Communication Peeled and Cored

... for the Classroom!

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IDEAS 2014 Conference
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Agenda:

* Define and Identify Core Vocabulary

* Discuss Benefits/Challenges and Strategies for Teaching Core Vocabulary

* Discuss Use of AAC Tools to Develop Language and Communication Skills for Life

* Highlight Activities and Ways to Target Communication Using Core Words throughout the School Day
Core Vocabulary or the Peel (Fringe)

* Everyday Questions Activity

- 2 Manual Boards (GoTalk 20+ Overlay)
  -- Curriculum Words
  -- Core Vocabulary Words
Core Vocabulary is a statistical concept related to overall word frequency.

- 350 most frequent words account for approximately 80% of words actually spoken.

- Not often the focus of AAC system design or the focus of communication goals for device users.

- The remaining 20% is made of “fringe” or extended vocabulary. It varies widely from person to person and is difficult to predict.

Why is core vocabulary key?

* Based on research, they are common words found to be consistent across ...

* Clinical Populations
* Activities
* Places
* Topics
* Age Groups
The Core Vocabulary Lists …

Derived from language samples collected during research studies:  [www.minspeak.com/CoreVocabulary.php](http://www.minspeak.com/CoreVocabulary.php)

- Banajee list of 26 toddler core words*
- Marvin list of 333 alphabetized preschool core words
- Balandin list of 347 core words used by adults
- Stuart list of 174 core words used by seniors
- Hill list of the top 100 core words used by fluent augmented communicators

From the above research studies, 250-350 words collected in the language samples accounted for approximately 75-80% of the words communicated. (* accounted for 96% )
| a | about | all | almost | already | also | an | and | another | ant | any | are | aren't | around | as | at | away | baby | back | bad | ball | bathroom | be | bean | because | before | being | bet | better | big | bird | birds | bite |
In the Course of Development the Banajee Core Vocabulary is Nested Within the Marvin Sampling

<table>
<thead>
<tr>
<th>a</th>
<th>about</th>
<th>after</th>
<th>again</th>
<th>all</th>
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<td>about</td>
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<td>boy</td>
<td>buy</td>
<td>bugs</td>
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<td>away</td>
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<td>bad</td>
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<td>bathroom</td>
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<td>birds</td>
<td>bite</td>
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Christine A. Marvin, David R. Beukelman, Denise Bilyeu
AAC, Vol. 10, Dec., 1994

* Typical 3-year old
* Cassie Sementelli M.S. CCC-SLP and Michelle Bishop M.Ed collected language samples from five typically developing children at their school in San Francisco
Sylvia (5 yr. 2 mo.)

- Right here next to me
- Did they move seats?
- I need to get my pencil
- *Are you gonna go outside?*
- Why is she going to sit there?
- Where is it?
- Why is she going to sit there?
- *I know that one*
- I can’t sit there cause I talk too much
- *This one is hard to do cause it’s so messy*
- Me and Jennifer are friends.
- I have to do this one again
- *I got it*
- *You have three more to do*
- *You want this?*
- When I’m done I’m gonna go outside
- *There’s more over there*

Cassie Sementelli M.S. CCC-SLP and Michelle Bishop M.Ed collected language samples from five typically developing children at their school in San Francisco.
Questions:

* How do we currently teach core vocabulary?
* Why do we teach vocabulary?
Very few therapists and teachers target understanding and use of core vocabulary within the context of the classroom ... and for communication, in general.

We typically/historically only focus on fringe not core vocabulary.
Why is there limited focus on core vocabulary with AAC device users?

* Often difficult to represent by pictures
  Example: put, get, like, want, have

* Easier to target nouns
  Example: dog, ball, house, bus

* Curriculum is highly focused on academics
  Example: yellow, June, hot

* Teachers are highly focused on having the student communicate to express their knowledge typically in a Q/A format

* With this focus, other aspects of receptive and expressive language skills for communication are typically not targeted and therefore are not practiced and learned by students with disabilities.
Example:  ON

* How do you teach this word in class and in speech therapy?
* Primarily targeted as a “sight-word” for reading

* Or as a spatial concept (“show me the ball is on the chair” or “tell me where the ball is”)

* However … its most common uses, it is not used as a spatial concept
  * Turn on the TV.
  * It goes on and on, and never stops.
  * She has to leave on time.
  * He is on medication.
  * I am on my way.

* A very common “core” word, but often not targeted within expressive goals in all its multiple meanings.
Video:

* The Power of Core Vocabulary
Early sight words are largely made up of core words

- Dolch Word List
## Dolch Words Lists

List 1, 2, and 3 know by the end of First grade, List 4 know by the end of Second grade, List 5 know by the end of Third grade.

<table>
<thead>
<tr>
<th>List 1</th>
<th>List 2</th>
<th>List 3</th>
<th>List 4</th>
<th>List 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a, and, away, big, blue, can, come, down,</td>
<td>an, are, at, be, black, brown, but, did,</td>
<td>after again, an, as, ask, by, could, every,</td>
<td>always, around, because, been, before,</td>
<td>about, better, bring, carry, clean, cut,</td>
</tr>
<tr>
<td>for, funny, go, help, here, in, is, it,</td>
<td>do, eat, four, get, good, have, he, into,</td>
<td>fly from, give, going, had, has, him, how,</td>
<td>best, both, buy, cat, cold, does, don't,</td>
<td>done, draw, drink, cut, done, draw, drink,</td>
</tr>
<tr>
<td>jump, little, look, make, me, my, not, one,</td>
<td>like, new, no, now, on, our, out, please,</td>
<td>last, know, let, live, may, of, old, open,</td>
<td>fast, first, five, found, gave, goes, green,</td>
<td>eight, fail, far, full, got, grow, hold,</td>
</tr>
<tr>
<td>play, red, run, said, see, the, three, to,</td>
<td>pretty, ran, ride, say, she, so, soon, that,</td>
<td>over, put, round, some, stop, take, thank,</td>
<td>green, its, made, many, off, or, pull,</td>
<td>hot, hurt, if, keep, kind, laugh, light,</td>
</tr>
<tr>
<td>two, up, we, where, yellow, you</td>
<td>there, they, this, too, want, was, well,</td>
<td>them, then, think, walk, were, when</td>
<td>read, right, sing, sit, sleep, tell,</td>
<td>long, much, myself, never, only, own, pick,</td>
</tr>
<tr>
<td></td>
<td>went, what, white, who, win, with</td>
<td></td>
<td>their, these, those, upon, us, use, wish,</td>
<td>seven, shall, show, six, small, start,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>work, would, write, your</td>
<td>ten, today, together, try, warm</td>
</tr>
</tbody>
</table>

Too Complicated?

* TRUE or FALSE ... The more buttons (vocabulary) you have, the harder it is to use with the emerging communicator.

* FALSE!! This thought is counterintuitive. Fewer buttons are more difficult ...
What WE Need to do more of...

* Teach meaning and use of core words in all its various uses and meanings. (Ex ... concept ON)

* Must be contextually-based and have meaning. (relevant for the situation)

* Taught throughout the day across various activities, various persons, various contexts.

*** EVERYONE TOGETHER AS A TEAM ***

* To facilitate learning, student must be engaged and motivated. (see a connection and, hopefully, joy in the interaction!)
Class Reorganization Needed?
NO ... Just put it in every day!
1. Aided Language Input
- Provide natural language models (input) to facilitate expressive output

2. Descriptive Teaching
- Allow students to use the words already in the device to express meaning and understanding for teaching lessons.
- Ask open-ended questions of your student
- Model possible responses for your student
- Ex: “big thing outside with hot red stuff coming out from on top”
What is it?

“Aided Language Input (ALI) is a teaching strategy in which the facilitator highlights symbols on the user’s communication display as he or she interacts and communicates verbally to the user.”

Goossens, Crane and Elder, 1999

Premise of ALI:

That AAC Users will acquire language the same way that typical speakers learn language – through natural interaction in a language rich environment.

Language develops, AAC must be learned. (Smith, 2006)
(Porter, 2007, pg. 49-50)
A. Model, Model, Model

* Provide short but complete models consistently using the student’s AAC system.

* Teachers, therapists, and families must know “what” is on the device or communication board and how to communicate those words. Familiarity!

* Shows how “ideas and thoughts” about what is happening can be communicated to others via AAC. ALI gives words to a child’s thoughts and feelings.

* Can be “general” or “focused.”

* From Navrotski and Witkowski, Aided Language Stimulation 1/2013
B. Conversational Recasting

* Respond to everything the student communicates – even if you think it is a mistake!!

* Expand on a student’s message by modeling just beyond the language abilities of your student

* Ex: Student: “I not go”
Teacher: “Oh ... You said ... [on device]‘I will not go.’ ”
Student: “Dog water.”
Teacher: “Yes ... [on device] dog drink... [verbal] Dog drink water.”

* The learning of target language structures was more rapid for conversational recasting than for imitative prompts. (Camarata and Nelson, 1994)

* Be aware of developmental norms of language. (Brown’s Stages)

* From Navrotsky and Witkowski, Aided Language Stimulation 1/2013
Number of Exposures to Learn a New Word (McDonald, 1999)

<table>
<thead>
<tr>
<th>LEVEL OF INTELLIGENCE</th>
<th>IQ</th>
<th>REQUIRED EXPOSURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significantly Above Average</td>
<td>120-129</td>
<td>20</td>
</tr>
<tr>
<td>Above Average</td>
<td>110-119</td>
<td>30</td>
</tr>
<tr>
<td>Average</td>
<td>90-119</td>
<td>35</td>
</tr>
<tr>
<td>Slow Learner</td>
<td>80-89</td>
<td>40</td>
</tr>
<tr>
<td>Mild Cognitive Impairment</td>
<td>70-79</td>
<td>45</td>
</tr>
<tr>
<td>Moderate Cognitive Impairment</td>
<td>60-69</td>
<td>55</td>
</tr>
</tbody>
</table>
Aided language input is a strategy in which the teacher uses the words in the student’s AAC system interactively with the student.

Appropriate communication using the child’s own AAC system then, in essence, is modeled for the child consistently.

This not only models appropriate use but facilitates comprehension and expression of vocabulary and language use within appropriate contexts.
Aided Language Input (Pre K group)
The average 18 month old child has been exposed to 4,380 hours of oral language at a rate of 8 hours/day from birth.

A child who has a communication system and receives speech/language therapy two times per week for 20-30 minute sessions will reach this same amount of language exposure in 84 years.

“Points to Remember”

-- Jane Korsten
• Need to have models 50-350 times before independent spontaneous use noted.
  -- AAC Clinical Therapy Data, Van Tatenhove

• Typically developing children start combining words (2-word phrases) when they have acquired approximately 50 spontaneous expressive words.
Video

* Activity-Based Teaching with Core Vocabulary (Classroom Group, YouTube-VanTatenhove)

* Language Group (Self-Contained, Autism)
Bolster Swing
Key Features Needed:
- Core Vocabulary (Single Words)
- Frequently Expressed Phrases
- Consistent access to Highly Motivating Extended / Fringe Vocabulary at a minimum

Consistent Layout and Organization for Predictability
- to develop efficient ability to locate desired words and possibility of developing motor-memory
- to facilitate staff and family “use” for aided language stimulation and teaching
Color Coding Chart for AAC Materials

Based on the Fitzgerald Key

Color coding helps students find words by the category they are in and helps make the board easy to navigate by making breaks in the different areas of the board.

<table>
<thead>
<tr>
<th>Category</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>People/Pronouns</td>
<td>Yellow</td>
</tr>
<tr>
<td>Verbs/Action Words</td>
<td>Green</td>
</tr>
<tr>
<td>Adjectives/Describing Words</td>
<td>Blue</td>
</tr>
<tr>
<td>Prepositions/Little Words/Social</td>
<td>Pink</td>
</tr>
<tr>
<td>Nouns</td>
<td>Orange</td>
</tr>
<tr>
<td>Wh- Question Words</td>
<td>Purple</td>
</tr>
<tr>
<td>Negation/Emergency</td>
<td>Red</td>
</tr>
</tbody>
</table>
A “team” must teach students who use AAC at the appropriate level for their current needs . . .

1. in a variety of contexts/activities
2. in a variety of ways and meanings
3. for a variety of functions (commenting, asking, directing, rejecting, etc.)
4. by frequent modeling vocabulary and language targets to teach vs. “test”
5. by using either “general” ALI or “focused” ALI

This cannot be done by one staff member alone!
Strategy 1: Activity-Specific Targets

* 1. Activity ______________________
* Core words to be targeted:

* 2. Activity ______________________
* Core words to be targeted:
Activity-Based Script for Communication

Activity: Circle Time / Morning Meeting

Communication Objective(s):
(2-3 word phrases, verbs/tense, plurals, prepositions, adjectives, labeling, commenting, describing, negating, directing, asking questions) repairing communication breakdowns, social conversation initiating, praising, etc.)

Targeted Vocabulary:

Device Buttons to Activate for Vocabulary: (at whiteboard)

1. Within this activity, teacher will ask/say: "Who wants a turn?"

Student will communicate:

my turn

(on main pg)

my + turn +

2. Within this activity, teacher will ask/say: "JR, you pick who goes next."

Student will communicate:

classmate go

(on main pg)

people name of a classmate + go

"Ok everyone"
Student will communicate:

3. Within this activity, teacher will ask/say: (when deciding which "day of week" song to wear) "Ok everyone... let's vote. What do you think, JR?"

Student will communicate:

4. Within this activity, teacher will ask/say: (during mystery object in mystery bag) "It's JR's turn... hmmm?"

Student will communicate:

Developed by Forsyth County Schools. 3/2010
Strategy #2: Word-Specific Targets

* **Examples:**
Pick 3-5 words to target during an entire week

Pick 1-2 words to target during an entire day

**make them visible on the wall as reminders**
The Language Stealers

Heh ... heh ... heh ... 😞

* Parent Email
* “The road to great outcomes can be so much longer than the road to poor outcomes.”
  * Jane Farrall

* We need to “lay a solid foundation and that takes time. We all love to get immediate results, but the more realistic scenario is slow and steady gains.”
  * Blog Post, PrAACtical AAC website
Thanks for listening and for your efforts in developing your students’ communication!

Jennifer M. Ro, MA, CCC-SLP
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References

* Baker & Sementelli, Closing the Gap 2005.
* Goossens, Crane and Elder, 1999.
* Smith, 2006.
* PrAACtical AAC Website
References


