Using Core Vocabulary to Support Non Verbal Students

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...a little about Spotsylvania

32 schools
Approx 2,935 SPED students
Approx. 100 nonverbal students

...the truth about teachers

Teachers are stressed
There are many demands on their time
Turnover is high
Training in AAC is minimal

...ditto the SLPs

SLPs are stressed
They have high case loads
Turnover is high
Training in AAC is minimal
Question to consider:

How can a county supply all nonverbal students with high quality communication and language supports that grow and move with the student?

…. and do it easily, equitably, frugally, and understandably...

Core Vocabulary can help that dream come true.

PECS Books Big Macs Cheap Talks ...

1 $8,000 device

Lots of nouns

No idea of how to expand on success...

No money to buy devices 1 bathroom symbol

No time to train

No carry over when kids change schools or grade levels

1 verb (want) Lots of pictures of food

Lots of pictures of art supplies Lots of pictures of colors

No pronouns, articles, demonstratives or adverbs
Beyond the Holy Trinity of AAC

Eat..........  

Drink........  

Bathroom.....

Let's give 'em something to talk about.....

<table>
<thead>
<tr>
<th>Brown's Stages:</th>
<th>Vocabulary most often provided:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown's Stage 1 = MLU of 1.75</td>
<td>![Image of vocabulary]</td>
</tr>
<tr>
<td>Brown's Stage 3 = MLU of 2.25</td>
<td>![Image of vocabulary]</td>
</tr>
<tr>
<td>Brown's Stage 5 = MLU of 4.0</td>
<td>![Image of vocabulary]</td>
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</table>

Brown's Stages:
- Age 1              2-3 words
- Between ages 1 - 2 - 10 to 20 words including name (combine 2 words)
- Between ages 2 - 3 - 450 words (combine noun and verb)
- Between 3-4 - 1000 words (sentence length 4-5 words)
- Between 4 -5 1500 words (ask who and why questions)

Typical Language Developmental Milestones

and the Big Question is....

If a student has a language age of 4 and a vocabulary of 1,000 words,

Will a book of nouns be enough?

How about a cheap talk?

A schedule board?
What is Core Vocabulary?

The term core vocabulary is used to describe words which are used frequently and across contexts.

Core words are those that are basic to the language and are without the shadings of culture and context.

Core vocabulary tends to be made up of verbs, demonstratives, and pronouns because these words are a small set of words that are unchanging in our language.

We all use core vocabulary, all the time, every day, in every environment.

80% of all that we say is made up of 100-200 basic core words. Lists of core words are used when compiling textbooks, for teaching English as a second language and for facilitating international communication.

* If you want to be understood by everyone in a room, use a core word!

Baker, Bruce (2000)

Core is made up of simple words that are easily understood

I love his humor! I enjoy his extreme jocularity!

Your words will mean war! That opinion will cause fisticuffs!

He thinks with vision! He cerebrates with great perspicacity!

Core is made up of neutral words unshaded by culture or context

<table>
<thead>
<tr>
<th>Core (Have General Meaning)</th>
<th>Not - So - Core (Have Specific Meaning)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give</td>
<td>Donate</td>
</tr>
<tr>
<td>Big</td>
<td>Huge</td>
</tr>
<tr>
<td>Little</td>
<td>Tiny</td>
</tr>
<tr>
<td>Eat</td>
<td>Dine</td>
</tr>
<tr>
<td>House</td>
<td>Home</td>
</tr>
</tbody>
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<tbody>
<tr>
<td>Give</td>
<td>Donate</td>
</tr>
<tr>
<td>I give a car.</td>
<td>I donate a car.</td>
</tr>
<tr>
<td>I give a backrub.</td>
<td>I donate a backrub?</td>
</tr>
<tr>
<td>I give a party.</td>
<td>I donate a party?</td>
</tr>
<tr>
<td>I give you my word!</td>
<td>I donate you my word?</td>
</tr>
<tr>
<td>I will give it a good try...</td>
<td>I will donate a good try?</td>
</tr>
</tbody>
</table>
Examples of Core Words

Top Words Used By Toddlers

A
All done/finished
Go
Help
Here
I
In
Is

It
Mine
More
My
no
Off
On
out

Some
That
The
want
What
yes/yea
you

(Banajee, et al., 2003)

What is Fringe Vocabulary?

Fringe vocabulary is made up of context specific nouns and verbs that are needed depending on context.

Fringe vocabulary needs vary from person to person and from place to place.

Permanent fringe is vocabulary that is an important part of a person’s life and will be used often.

Temporary fringe is vocabulary that is very situationally specific and infrequently used.

Permanent Fringe (Big Part of Life) vs. Temporary Fringe (Hardly Ever Used)

food

Saturn

planet

orbit

solar system

atmosphere

(car

animal

person

house

(Clap Clarke, MS CCC-SLP, Assistive Technology Works, Inc)

Quote:

Despite evidence that nouns are not among core vocabulary used by preschoolers... clinicians typically select nouns representing foods and objects as first symbols when designing AAC systems.

(Banajee, et. al., 2003)

Let’s look at the word:

ZOO

It could be a permanent fringe word if you are a veterinarian.

It could be a temporary fringe word if you are a kid on a field trip.

If you want to tell your mom where you went today, zoo is the word that carries the most meaning:

I went to the Zoo.
Fringe Vocabulary Carries Meaning

... But you can’t have every word or the system gets too complex and difficult to navigate.

How do you say “I went to the zoo” without using the word “zoo”?

Hint: Core possibilities = I go see want big many more stop
Permanent Fringe = animal, bus, school

I go bus see many big animal
I go bus see animal animal animal go bus.

Single Page Design

A single page design is one in which all the words you are going to use are on the same page. In a single page design system, growth comes from adding vocabulary to the same page instead of adding new pages.

Why would you want a single page design?
1. cognitively simpler.
2. deemphasizes need for memory.
3. faster.
4. maximizes the use of motor patterns.

Use of Motor Patterns

A single page core vocabulary board allows students to use motor planning instead of visual scanning to find the word they are looking for.

Single Page Design

More cells not more pages

It's a big Mac!

It's a Dynavox!

It's a Cheap Talk!

There's room to grow!

I gave a 4 year old student with autism and xxyy syndrome a 32 Techspeak
What the Speech Therapist did: 

almost fainted
What is the Natural Consequence of:

Core Vocabulary on a Single Page using Motor Patterns?

You don't have to think because...
The words are ALWAYS where you left them

Or you can do this.....

A Little Problem with Levels...
Iconicity
...life beyond Boardmaker......

Iconicity =
How apparent is the relationship between a symbol and its meaning.

In using core vocabulary boards, you rely less on the meaning of pictures and more on the placement of the vocabulary. Instead of scanning for the correct picture, you know from experience that the word you want is where it always was....

Game Show:
Are you smarter than a nonverbal student?

For 1 million dollars!!!! (or a cheap prize)
Draw a universally understandable picture for the word:

IT
In pursuit of generative language

Core vocabulary supplies a chance for generative language production and gets away from the idea of scripting. With a good vocabulary, students can say what they want to say on a variety of topics in a variety of settings.
What can you say with the words you have?

Core Vocabulary Board

Context board with specific nouns

Requests only  Many forms

Review of Concepts:

1. Core Crosses Contexts, is fast and cognitively simple.
2. Core supports the development of motor patterns through the use of a single page design.
3. Choosing by position de-emphasizes the need to “scan and read” picture meanings that may be obtuse.
4. Core supports language learning by supplying all parts of speech in a simple structure

Result: Generative language production.

The Things We Use:

Word Lists:

<table>
<thead>
<tr>
<th>General Applications of Memory Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print 1 Words:</td>
</tr>
<tr>
<td>1. all good</td>
</tr>
<tr>
<td>2. no</td>
</tr>
<tr>
<td>3. how</td>
</tr>
<tr>
<td>4. see</td>
</tr>
<tr>
<td>Print 2 Words:</td>
</tr>
<tr>
<td>1. all good</td>
</tr>
<tr>
<td>2. at</td>
</tr>
<tr>
<td>3. they</td>
</tr>
<tr>
<td>4. are</td>
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</table>

The Things We Use:

The Ace Center Book:
The Things We Use:

Low Tech Books:

Mid Tech Devices with 32 and 128 cells

The Things We Use:

High Tech Devices

3rd grader with autism: Starting with a low tech book
Core Stage 1 Vocabulary: snack
Core Stage 1 Vocabulary:

Kristen: The NEW MORE CORE Board
Making Compromises

Kristen: Nonverbal TMR who has used sign until now
Midtech solution with core vocabulary

Notice:
1. Poor attention
2. Poor understanding of picture meanings
3. Poor inclusion

What I learned from Kristen's teacher:
I wanted Core: she wanted Academics
Kristen: Nonverbal TMR who has used sign until now

Notice:
1. Increasing Attention
2. Easy understanding of concept placement
3. Good inclusion
4. Greater amount of conversation
5. Much vocab on 1 page.
(I-names- happy- tired- play- eat- more)

Making it fun with Core and Friends

Maddie: Fun with Verbs

Maddie: A student with Autism
It's all about the verbs

Mid tech device with two hits for GO

Autism and the high tech device

Vantage Device out of the box
Autism and the high tech device

Unity 1.5 - Core + Fringe Single Hit

Maddie: Motor Planning + speech output

Her User: Unity 1.5

Joey's Board

Joey: A boy with autism learning language concepts

Mid tech device with 32 cells

Notice:
Learning verb meanings
Learning motor patterns
Single page design
This time he got it!

What the students wrote:

- Yesterday I ate Funyons
- You go shopping.
- We paid money.
- Yesterday we ate Skittles
- They counted with money.
- I tasted crunchy Cheese-Its
- Yesterday we bought food.
- I eat chips.
- They go shopping.
- We counted money.
Even more basic than the freedom of speech is the freedom to speak...

Stephen Hawking

Many thanks to
Chip Clark, Gail Vantatenhove, John Halloran, Birgit Shipman, Kathy Dickinson

........................................and all the students of Spotsylvania County.
Resources:
The Ace Center Communication Book –
http://www.ace-centre.org.uk/index.cfm?pageid=D1342847-3048-7290-8E32840F6850A

Vocabulary Lists – Von Tatenhove

Barb Cannon’s TTAC Webshop with materials and a research paper on core vocabulary
http://www.ttaconline.org/staff/s_training/s_training_Info.asp
?selWebshop=bcannon123200620102pm&selAuthor=bcannon

Jen Mitchell’s TTAC materials for supporting ASOL goals using Core vocabulary:
contact Jen - Assistive Technologist  jmitchell@ttac.odu.edu
757-683-4873

Understanding and using Core Vocabulary with devices Chip Clark
contact Chip  info@assistivetechworks.com or by phone: (703) 307-0744.

Research


Bolender, Susan, & Sacerdote, T. The topics of meal break conversations. Augmentative and Alternative Communication


Clarke, Chip, MS CCC/SLP, (2006) Getting to the Core of It AAC conference, Bloomsburg VA


Handouts for this session is available at:
http://AT4kids@wikispaces.com