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

ATIA 2015

Penelope Hatch, Ph.D., CCC-SLP
Lori Geist, Ph.D., CCC-SLP
Karen Erickson, Ph.D.
Center for Literacy & Disability Studies
University of North Carolina at Chapel Hill
Learning Objectives

1. Participants will be able to identify at least 2 characteristics of a core vocabulary.

2. Participants will be able to describe at least 2 reasons for the necessity of teaching core vocabulary words and symbols to students with CCN.

3. Participants will observe a sequence of 3 strategies used to teach students with CCN core vocabulary words and symbols.
To access this presentation, look for ATIA 2015 at the Center for Literacy and Disability Studies website: https://www.med.unc.edu/ahs/clds/resources/conference-handouts

It will be available after Tuesday, February 3, 2015
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.
DLM First Contact Survey

- The DLM First Contact Survey (DLM, 2013):
  - $n = 46,161$
  - 3% exhibit no intentional communication
  - 6% have intentional communication but have no words, signs, or symbols
  - 24% use single words, signs, or symbols for a restricted range of communication purposes
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
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<th>I</th>
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DLM’s™ First 40

• Previous 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
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
Classroom Sized Core Display

Core

Fringe
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:
Additional Resources to Teach Core

Dynamic Learning Maps PD Modules

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

- Facilitated and Self-directed modules
- Virtual Community of Practice with a growing list of Core Vocabulary Resources

- http://prAACticalAAC.org

- Other Commercial Resources
  - Core vocabulary books (Dynavox & PRC)
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.
Next Stage of DLM Core Development

- Develop an implementation program for DLM™ Core Vocabulary (DLM-CV) (Funded by a U.S. Department of Education, Office of Special Education Programs Grant)

  - Distribute through Project CORE website
  - Develop implementation tools and training resources for effective use
  - Refine student communication supports
DLM-CV Formats

- Two or more levels of complexity
- Five or more technology-based platforms
- Downloadable from Project CORE website
Evidence-based Intervention

- Informed by System for Augmenting Language (SAL) (Romski & Sevcik, 1996; Romski, Sevcik, Cheslock, & Barton, 2006)

- Components:
  - AAC system
  - DLM-CV*
  - use in natural environments
  - models of use by communication partners
  - ongoing feedback

*Primary difference from SAL. Intended to reduce demands for selecting personalized vocabulary and increase opportunities to teach.
Implementation Program

- Informed by the implementation science research (Fixsen, Blase et al)
- Tools and resources:
  - Readiness assessments and action plan models
  - Interactive and on-demand training and support materials
  - Self-evaluation and observational fidelity checks
  - Data-based decision framework for changing complexity and format of DLM-CV
## Expected Outcomes and Measures

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<tr>
<th>Improved Outcomes</th>
<th>Measures</th>
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<tr>
<td>Improvements in student communication abilities</td>
<td>• Communication Matrix (Rowland, 2014)</td>
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<td>Increase in frequency and range of functions expressed by student</td>
<td>• Analysis of language samples</td>
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<td>Increased practitioner use of evidence-based AAC intervention</td>
<td>• Readiness assessments</td>
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<td>• Fidelity checklists</td>
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<td>• Self-evaluations</td>
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## Expected Outcomes and Measures

| Academic gains for students with SCD | Pre/post literacy assessments  
| Wide use of DLM-CV resources        | Website data analysis  
| Replicable design process          | Professional reviews  
|                                     | Documentation of iterative development process |
Session # CS-012

https://www.surveymonkey.com/r/CS-012

THANKS