children of deaf adults.

When I look back, I am happy that I kept an open mind and explored the use of Cued Speech, especially for the purposes of English literacy. Cued Speech allows deaf and hard of hearing children to see the language they are learning in real time—and every student is entitled to be supported in his or her chosen mode of communication and instruction.

Cued Speech and ASL

If a deaf child is born to a family in which the parents are deaf and ASL is the native language, that child will most likely learn ASL as his or her primary language—and could learn English as a second language via Cued Speech. A deaf child who is born into a family in which the parents are hearing could learn English via Cued Speech as his or her first language and ASL as a second language.



Cued Speech provides an effective tool for bilingual families who wish their deaf or hard of hearing children to develop English proficiency. In my interactions with native cuers over the years, I have learned that many “cue kids” learn ASL by their teen years. The native

cuers that I know generally prefer English for academics and communication with hearing people and ASL for communication with others who are deaf or hard of hearing.

Cueing and ASL can be incorporated into children’s lives in a variety of ways:

- Cueing at home and using ASL at school
- Cueing at school and using ASL at home
- Cueing for half a day and using ASL for half a day
- Cueing for phonics instruction and using ASL for storytelling
- Cueing for English instruction and ASL for ASL instruction

CueSign, Inc. (www.cuesigncamp.com) supports the use of both ASL and Cued Speech. CueSign brings people together

A special thank you to Angela Kuhn, pre-K-8 principal at the Illinois School for the Deaf, and Amy Crumrine, CueSign, Inc., board president, for their contributions to this article. Portions of this article have been taken directly from the AGBMS website with permission.

References

Cornett, R. O. (2000). *Cued Speech: What and why?* Retrieved November 1, 2017, from <http://www.cuedspeech.org/cued-speech-what-and-why.php>

Kyllo, K. L. (2003). Phonemic awareness through immersion in cued American English. *Odyssey*, 5(1), 36-44.

LeBlanc, B. M. (2004). A public school Cued Speech program for children with hearing loss and special learning needs. *Volta Review*, 104(4), 327-338.

National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Washington, DC: U.S. Department of Health and Human Services.

Office of Research Support and International Affairs. (2014). *Regional and national summary report of data from the 2013-14 annual survey of deaf and hard of hearing children and youth*. Washington, DC: Gallaudet University, RSIA.

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