

Cueing with Babies:

Answers to Frequently Asked Questions

Cued Speech for American English

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











/k, TH, v, z/

/aw, e, ue/





/h, r, s







/b, n, wh/

consonant alone





/f, m, t/ vowel alone



/I, sh, w/





/g, j, th/



/ch, ng, y/

/ie, ou/

Author: Grace Consacro

Cued Speech can provide an avenue for you to convey the language of your home to your child who is deaf or hard-of-hearing as soon as a hearing loss has been identified. How and when should you introduce cued English to your very young child? The short answer is *immediately*.

Once a hearing loss has been identified, you can learn how to cue and begin cueing just as you would speak to a hearing baby. As a baby is cooled over and cuddled, you can begin the process of teaching language to your child simply by cueing all you say.

Parents who are deaf and already know how to cue are at an advantage as they will naturally begin cueing immediately on the birth of their child, whether the baby is hearing or deaf. Any child can acquire the language of the home from the parents using Cued Speech. The sooner and more consistently your child is cued to, the more likely she will begin imitating cues and start cueing and communicating with you and others.

Why should I cue with my baby?

For many parents, the language of the home is spoken. If you are one of these families, cueing is a way for you to visually convey your natural "family" language to your child who is deaf or hard-of-hearing. Cueing enables you to communicate with all members of the family simultaneously, without switching between languages.

Reading and literacy development are also important to all parents. Early cueing allows children to absorb and understand the different phonemes, or sounds, that make up their native language. They will naturally develop one critical factor of "emergent literacy," or reading readiness: phonemic awareness. With Cued Speech, you can provide your child with a language-rich environment that makes it easier to communicate all the things in their world.

How old does a child need to be in order to cue to her?

You can cue to your child from birth, just as you would speak or sign to her from birth.

Will cueing help my child learn to listen and use spoken language?

Yes! Cued Speech is a perfect partner in the journey toward getting your child to speak and use her hearing. Cueing to your child enables her to see the pronunication of words and clarifies sounds that are difficult to distinguish

through vision (for example: /m, b, p/) and through hearing (for example: /b, d, g/). By establishing a strong language base in your child through cueing, speaking with correct grammar and a high level of vocabulary will come naturally and listening will become much easier because your child can anticipate what she is listening for.

Does my child need hearing in order to cue? Can I cue to a child who is profoundly deaf?

Cued Speech was originally intended for use with children who are profoundly deaf or have no usable residual hearing. These children thrive on the visual access to language that cueing can provide. In addition, cueing has proved to be effective for children who are hard-of-hearing, helping to clarify auditory information in noisy situations and providing visual confirmation of difficulat to hear words and word endings. Hearing children with speech, language, and/or auditory processing problems can also gain tremendous benefit from cueing.

What/when should I cue to my baby?

Ideally, you would cue *everything* that you say during the normal course of your day. However, as you first learn to cue that may not be possible. Pick some "routine" parts of your day to cue consistently—during mealtimes, diaper-changing or toilet training, running errands, bath time, bedtime, and at the grocery store, as well as during playtime or other special family occasions/outings. The goal is to cue whenever you talk. Don't worry if your baby is not looking directly at you at first; she will eventually realize that what you're doing is communicating and start paying attention.

Research in language development shows that babies learn words used in isolation first. This is good news for parents new to cueing. Cueing one word (such as *ball*) and building upon it (*red ball* or *little red ball*) is helpful and a natural process for language development in young children.

How can I become fluent so that I can cue to my baby quickly?

The short answer is—*practice, practice, practice!* One way to increase your speed is to write down a list of some things that you say to your baby each day and practice those until you can cue them easily and quickly.

For example, you can cue the words *mother*, *father*, *grandma*, *grandpa*, as well as the names of other family members, including brothers, sisters and family pets, and close friends and relatives that the child interacts with regularly. You can also cue the names of common foods and household items (*milk*, *juice*, *cereals*, *water*, *eggs*, *cheese*, *chicken*, *apples*, *coat/jacket*, *bottles*, *cup*, *spoon*, etc.), favorite toys (*ball*, *bear*, *baby*) and so forth.

Words and phrases in your repertoire that are quick and easy to cue will increase your overall speed as you add "unfamiliar" words to your child's language. Common phrases might include the following:

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"It's time for..." (bed, nap, lunch, dinner)
"Do you want..." (juice, blankie)
"Where is..." (Daddy? Mommy? the kitty?)
"I see ..." (your nose, a plane, a tree)
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Will my baby cue back to me? When?

Yes, your baby should be able to approximate some cues back to you after a while. The time frame of when a baby might begin to cue has not yet been definitively established. There is some research in progress now that seems to suggest that a baby might develop some cue approximations or baby cues at the same time that hearing babies begin to speak or deaf babies begin to sign back to their parents, which is typically between 9 and 18 months of age.

Cueing, just like signing, requires some manual dexterity and fine motor skills which may impact your baby's ability to perfectly convey the entire system while they are first cueing. Children who are hearing often have approximations or mispronunciations in their speech for difficult-to-produce sounds through the age of six or seven. Cueing children will experience the same need to offer an approximation for a cue and develop expressive skills over time as you encourage him to cue.

You can encourage expressive cueing in your child by looking for approximations and reinforcing the use of them. For example, a child might tap his throat or chest area with his pointer finger to indicate *daddy* and use an open hand at the throat to indicate *mommy*. All babies offer approximations of speech; observant parents will be able to identify cue babbling and attempts and can encourage their use as the baby's skills develop. Anecdotal evidence shows that babies will likely cue words with the easiest handshapes (5, 1, 6) and/or use one or two primary locations before correctly moving from one location to another.

Will my baby speak when she cues?

If you speak and cue, then your child is likely to speak and cue. If you choose to cue without using your voice, than your child won't use her voice either. It is possible to to cue and speak simultaneously. As your child learns to speak, either naturally through exposure or with the assistance of therapy, cueing will help you understand the approximations she makes as she learns to speak. Cueing shows what the target consonant and vowels are for each word and phrase. Cues can provide the "place holder" for your child as she learns to articulate difficult to produce sounds, such as /k, ng, l, y, r/.

Can my child learn to sign and cue at the same time?

Yes! Native speakers of a language provide the best models of that language. Individuals who use a spoken language can share that language via Cued Speech and those who use a signed language can sign. Because cueing uses one hand and the mouth near the face and signing uses two hands in a larger area around the body, children can easily distinguish between the two modes of communication.

Conclusion

You can provide the language of your home visually to your baby who is deaf or hard-of-hearing. Cueing will safeguard your child's language development as you explore options for early intervention and, possibly, assistive listening technology. Cueing provides the best foundation for your child's communication (including listening and spoken language), reading, and literacy development. You should encourage your child to cue as soon as possible. To provide clear and consistent exposure to language, you should cue as often as possible to your child.

Resources

- Cornett, R.O. & Daisey, M.E. (Eds.). (2000). *The Cued Speech resource book for parents of deaf children* (2nd ed.). Cleveland: National Cued Speech Association.
- LaSasso, Carol J.; Crain, Kelly Lamar; & Leybaert, Jacqueline (Eds.) (2010). *Cued Speech and cued language for deaf and hard of hearing children*. San Diego, CA: Plural Publishing.
- Ling, D. (1989). Foundations of spoken language for hearing-impaired children. Washington, DC: Alexander Graham Bell Association for the Deaf.
- Paul, P.V. (1998). *Literacy and deafness: The development of reading, writing, and literate thought*. Boston: Allyn & Bacon.
- Schwartz, S. (1996). *Choices in deafness: A parents' guide to communication options*. (2nd ed.). Rockville: Woodbine House.
- Sheetz, N.A. (2001). Orientation to deafness (2nd ed.). Boston: Allyn & Bacon.



Cued Speech = Visual Access to Spoken Language

Cued Speech for American English

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







/ee, ur/





/k, TH, v, z/

/aw, e, ue/





/h, r, s

/a i oo/





/b, n, wh/

consonant





/f, m, t/ vowel alone







/I, sh, w/









/ch, ng, y/

/ie, ou/

Authors: Hilary Franklin & Amy Ruberl

Cued Speech

This mode of communication uses the mouth and hand to visually distinguish the building blocks or phonemes of a spoken language, thus allowing for the clear transmission of language between two or more cuers. Handshapes, hand placements, and hand movements combine with mouth movements to clearly show the stream of consonants and vowels that represent the words and thoughts of a cuer.

The Original Purpose of the System

Dr. R. Orin Cornett, the creator of Cued Speech, developed the system in 1966 for the purpose of improving the poor literacy levels he saw occurring in deaf education around the country. By providing visual access to the stream of consonants and vowels of a language at a rate similar to speech, he felt children who are deaf or hard-of-hearing could acquire English in a way that American Sign Language and oral education are unable to provide.

Cued American English

English contains approximately 40 individual phonemes. In cued English, consonants are represented by handshapes and vowels are represented by placements and movements. See the graphic on the left for the components of cued American English. Consonants on the same handshape look different on the mouth. Vowels occurring at the same placement also have different mouth shapes. When these handshapes and placements are paired with corresponding mouth shapes and facial expression, the basic building blocks of English (phonemes) can be expressed at a rate similar to that of spoken language. By providing access to this stream of consonants and vowels with additional information (facial expression, force of cues, head movement, etc.), Cued Speech conveys a rich language visually with all of its intricacies and nuances including laughter, surprise, anger, sarcasm, teasing, annoyance, indifference, joy, and so forth.

Learning How to Cue

Children exposed to cueing during the critical time of language development, birth to age six, learn how to cue by being exposed to it. Just as most hearing children simply hear English around them and begin to play with sounds as they babble, children who cue learn by being immersed in a visually language-rich environment.

For adults who want to apply this skill to a language they already know (spoken or written), the process is much more deliberate and the time it takes

to achieve proficiency varies by individual. The system used to convey cued English is a closed set of information, containing the components you see on the left-hand side of the first page, in combination with mouth movements and facial expressions. The mouth movements and facial expressions are ones you already use naturally in conversation with others. As you learn the pieces of the system and how they apply to English, you learn how to select the appropriate representation for your dialect of American English.

Dissecting the words you use to communicate into a stream of consonants and vowels is a task that some easily master. Others take longer to break words down into these small building blocks. Consonants and vowels do not always correlate with the printed word. Just as learning to spell in English can be a challenge (for example: *though*, *through*, *cough*, and *tough* do not rhyme, but *fare*, *hair*, and *tear* do), learning to cue can be challenging as well. You need to stop thinking in terms of spelling and start thinking in terms of target phonemes (what consonant or vowel sounds the letters are representing). For example, the following words all end with the phoneme /f/: graph, if, and laugh. These words all contain the short vowel /e/: head, bed, said, says, friend, and guest.

Your ability to accurately identify a stream of phonemes plays a large role in how long it will take you to develop cueing skills. Learning the pieces of the system takes some instruction and memorization and can occur in a short time frame. After memorizing the system and learning how to execute the cues, the next step is to build speed and fluency. These skills come with practice, repetition, and use. New cuers tend to develop a set of phrases they are comfortable using and then slow down when they encounter a word they have never cued before.

Cue camps and workshops that take place around the country are often the best place to learn how to cue. Teachers need to be certified by the National Cued Speech Association (www.cuedspeech.org) in order to work at NCSA cosponsored camps. This ensures that the information presented about the system, including its history, is taught consistently, no matter who the instructor is. At camps, you receive excellent instruction during the day with the added benefit of times outside of class when you see cueing in action in myriad ways (parent to child, friend to friend, deaf adult to hearing child, etc.). This exposure aids in understanding how the mode of communication actually works and provides a realistic expectation that your speed will develop in time.

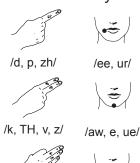
While having an instructor is best to ensure that you are executing the cues correctly and not acquiring any hard-to-break habits, you can learn to cue from a DVD or CD-ROM. Contact Cued Speech Discovery (www.cuedspeech.com) for a catalog to see what resources are available. These products can be very useful after you have taken a class, to provide practice and reinforcement of newly acquired skills and knowledge.

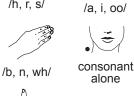


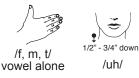
Cued Speech: Myths and Facts

Cued Speech for American English

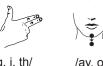
Visually providing the building blocks needed for communication, language development, and literacy.

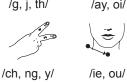












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Myth: Cued Speech = Speech

Fact: Cued Speech does not require the use of speech or voice to communicate clearly, nor was it developed for the purpose of improving a deaf person's speech skills. While speech therapists and auditory rehabilitation specialists have employed the use of cueing in therapy sessions as a biofeedback tool, it is considered a secondary benefit of the system. In the 1960s, it was believed that phonemes and speech were interrelated and could not be separated, and this is partly why the system was named "Cued Speech."

Myth: Phoneme = Sound

Fact: While hearing individuals do interpret the term "phoneme" to mean the sounds of a language, deaf individuals have different interpretations of the word. For a deaf cuer, a phoneme is a visual representation of a building block of a language. For those who use signed languages, such as American Sign Language, phonemes are based upon the parts of the signs (handshape, palm orientation, location, and movement).

Myth: Cued Speech is now called cued English or cued language.

Fact: Cued Speech is the name for the mode of communication first developed for American English in 1966. The Cued Speech system has since been adapted to more than 60 languages and major dialects (as of December 2006). These languages have some phonemic differences from American English; therefore, the handshape and hand placement groupings in Cued Speech may or may not be the same across languages. Cued American English and cued British English have different vowel groupings, which can make cued communication between users of the two systems difficult.

Myth: You can't cue to babies.

Fact: In fact, infancy is the BEST time to start introducing a child to language. By cueing as soon as possible with a child, you maximize her chances for success in developing strong communication, language, and literacy skills. When encouraged to do so, babies will "cue babble" and make approximations of words using both their hands and mouths.

Myth: Once an individual receives a cochlear implant, cueing is no longer necessary.

Fact: Cueing provides consistent and clear visual access to language and environmental information. Cochlear implant users who cue report that while

they are better able to interact with non-cuers when their implant is on, cueing clarifies and validates what they hear with the implant. They prefer to have the clear communication that cueing provides to decrease the burden of struggling to understand the message solely through auditory means.

Myth: Children who are deaf can't rhyme.

Fact: Research has demonstrated that cuers who are deaf are able to rhyme in a manner similar to their hearing peers. These cuers were able to generate rhymes based not only on spelling (*fear* and *hear*) but with words where spelling offers no hint at the rhyme (*bird*, *heard*, *word*, and *curd*).

LaSasso, C., Crain, K., & 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.

Myth: Facial expression is not important when cueing.

Fact: Facial expression provides a great deal of information about the context and content of the message. The face and body provides details about the cued message that a hearing person would garner from audition alone (the rising and falling of tone, stress on a particular word, emotion, etc.). In other words, facial expression provides answers to questions such as the following: Are you asking a question or making a statement? Are you teasing or serious? Are you providing a definitive answer or being wishy-washy?

Myth: Cued Speech was developed to replace ASL.

Fact: Cued Speech was developed to help raise the literacy levels of deaf individuals. Dr. Cornett, the creator of Cued Speech, envisioned that sign language would always be a part of the deaf community; however, by cueing, children who are deaf would have a way to easily acquire the native home language, read and write proficiently, and more easily communicate with hearing family members who cue.

Myth: Cueing only works for children who have a lot of residual hearing.

Fact: Cued Speech was originally intended for use with children who are profoundly deaf or have no usable residual hearing. These children thrive on the visual access to language that cueing can provide. In addition, cueing has proved to be effective for children who are hard-of-hearing, helping to clarify auditory information in noisy situations. Hearing children with speech, language, and/or auditory processing problems can also gain tremendous benefit from cueing.

Myth: SEE/sign systems provide complete access to English.

Fact: 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 and affix (prefixes and suffixes) level, not the phonemic level. For example, the sign for *cat* does not show the English phonemes for the word as /k, a, t/. Results of research by Reid Lyon at NIH indicate that access to the phonemic stream of language and the ability to manipulate that stream are prerequisites to strong reading and writing skills. While these signing systems are adequate for communication between users of two separate languages (ASL and English), they do not provide enough information for native acquisition of English and future development of reading and writing skills.

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



Using Cued Speech to Maximize the Benefits of Cochlear Implants

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The widespread use of cochlear implants (CIs) with children who are deaf and hard-of-hearing is changing how we teach these children. Cochlear implants are not a cure for deafness. Nor are they guaranteed to work. As parents and educators embrace this new technology and strive to provide the maximum benefit possible to each child, Cued Speech can safeguard the language development of children who are deaf or hard-of-hearing.

- **What benefit do cochlear implants provide?** Cochlear Implants have changed the way children who are deaf receive auditory information. An implant may provide...
 - improved access to sounds.
 - > more incidental learning.
 - > more opportunity to learn through listening.
- So why is an implant not enough? Outcomes for children with cochlear implants vary widely. Not all children benefit greatly from cochlear implants because...
 - > nearly 40% of children who are deaf or hard-of-hearing have secondary disabilities
 - > cochlear implants have not solved the problems of distance and background noise.
 - hardware problems occur.
 - > some implants are not successful.
 - > the child cannot hear when the device is off or malfunctioning.
- ❖ How CAN you ensure success with an implant? Cue and speak to implant users. Cued Speech can...
 - > give visual clarity to children with cochlear implants.
 - > safeguard language development by giving specificity to what is heard.
 - > override the problems with distance, noise and reverberation.
 - > provide visual access to language when the CI is off or not working properly.
 - > serve as a visual dimension for implanted children with secondary learning or processing issues.
- ***** What do professionals in the fields of education and speech observe in children with implants who cue? These children...
 - > develop an internal phonological model of speech, which helps establish literacy.

- interpret the sounds that they are hearing and verify them with cues.
- have a safeguard for language development and literacy.
- > can keep up with the speed and amount of information in the mainstream that hearing peers are exposed to.
- **Where's the proof?** Recent research shows that speech/phonological processing includes both visual and auditory processing.
 - > Speech, for hearing people, is a bimodal percept when we see and hear the voice and lip movements of the speaker. The brain combines what it sees and hears to make the best guess of what is said. Children who get cochlear implants before 30 months of age are able to fuse the auditory and visual aspects of speech.
 - o Wassenhove, Grant & Poeppel. (2005). Visual speech speeds up the neural processing of auditory speech. *PNAS*. 102, 1181-1186.
 - ➤ While cochlear implant technology has improved, filtering out background noise is still problematic. Therefore, individuals who use implants may have a difficult time communicating in noisy environments.
 - o Niparko, J.K., et al. (2000). *Cochlear implants: Principles & practices*. Philadelphia: Lippincott, Williams & Wilkins, 27-28.
 - o Yost, W. (2000). Fundamentals of hearing. San Diego: Academic Press.
 - ➤ Information delivered visually through Cued Speech may help to refine the speech perception received through the cochlear implant.
 - o Leybaert, J. & Alegria, J. (2003). The role of Cued Speech in the language development of deaf children. In Marschark, M. & Spencer, P. (Eds.), *Oxford handbook of deaf studies, language, and education*. 261-274. Oxford: Oxford University Press.
 - ➤ Cued Speech users use the same parts of their brain—the auditory cortex—to process phonological information as hearing peers.
 - o Eden, G., Lansdale, M., Cappell, K., Crain, K., Zeffiro, T., & LaSasso, C. (Submitted for publication). Representation of the sound structure of language in deaf users of Cued Speech: A brain imaging study of reading. *Science*.
 - ➤ Children with cochlear implants who used Cued Speech showed rhyme sensitivity equivalent to age-matched peers. Exposure to Cued Speech reinforces the cross-modal interaction between auditory and visual cortex.
 - LaSasso, C., Crain, K. & Leybaert, J. (2003). Rhyme generation in deaf students: The
 effect of exposure to Cued Speech. *Journal of Deaf Studies & Deaf Education*, 8(3), 250270.



A Quick Overview of Cued Speech

Cued Speech for American English

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consonant alone





/f. m. t/ vowel alone

1/2" - 3/4" down /uh/





/l, sh, w/

/ah, oe/





/g, j, th/







/ch, ng, y/

/ie, ou/

Author: Amy Ruberl

- **Development of Cued Speech**: *Dr. R.Orin Cornett developed the system* in 1965–1966...
 - > with the primary goal of improving literacy.
 - > to overcome the problem of accessing spoken language.
 - > to provide access to the phonemes of language through vision, using the information from the mouth and one hand
- **Cued Speech Facts**: *Cued Speech was developed to aid the acquisition* of literacy skills in deaf students. Cued Speech...
 - > does NOT require any hearing or speech.
 - is NOT a language.
 - is a closed system adapted to more than 60 languages and dialects.
 - > DOES show the phonemes (consonants and vowels) of spoken languages visually.
 - requires synchronization of both the hand and mouth to send a complete message.
 - > IS a visual mode of communication.
- **Advantages of cued American English**: Cuers who are deaf or hard-ofhearing meet or surpass hearing peers in linguistic competence. These cuers...
 - > can acquire and use the same language other family members use at
 - receive visual access to English from their transliterators; therefore, they do not rely on interpretation.
 - have English skills that match the skills of their hearing peers.
 - ➤ have an accurate phonological model of a spoken language.
 - > can learn foreign languages as easily as hearing children.
- ❖ Deaf Community: Cuers can be members of the deaf community. These cuers are like signers who are deaf because...
 - > they use a visual form of communication.
 - > speech is not necessary for communication.
 - > a majority learn to sign fluently.
 - > utilize any of a variety of assistive devices.
- **Hearing Community**: Cuers can be members of the hearing community. Cuers who are deaf or hard-of-hearing are like adults who are oral/aural because...
 - > English is their first language.
 - > they use speech, speechreading, and/or listening with hearing individuals.
 - > utilize any of a variety of assistive devices.