

## CORE VOCABULARY IS THE SAME ACROSS ENVIRONMENTS

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Large amounts of time are dispensed to fine tune vocabulary in augmentative communication systems for specific environments. Is this effort necessary or even beneficial?

Few subjects in augmentative communication have been studied more intensely than vocabulary selection. Instructional courses at the American Speech-Language Hearing Association dating back for more than 15 years have been devoted to vocabulary selection. The language used by people with disabilities has been studied extensively. Many published proposals have produced guidelines as well as specific lists. Frequent articles in refereed journals have not only discussed vocabulary selection, but charts, tables, harvesting methodologies, etc. have been a regular feature of non-refereed publications as well. Recommendations to crawl about the room in order to view the world from a child's perspective as well as long questionnaires asked of adult users concerning what they would say, etc. have attracted the attention of the best researchers.

In current augmentative communication practice, large amounts of time are used to develop special vocabularies for classes, field trips, activity-based learning, and a host of other academic and non-academic environments. The vocabulary, for example, of earth sciences is considered to be radically different from that of seventh grade social studies. The vocabulary needed to describe molestation is considered highly specialized. Functional vocabulary for a restaurant includes menu items, requests for condiments, expressions of preference like rare, medium, and well done. A nature walk has its own special vocabulary which must be added to each device before summer camping experiences. In short, vocabulary selection for augmentative communication systems is one area of intense thought and labor in the clinical field.

As appropriate as such work seems to our intuition, the search for powerful, context specific nouns to be used in differing environments flies in the face of long, established linguistic principles. In the past century, linguists and second language teachers have discovered that a core vocabulary of fewer than a thousand words can provide semantic coverage for nearly every idea expressible in a human language. The most famous effort to express all the notions conceivable in English in a restrained vocabulary was called Basic English. Basic English, however, is one, among many. Using its 800 words and appropriate morphology for those words, a person can express nearly everything that the English language can express.

Spoken language studies from elicited and spontaneously generated speech have shown that the 100 most frequently occurring words of a linguistic sample typically account for more than 60 percent of the total words communicated. Typically, the top 100 to 200 words account for 80 percent of the total words communicated. The phenomenon of a

core of words with high frequency accounting for a majority of words communicated is not limited to English. Similar samples in German, French, Spanish, Italian, Portuguese, Swedish, Danish, Dutch known to the authors show similar statistics.

In augmentative communication various language corpora assembled throughout the past 20 years have shown that children, adolescents, and adults use the same core vocabulary. Further, these studies show that the same core vocabulary is used across environments. Stated bluntly, natural speakers would exhibit the same personal pronoun profile in a one half hour language sample taken in a restaurant as they would in one harvested in a walk through a zoo. “Look at that Flamingo. I don’t think I’ve ever seen anything that color before. It’s standing on one leg. Does it have two? Where’s its other one? Wait a minute. I think I see it. Etc., etc., etc.”

It does not take a strong imagination to imagine the preceding communication to be completely capable of delivery with the omission of the word “flamingo” and the substitution of a pointing gesture. What is the most frequent word in the preceding 35 word imaginary corpus? “I” is tied with “it.” Personal pronouns account for eight of 35. These two personal pronouns make up 22.9 percent of the total words spoken. The only non-core word here is, of course, “flamingo” and accounts for 2.9 percent of the sample. Yet which of the words in the sample would be typically selected for inclusion in a special AAC zoo vocabulary?

Language is an awkward fact we all frequently choose to ignore. Everyday speech is made up of core vocabulary and grammatical morphemes yet these are not the focus of vocabulary development in augmentative communication. Instead we focus on the “power words” in each environment. We think of fringe vocabulary as powerful words because simply by mentioning one, it is possible for a conversational partner to fill in the blanks. However, when we allow the conversational partner to fill in the blanks, what we are doing is allowing him or her to guide the conversation, direct its contents, and many other things typically developed speakers would never allow.

Let’s take a look at another sentence. “I went to the museum yesterday and saw a dinosaur.” There are ten words in this sentence. Two of them are context specific – museum and dinosaur. Eight of them are core words. However, which of these words would appeal to an augmentative communication system vocabulary manager? Museum and dinosaur would be considered the most powerful or novel words because pointing to graphics illustrating these words or speaking these words on a voice output system would enable the conversational partner to fill in the blanks. The envisioned conversation would feature an augmented communicator who would first say or point to “museum.” The conversational partner would say “Oh, you went to a museum. Did you have a good time?” The augmented communicator would reply by uttering or pointing to “dinosaur.” The conversational partner would then say “You saw the dinosaur. Was it interesting to see a dinosaur?”

The benign vision portrayed by the preceding interaction could, however, have gone in just the opposite way. The conversation partner could have said, “Museum?! You went

there yesterday. I am not going to get another trip together for you. Boy, you guys, give an inch and you take a mile. You don't appreciate anything we do. Your attitude makes me sick." Folks, this is language reality. How could the augmented communicator dig him or herself out of the hole brought about in the second imaginary interaction? Personal autonomy is best effected by control of core vocabulary.

If an augmented communicator had control of core vocabulary, he or she could have said, "I went somewhere yesterday. It was fun. We saw old things." The conversational partner might reply, "I know. Who do you think organized it? I'm glad you had a good time. I'll organize some more trips for you guys, if you liked that one."

Which is easier to do? Organize and teach an effective structure for 200 core words and their grammatical morphemes or the near random cast of extended vocabulary that float through every individual's life? In our opinion, it is core vocabulary that liberates. The fact that the same core vocabulary is used across all environments gives one in control of core vocabulary functionality across environments. Although topics change, core vocabulary is consistent. In Sheela Stuart's work with older people, she divided her cohorts into two groups: younger age, 60 to 74 years and older age, 78 to 85 years. She further divided the groups into male and female. The results of topic analysis indicated difference between older age cohorts and younger age cohorts and between men and women. The greatest differences were between younger women and older men. The topic various included present versus past, family versus friends, household routines versus facts, and so on. Nevertheless, there was no significant difference in the frequency of use for the composite 250 most frequently occurring words.

The augmentative communication community has failed to assimilate the power of these data. Stuart's work, while pioneering, is far from alone. A host of other researchers have found similar data. Rather than focussing on core vocabulary which is consistent across groups and across environments, the augmentative communication community has chosen to focus on the difficult business of trying to pair fringe or extended vocabulary words in various environments. The lesson being sought, for instance, from Susan Balandin's collection of one of the largest spontaneous spoken corpora is not that topic and, hence, fringe vocabulary is impossible to predict, but how, given this impossibility, can we go about selecting fringe vocabulary anyway.

The authors of this paper suggest that since, with core vocabulary one can express virtually any idea, and that since core vocabulary is consistent across all naturally speaking populations, in all environments, the field of augmentative communication should focus on representing and teaching core vocabulary in augmentative communication systems.

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