

How Cued English Impacts Learning to Read and Write English for Deaf/Hard of Hearing Students

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Cued English provides deaf/hard of hearing children with visually clear and visually complete access to the consonant-vowel structure of English which in turn allows them to acquire the knowledge and experience of the English language needed to be a successful reader and writer of English. Having consistent exposure to cued English from an early age provides the deaf/hard of hearing child with English knowledge and experience that is equivalent to what hearing kids bring to the process of learning to read and write. Deaf/hard of hearing children's ability to use cueing to access English is independent of their ability to use residual hearing or to use speech. In other words, having oral/aural skills are not a prerequisite to using cued English, nor are they a product of using cued English. The development of oral/aural skills can be facilitated by cued English, but those skills require direct intervention and should not be assumed to develop on their own as a result of using cued English.

What kind of knowledge/experience with English is given through cueing?

- A. Phonemic Awareness—accessed through vision instead of through hearing
- B. English semantics (vocabulary, meaning of words)
- C. English syntax (the order of words in a sentence)
- D. English morphology (word endings)
- E. English idioms

A. Phonemic Awareness—accessed through vision instead of through hearing

What is a phoneme? Phonemes have *historically* been defined as an **acoustic event**, i.e., the “sounds” of a language, or simply, “speech sounds”. The dictionary¹ defines a phoneme as “one of the set of the smallest units of **speech** as the ‘m’ of ‘mat’ and the ‘b’ of ‘bat’ in English, that distinguishes one **utterance** or word from another in a given language.” **Cueing changes the way we define English phonemes.** Phonemes remain the smallest unit of English which distinguishes one word from another, i.e., the consonant and vowel “building blocks” of English, but they no longer need be defined by acoustic characteristics or tied to the speech sounds of the language. **Through cueing, the phonemes of English become a purely visual event.** Cueing allows the deaf child full access to the phonemic code of English through vision alone. As a result, the way we define phonemes must change. **English phonemes can be conveyed acoustically through speech or they can be conveyed visually through cueing.**

¹Webster's II New Riverside University Dictionary, p. 883, copyright 1984, Houghton Mifflin Company

Because the alphabet we use to read and write English uses letters to represent the phonemes of the language (unlike Chinese which uses characters to represent words), knowledge of those phonemes is extremely valuable to a reader/writer of English because it helps them learn the printed consonant-vowel code (letter symbols) by matching it to the consonant-vowel code they already know via cued English. Hearing children do this too by matching the printed code to the consonant-vowel code they already know, i.e., the auditory phonemes conveyed through speech.

Cued English represents the phonemes of English in a purely visual way with no ambiguity, so children exposed to cueing consistently, i.e., “cue kids”, have complete, visual access to the phonemes of English. The six-year-old deaf child who has been cued to for several years has figured out the phonemic code of English through unambiguous visual access just as a hearing child figures out the phonemic code through unambiguous auditory access. This means the deaf child exposed to cued English consistently can come to the task of learning to read and write with a level of phonemic awareness that is equivalent to a hearing child’s.

Considerable research has been done on the phonemic awareness skills that hearing kids have before they are taught to read or write English using printed symbols.

Phonemic awareness skills include:

1. Rhyming—recognizing if two words rhyme or not and generating rhyming words to match a given word
2. Word Segmentation—i.e., words have parts (syllables); there are long words (caterpillar) and short words (cat); butterfly has 3 “parts”, pumpkin has 2 “parts”
3. Syllable Segmentation—i.e., syllables are made up of individual phonemes, (“cat” has three phonemes: /k/ /ă/ /t/)
4. Sound Synthesis—you can take sounds and put them together to make syllables/words, ex., “s” + “ee” = see, but “k” + “ee” is a different word: key
5. Letter-Phoneme Association—the letter P says “p”. Given a letter, the child can tell you a word that starts with the phoneme associated with that letter (ex. given S, the child tells you, “soup”). Given a word, the child tells you the first letter (ex. given “bear”, the child tells you, “It starts with B.”).

Because cued English represents the phonemes of English in a purely visual way with no ambiguity, “cue kids” have complete, visual access to the phonemes of English. As a result, they can develop the above described phonemic awareness skills and arrive at the task of learning to read and write with the same knowledge that hearing kids bring with them to the task.

HOW do phonemic awareness skills help with reading and writing?

Hearing children use their auditory memory to learn which sound (auditory phonemes) should be associated with which symbol (printed letter) which then enables them to “sound out” a printed word. “Cue kids” use their visual memory of visual phonemes (the “cued” of cued English) to learn which phonemes to associate with which printed letter. Both sets of children come to the task of learning to read with a phonemic knowledge of the language. This knowledge allows the hearing child to “sound out” a printed word and it allows the deaf child to “cue out” a printed word. The decoding process is the same, but is accessed by different senses and memories i.e., the hearing child has an auditory representation of what a consonant or vowel means while the deaf child who has had consistent exposure to cued English has a visual representation of what a consonant or vowel means.

Cueing kids’ knowledge of the phonemic structure of the language also impacts the task of learning to write. Their knowledge of visual phonemes results in their ability to write phonetically, making the same phonetic mistakes that hearing children make. Their phonetically based spelling is often referred to by teachers as “invented spelling”, ex. “mome” for “Mommy” or “noz” for “nose” or “luv” for “love”. It is based on the children’s knowledge of the phonemes of the language. This type of phonetic spelling may be incorrect but is viewed among reading teachers as desirable because it shows that the child has “broken the code” of letter-phoneme associations.

Although it is true that written English does not follow a 1:1 phoneme-symbol association, i.e., there are many exceptions to the phonic rules, this phoneme-symbol correspondence remains the basis for the alphabetic system. The seemingly inconsistent phoneme-symbol relationship is actually governed by rules such as “VCe: the e changes the vowel from a short vowel to a long vowel sound,” etc.

B. English semantics (vocabulary, meaning of words)

Cue kids naturally acquire English vocabulary through meaningful interactions with cuers of English. These words are not taught through drill or direct instruction; instead the kids learn the meanings of words through conversations with people who cue to them. Specificity, synonyms, multiple meanings, contractions, and modals are areas of vocabulary development that are typically taught by teachers of deaf/hard of hearing(d/hh) students or by speech/language pathologists during their direct teaching/therapy times with their d/hh students. Kids who have learned English through consistent experience with cueing at an early age typically develop their vocabulary in these areas at an age-appropriate rate so that little if any remediation is needed in these areas. See the following lists for examples of these vocabulary targets:

SPECIFICITY: using specific words to denote members of a class
-colors: turquoise, magenta, fuchsia, periwinkle
-footwear: high heel shoe, loafer, ballet slipper,
-vehicles: backhoe, grader, cement mixer, dump truck,
-animals: python, cheetah, orangutan, toucan

-dinosaurs: triceratops, tyrannosaurus rex, brontosaurus,

SYNONYMS:

-happy/glad

-upset/mad/angry

-done/finished/all done/over/all through

MULTIPLE MEANINGS:

-step (stair, part of process, walk)

-tip (fall, top, money)

-like (fond of, same as)

-bark (tree part, dog noise)

CONTRACTIONS:

-won't, I'll, you're, they're, let's, haven't, isn't, didn't don't

We use contractions frequently in English; they appear often in early reader books as well.

MODALS:

-could, would, should

HOW do these skills help with reading and writing?

When decoding words on a page, the cueing student is figuring out a word that is already in his/her vocabulary. The word is recognized and the decoding process moves on to the next word. This sharply contrasts the experience of many signing deaf learners who are not decoding because they do not have a phonemic knowledge of the language, but instead are relying on their ability to visually memorize the appearance of a printed English word and attach meaning to it (also known as the "sight-word approach"). In addition, because the printed English word may be their first encounter with that English word, the student often needs a person (teacher/parent) at their side to teach them the meaning of this new English vocabulary word. In summary, the cueing child phonetically decodes a familiar English word, where as the signing child must visually memorize the English word as a sight word, then match it to a sign in his/her sign vocabulary.

C. English syntax (the order of words)

Syntax refers to how words are put in a certain order to express the desired message or question. The inclusion of all the necessary words put in the correct order reflects mastery of the language.

Simple Sentences

Ex. The cat hid behind the sofa.

Ex. Ryan and Katie are riding their bikes.

Complex Sentences

Ex. I want the one with no stripes on it.

Ex. Mitzi gave me the puppet to use after story time.

Ex. Before we eat, I want to play with the bubbles.

Questions

Ex. to ask a yes/no question, the words have a special order: "Are you 5?"
not "You are 5?"

Ex. to ask a Wh- question, the words have a special order: "What is your name?",
not "What your name is?"

Ex. use of the "dummy DO": What color do you want?" "Does your dog like to
chase cars?"

HOW does this knowledge help reading?

By age 5-6 years, most hearing children understand the majority of simple and complex sentence structures and questions commonly used in English. They may not use them, but they understand them. This sets them up for success when reading because the format of the sentences (syntax) is familiar to them. Their knowledge of English syntax enables them to anticipate/predict words as they read. Anticipating what kind of word comes next in the sentence combined with decoding skills enable the student to use closure as s/he reads.

Ex. The boy is sl*#^(*#. (knows) (knows) (knows) doesn't know this word, so combines decoding skills with prediction skills and guesses "slow" or "sleeping" because s/he know that an adjective or Verb+ing usually follows "THE NOUN IS _____."

Cue kids are NOT learning the syntax of English while they learn to read; rather, they already know the syntax of the language. Reading is learning a visual consonant-vowel code via print to match the one they already know via cued English. Their knowledge of the language combined with decoding skills are huge assets in the reading process.

D. English morphology (word endings)

Ex. "5 cups", not "5 cup"

Ex. We played Thomas the Train yesterday," not "We play Thomas the Train yesterday."

Ex. Jessie never shares, not "Jessie never share."

HOW does this knowledge help reading?

When the child sees the word endings as s/he reads, there is no need to explain why it's there. The child recognizes it as his/her language. Likewise, when writing, these word endings naturally appear. There is no need to explicitly teach the rule: "when your subject is just one (singular), remember to put a "s" on the verb following it for proper noun-verb agreement: Ex. Sally rides her bike everyday."

English is understood and used by hearing kids not because it was explained and then practiced in a lesson, but because the kids have repeated exposure to English through an unambiguous medium—their hearing—in meaningful interactions with people. Then, they start to use English themselves, including the grammatical rules. Six-year-old hearing children cannot explain to you why they use them, rather the rules are internalized. The same internalization of English rules happens with deaf children who have consistent exposure to English through cueing.

When cued English is used to communicate with deaf/hard of hearing kids, English is acquired naturally because cue kids have repeated exposure to English through an unambiguous medium—their vision—in meaningful interactions with people. When these deaf/hard of hearing kids write, they use English, including the vocabulary, sentence structures, grammatical rules, etc. Like hearing kids, they probably cannot explain why they use certain grammatical features of English, rather the rules are internalized.

E. English Idioms

This could really be included under semantics, but it deserves its own category. It is sometimes called figurative language. A vast amount of English is considered to be idiomatic or figurative. We use words in combination with each other which result in some meaning that is very different than the meaning of each individual word.

Ex. Let's head over to the mall.

Don't make fun of her.

She won't get away with that.

Let's go over the directions.

HOW does this knowledge help reading?

Because the children have been consistently exposed to idiomatic language through cued English as they interact with people in meaningful contexts, the idioms are already familiar to them. Therefore, when they read idiomatic English, it will be a language they know. No one needs to explain the meaning of these English idiomatic phrases to them.

Cueing for Phonics vs. Cueing for Literacy

Cued English is different than any other manual attempt to visually show English because it represents the phonemes of the language. It is understandable that some professionals view cueing as something needed only for teaching d/hh children phonological awareness skills and phonics skills. It must be stressed that to use cued English in such a limited way will not lead to the natural development of English or of reading and writing as explained in this article. It *could* result in the d/hh child being able to “cue-out” written words or if given a cued word, write it on paper. This isolated skill could be compared to a hearing American child learning the speech (auditory phonemes) that corresponds to the Russian alphabet. That child could then “sound-out” a sentence written in Russian and, if given a spoken Russian word, write it on paper, but would not understand what was decoded or written. Obviously this isolated phonics skill is far different than what we

would call “literacy skills”. **Literacy requires a knowledge of the *language*—its vocabulary, word endings, syntax (grammar), and idiomatic expressions.** If a d/hh learner has consistent access to English through cueing that is used during meaningful, age-appropriate interactions, English *language* can be acquired. Because cueing is based on phonemes, as is our English alphabet, cueing also enables d/hh learners to acquire phonics skills. Phonics skills allow the student to *access* the code of written English, enabling them to “cue-out” written words. **The goal is to acquire both an internalization of the English *language* AND the *phonic skills* necessary to decode our phoneme-based alphabetic system.** Both of these skills together equip the learner to acquire English literacy, i.e., become a fluent reader and writer of English.

So, the temptation to use cueing solely as a tool for teaching phonological awareness and phonics should be avoided. There is little value in decoding the printed word “coat” into the cued (or spoken) phonemes of /k/ /ō/ /t/ if one does not recognize the phonological unit /kōt/ as carrying *linguistic* meaning—the thing worn over your clothes to keep you warm outside. Likewise, there is little value in being able to decode the written English sentence, “The private eye was talked into it by his fellow sleuths,” if one does not understand the vocabulary (sleuth, fellow), grammatical construction (reversible passive), and figurative language (private eye, talked into it) contained therein.

In summary, cued English allows full, unambiguous, visual access by deaf and hard of hearing children to the phonemic structure of English. If access to cued English can be achieved in the early childhood years, the child can be equipped with the same linguistic knowledge that hearing children bring to the task of learning to read and write English. Deaf and hard of hearing children with cued English experience are learning to read a language they already know (just as hearing children do) using phonemic decoding and linguistic closure strategies (just as hearing children do). Cue kids are learning a printed code to match the visual one (the cuem of cued English) just as hearing children learn a printed code to match the auditory one (the speech of spoken English). Likewise, their written English will reflect the language they already know. Their written English will:

- be phonemically based because of their phonemic awareness skills.
- be semantically correct, i.e., using appropriate vocabulary.
- be syntactically correct, i.e., using correct word order and sentence structure.
- contain word endings without having to memorize rules about their use.
- contain idiomatic use of English and appear very natural and not stilted or formal.

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