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A Few Good Words

Using Core Vocabulary to Support Nonverbal Students

by Barbara Cannon & Grace Edmond

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Is it possible that a few simple words like "give," "go," "like," "you," and "stop" can change the lives of nonverbal students? Finding the answer to this question has been the work of speech-language pathologists, assistive technologists, and teachers in the Spotsylvania (Virginia) County Schools for the past four years.

We began a program in 2004 to improve the communication and language learning of nonverbal students via the concept of core vocabulary: use of a small set of commonly known words to improve communication and language learning for students who use augmentative and alternative communication (AAC).

At that time, Spotsylvania County Schools had nearly 100 nonverbal students with many different types of disabilities and cognitive abilities in 29 schools. There were students with autism, students who were deaf or blind, and students with cerebral palsy. Some students had normal cognitive potential and others had severe cognitive deficits. Some had severe behavior problems; others had difficulty physically manipulating their AAC devices. Although an undeniably varied group, our nonverbal students had one thing in common—speech and language services.

We asked an important question: How can a school district provide meaningful services for AAC and language learning to a very diverse student population? The problem was complicated by circumstances in our schools, including increasing demands on teacher time, a high turnover in classroom staff, and a lack of training in AAC. We needed a way to simplify and demystify the process of providing communication and language supports. The communication systems needed to be easy for teachers and staff to understand, create, and implement while also supplying high-quality individualized communication supports for diverse students.

We learned about the concept of core vocabulary during professional development. Many AAC devices on the market today have built-in vocabularies based on core vocabulary. By looking at these devices and talking with researchers and designers, we began to understand how core vocabulary is used to support language and communication through these AAC devices. We also realized that the concept of core vocabulary could be incorporated into instruction. We found that not only could we design an integrated, flexible, and responsive continuum of communication supports, but also that these supports could be used for language learning and academic access.

Paradigm Change

This simple idea was in stark contrast to past practice in our county schools. Learning materials, communication boards, and small devices regularly contained little more than a series of nouns. Students were given the core word "want" with a host of nouns such as "pretzel," "cookie," "drink," or "popcorn." Sometimes communication boards were constructed to supply nouns for "paper," "crayon," "marker," and "paint." Classroom learning materials gave choices for words like "Saturn," "Jupiter," or "planet." A student with severe intellectual disabilities was even asked to identify a picture representing the word "zucchini."

Although these terms offered practice in naming and provided students with opportunities to make choices, they were very limiting. They offered few opportunities for students to comment, protest, construct sentences, or take conversational turns. Additionally, these content-specific materials were time-intensive to produce because the vocabulary had to be changed for each situation the student encountered. Staff members constantly made and changed boards throughout the day or, more likely, did not supply boards at all in many situations.

Why did we do this? Possibly because it is easy to find pictures of nouns and to teach those concepts.

It is easier to find a picture of a school bus or a bag of popcorn than a picture that describes the abstract concept of "go" (Adamson, Ronski, Deffenbach, & Sevcik, 1992). However, when a student knows what "go" means and has that word available on a communication board, the impact on communication ability is far greater than that of accessing a series of nouns. Although nouns are important, the ability to use all language forms makes communication possible. The concept of core vocabulary with its emphasis on multiple language forms offered a way to provide students with generative vocabulary. We wanted our students to communicate independently their needs and wants, problems and opinions, academic answers...and maybe even their dreams.

Finding the Words

We started the program by selecting words that would be used. We then developed additional sets of words that added new vocabulary incrementally as students mastered vocabulary. This process offered something previously unavailable in the county: a defined and sequential way for nonverbal students to advance to ever-higher levels of language and communication. We also wanted these word lists to be readily available without using instructional time making materials.

We selected vocabulary from three main sources. We read the research on vocabulary selection and studied the developmental words lists of Benajee, Dicarolo, and Stricklin (2003) and Beukelman, Jones, and Rowan (1989). Both of these research teams defined the words most frequently used by toddlers, including core words from many semantic groups. We also used the hybrid lists of Gail Van Tatenhove, an SLP specializing in AAC. She took the Benajee et al. (2003) word list and compared it to other lists and to language samples from the devices of AAC users. Finally, we found an easy-to-use booklet from the ACE Center in Great Britain, which supplied a way to take core vocabulary words and put them into distinct stages for the development of low-tech communication materials.

From these sources, we developed three different core pages as templates for communication books, with each page representing a different stage of language acquisition. We also created a series of content-specific pages to supply the nouns and specific verbs needed in the school environment. Although not individualized for specific students, these materials gave teachers a starting point for the construction of communication books, made by placing core and content-specific pages together in three-ring binders with page protectors. A page containing core vocabulary is always on the left side and a page with content vocabulary is always on the right side of each set. When the user turns the page, an identical core page is on the left side, but a different content vocabulary page is on the right. This arrangement supplies the student with the needed content words while always allowing immediate access to core vocabulary. By using this system, students can begin to understand and use different language forms and construct sentences in addition to communicating their wants, needs, and academic responses. Additionally, when teachers model the use of the book by pointing to the pictures, they help students understand and use the vocabulary that is presented.

Single Page Design

In making our books and choosing devices to use with core vocabulary, we chose to use a single-page design as much as possible. Single-page design simply means that important words are displayed on one unchanging page instead of on multiple overlays. The advantage of this simple method is that core vocabulary stays in the same place, reducing the need to visually scan the choices and to understand picture meanings. For instance, the word "turn," a concept that is difficult to depict adequately as a picture, will always appear in the same place on the page so that the student can choose the word by location, not by picture meaning. The single-page design also helps students develop motor patterns that make communication faster and more efficient. These motor patterns might best be visualized as the single-page design of a keyboard that we use to develop the motor pattern we call touch typing.

Use of the device incorporates the same concept. We chose devices that have a larger number of cells and gradually add vocabulary to the device while keeping the placement of words constant. By supplying a student with a device that has 32 cells—but only eight with active vocabulary—we make it possible for the student to grow into a bigger vocabulary without changing devices or moving vocabulary to new locations.

Reaching More Students

Our program to foster better communication has expanded to include many unexpected results. Four years after we began to think about the concept of core vocabulary and two years since our low-tech books were first distributed, more students have been provided with AAC than was previously possible because of our readily available, easily implemented low-tech communication books. In response to the increased demand, we developed downloadable templates that allow teachers to construct their own core communication books easily for students. We use the core vocabulary concept when selecting vocabulary for low- and mid-tech devices, reducing the need to produce context-specific materials. When purchasing high-tech devices, we have found that the use of core vocabulary makes their successful implementation in the school environment more likely.

Teachers and staff have created new ways to serve students by using core vocabulary to enhance written expression, test reading comprehension, and adapt the curriculum. Even Individualized Education Program and language goals are increasingly written to focus on the core vocabulary needed to perform proficiently on high-stakes testing.

In Spotsylvania, the concept of core vocabulary is expanding because it is working. Our core vocabulary-based books and devices are practical and simple, and SLPs and teachers alike have been able to make materials to improve communication supports for students.

We began our program with a desire to find an integrated approach to support a broad range of nonverbal students. High-functioning students with full language potential in our district gain just as much benefit from core vocabulary as lower-functioning students who have significant language and communication disorders. In our experience, core vocabulary is a concept capable of aiding communication and language learning across all disability types regardless of severity. We continue to strive for the goals of generative communication and language learning for our students and feel that we have made great progress with just a few good words.

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What is Core Vocabulary?

"Core vocabulary" describes a small set of basic words in any language that are used frequently and across contexts (Cross, Baker, Klotz, & Badman, 2006). Core words tend to be pronouns, verbs, and demonstratives because they represent words that generally do not change (Stubbs, 1986). Words like "big," "little," "give," "eat," "go," and "you" are examples of core vocabulary terms used every day in many situations. Research shows that 80% of what we say is communicated with only the 200 most basic words in our language (Baker & Hill, 2000). We use core words to make ourselves understood. For instance, one would say "give" instead of "bestow," or "smart" instead of "perspicacious." Lists of core words are widely used when writing textbooks and training manuals to be sure the materials are readable by a broad audience (Stubbs, 1986).

Resources

To learn more about the Core Project in Spotsylvania or to download materials to make low-tech core communication books, visit:

- [Web class](#) on the use of core vocabulary
- Claire Latham's [Developing and Using a Communication](#) Book
- Gail Van Tatenhove's word lists and downloadable handout on "[Normal Language Development, Generative Language and AAC](#)"

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