Teaching Core Vocabulary Words and Symbols to Students with Complex Communication Needs

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Disclosure Statement

- Penelope Hatch, Lori Geist and Karen Erickson are employees of the University of North Carolina at Chapel Hill. The content of this talk is related to work they are conducting as part of a subcontract awarded to the University by the Dynamic Learning Maps™ project at the University of Kansas. The presentation was developed as part of grant 84.373X100001 from the U.S. Department of Education, Office of Special Education Programs. The views expressed herein are solely those of the authors, and no official endorsement by the U.S. Department should be inferred.

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http://dynamiclearningmaps.org
College & Career Readiness Standards (CCRS) emphasize:

• Learning that builds over time.
• Application of knowledge and skills.
• Active participation and interaction in learning activities.
• Collaboration and communication.
• Ongoing comprehensive instruction in reading, writing, speaking, listening, and language.
Why might a core vocabulary be useful for students with CCN?
Communication Benefits of a Core Vocabulary

• Variety of word classes included
• Vocabulary allows expression of a variety of communicative functions
• Vocabulary is useful across contexts
• Vocabulary can be combined to increase semantic and syntactic complexity
The DLM™ Core Vocabulary

- Prioritized list of words that reflects the intersection of the most frequently occurring words in social communication and the most important expressive vocabulary in the College and Career Readiness Standards (CCRS).
The DLM™ Core Vocabulary: Selection Process

- Review of extant core vocabulary research
- Review of several existing core vocabulary sets
- U scores
- Review of vocabulary used in CCRS
- Development of a weighting system to rank words in order of utility
# DLM™ First Forty Core Words

<table>
<thead>
<tr>
<th>I</th>
<th>like</th>
<th>not</th>
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<td>help</td>
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<td>can</td>
<td>here</td>
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<tr>
<td>open</td>
<td>turn</td>
<td>stop</td>
<td>over</td>
</tr>
</tbody>
</table>
The current slide shows our first 40 suggested words divided into 10 groups of 4 words each.

The vocabulary selection IS research-based, however, the organization is NOT.

The grouping of 4 words is one approach to organization.

Organization was based on providing multiple opportunities for expression as well as receptive input and modeling IF a student could handle only 4 symbols at a time.
Uses for DLM’s™ First 40

- Can be represented through tactual, high contrast, black and white, or commercially available symbol sets (e.g., Picture Communication Symbols (PCS™), SymbolStix®, Widgit Symbols).
- This information has been shared with the communication device manufacturers and has influenced some of their core vocabulary options.
- DLM member states have used the information to inform communication systems they created to be used across schools and districts.
32 Location Core Overlay
9 Location and 8 Location Overlays Created Using DLM’s “First 40”
3 Vocabulary Tiers
(Beck & McKeown, 1985)

• Tier 1 – The most basic words (e.g., baby, clock, happy, walk).
• Tier 2 – High frequency words for mature language use. These words are found across a variety of domains (e.g., absurd, steep, disaster)
• Tier 3 – Low frequency words used in specific domains (e.g., hemoglobin, lathe, escarpment)
Characteristics of a Core Vocabulary

- Limited set of highly useful words
- Words apply across settings
- Vocabulary is primarily pronouns, verbs, descriptors, and prepositions (often opaque symbols)
- Very few nouns are included in a core vocabulary
- Consistent location of vocabulary
Teaching and Modeling Vocabulary

• No student will be able to use this approach without teaching and modeling.

• Teaching:
  • Teach the **words** in the set you select.
  • Teach the **symbols** in the set you select.

• Modeling
  • Model the use of the vocabulary during instructional activities and all other communication activities.
  • Receptive input using the system is critical.
  • Create multiple systems and take advantage of peers.
Teaching Vocabulary

1. Do you know what word this symbol represents?
2. What are some definitions of that word?
turn

Verb:
1. To move or cause to move in a circular direction wholly or partially around an axis or point.
2. Change in nature, state, form, or color; become

Noun:
1. An act of moving something in a circular direction around an axis or point.
2. An opportunity or obligation to do something that comes successively to each of a number of people.
Teaching Vocabulary & Symbols

1. Identify symbol on overlay
2. Provide student friendly definition
3. Ask student(s) to repeat word using speech or AAC system

Zangari & Van Tatenhove, 2009
Teaching and Supporting Vocabulary Use

- Combine new word and symbol with known words and symbols into a phrase or sentence illustrating word meaning.
- Ask student(s) to demonstrate meaning of word and symbol in sentence.
- Assist student(s) in creating their own sentence with target word.
Teaching Vocabulary in 2 Classrooms

2 ASD classrooms using 32 core for 12 mos:
• Manual communication display/Go Talk 32 Express/I pad with Touch Chat app

First we make a plan:
• Choose the new words
• Generate phrases to use new words with known core
• Choose an activity
  • Rich in context
  • Engaging
  • Interactive
Introducing a New Word
Model...Model...Model

Model

• To support receptive language
• To teach new words and combine known words
• To demonstrate a variety of communicative functions
• To support the understanding of words and their varied uses in a variety of environments
• With multiple systems encouraging adult and peer support
I can run!
Teaching “on”

What to look for?

• Phrases using new words and known words
  • Put on, turn on, what put on, more on again, put on that

• Activity rich in context, engaging and interactive
  • Stuffed frog can sit on…
  • Lights on…
  • Clothes I can put on
Teaching Multiple Ways to Use a Word
Free DLM Resources

http://secure.dynamiclearningmaps.org/unc/facilitated/index.html

• Facilitated and Self-directed modules
• Link to a Virtual Community of Practice with a growing list of Core Vocabulary Resources
Why a classroom sized AAC System?

• Large symbols may provide easier access for some communicators
• Allows for vocabulary instruction during group activities for all students
• Everyone can see communication being modeled including staff and peers
• Symbols can be physically manipulated
• Allows for large group participation including those students without a personal AAC system “yet”
More Reasons…

• Allows students access to one more AAC system in the classroom where they have seen communication modeled daily
• Allows for multiple turn taking in a group
• Allows for greater opportunities for verbal students to increase their expressive language and learn vocabulary including word order
Why we love our classroom sized boards

One SLP shares her teams experience:

“My special education teacher tried core vocabulary today in prep for an upcoming evaluation. She couldn’t believe how well it went. She is now making core vocabulary the feature of her lesson plan that she is using for her evaluation.”

A Special Educator from a center based program for older students:

“I decided to have a discussion about normal language development with my para-educators and share my expectations for the students to become communicators. I already had multiple core boards in the room, but little modeling was taking place. Quickly, everyone bought into using the core boards and modeling language on them.”
More Reasons Why…

A Special Educator in a middle school classroom for students with cognitive impairment:

“A 7th grade student with minimal success using a high tech AAC system began using the large 32 core board in her classroom. She is now using core words and phrases and orally imitating some of the most frequently demonstrated words. The team is now confident in how to move forward in supporting this student.”

A special educator in a middle school classroom of students with cognitive impairment:

“When I model new words with known words using the large core vocabulary display on a regular basis, I often see my students begin to use these words spontaneously.”
And One More Reason…

An SLP serving a classroom of students with ASD:

“The core allows for multiple turn takes with peers. Previously, the students only had a few words and most were nouns like the names of sport teams with “won” and “lost” available. Now, when participating in engaging, motivational activities my students are communicating more spontaneously and engaging peers using core with just a few fringe words.”
Classroom Sized Core Display

Core

Fringe
Directions: One example…

• One set of 4’x4’ symbols are secured to Velcro sensitive fabric with packing tape.
• Another set of matching symbols are Velcroed on top of the taped symbols
• A long strip of Velcro is attached to a strip of laminated tag board as a removable message strip
  • This strip can be attached to the top or bottom of the large core display
Variations On A Theme

- Symbol size ranges from 2 x 2 – 6 x 6
- Some displays are permanently attached to the wall, others are portable
- Some displays do not yet have removable symbols, but that is the long term goal
- Many classrooms have multiple large core boards in different instructional areas and for ease of use
Classroom Sized Core Display

This core board was created on a bulletin board. The symbols are attached with Velcro outlined by red tape.
Classroom Sized Core Display

A large core vocabulary display with removable symbols attached to a white board with Velcro
Classroom Sized Core Display

Classroom sized core display with removable symbols and message strip on tag board
Classroom Sized Core Display

A 32 core vocabulary display enlarged to poster size on a bulletin board.
Classroom Sized Core Board

Digital core display on a smart board using Nova Chat Editor
A Way To Practice

Core Word of the Month
Another Way to Practice

Display the core word phrases in the classroom to support modeling after the core word has been taught:
Things to Remember

• You must teach and model vocabulary if you want students to learn and use it.
• Vocabulary instruction should be interactive, engaging and rich in context.
• Using vocabulary in multiple ways and contexts will increase student understanding.
• Combine new words with known words to increase understanding of both.