Title: Core Vocabulary AAC Instruction for Students with Significant Cognitive Disabilities

Lori Geist, PhD
Karen Erickson, PhD
Penny Hatch, PhD

The Center for Literacy and Disability Studies
University of North Carolina at Chapel Hill

Handouts are available at www.atia.org/2016Handouts
Learning Objectives

• Participants will:
  – describe the importance of classroom-based, naturalistic core vocabulary AAC instruction to academic engagement and success.
  – define 5 components of the Project Core implementation program.
  – discuss how to use data to determine when to increase the complexity of a core vocabulary AAC system.
Disclaimer

• Drs. Geist, Erickson & Hatch are full-time employees of the University of North Carolina at Chapel Hill.
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Project CORE Overview

- Develop a comprehensive implementation program for the delivery of a multi-tiered approach to the system for augmenting language (mSAL).

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Project Goals

• Teach students with significant disabilities and complex communication needs (CCN) to communicate symbolically with a variety of people for a variety of purposes.

• Create and evaluate a multi-tiered system for augmenting language (mSAL) and a universal core vocabulary.

• Develop intervention and assessment tools for teachers, related service providers, and other classroom staff to effectively implement mSAL.

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Intended Outcomes

• Improvements in student communication abilities as measured by changes in level on the Communication Matrix (Rowland, 2015) and analysis of language samples collected throughout the school day.

• Increase in practitioner use of mSAL as measured by self-evaluations, observations and fidelity checklists.

• Academic gains for students as measured by pre/post literacy assessments and end of year alternate assessments.

• Build a system with teachers as the primary audience.
Defining the Need

• Among students with significant cognitive disabilities:
  – 9% reported to have no symbolic system of communication
    • 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
  – 47% of students known to use AAC and speech use single words, signs, or symbols...
  – 80% of students known to use only AAC use single words, signs, or symbols...

DLM First Contact Survey, 2014

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Multi-Tiered System for Augmenting Language (mSAL)

5 components at each Tier:
- an AAC system
- vocabulary and symbols
- use of natural everyday environments for teaching
- models of symbol use by partners
- ongoing resource support and feedback

Informed by Mary Ann Romski and Rose Sevcik’s System for Augmenting Language (SAL) (1996)

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Changes Across mSAL Tiers

• Tier 1
  – Universal core vocabulary

• Tier 2
  – Universal core vocabulary
  – Specialized core vocabulary

• Tier 3
  – Universal core vocabulary
  – Specialized core vocabulary
  – Individualized core vocabulary
Creating an Implementation Program

• Informed by 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 the Universal and Specialized Core.
Teacher Focus

• Demands on SLPs restrict available time for daily classroom instruction.
• Students need meaningful opportunities to learn to use AAC all day, every day.
• Teachers are the key to all day, every day opportunities in the classroom.
• SLPs support teachers in Tier I and then actively lead and direct Tier II & III interventions.

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Assessing Communication Abilities

- The Communication Matrix
  by Dr. Charity Rowland of Oregon Health & Science University (original 1990, revisions in 1996 and 2004)
  - Skills assessment
  - Earliest stages of communication
  - Any form of communication, including pre-symbolic
<table>
<thead>
<tr>
<th>Level</th>
<th>Behavior Category</th>
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<tbody>
<tr>
<td>I</td>
<td>Body Movements, Early Sounds, Facial Expressions, Visual</td>
</tr>
<tr>
<td>II</td>
<td>Body Movements, Early Sounds, Facial Expressions, Visual, Simple Gestures</td>
</tr>
<tr>
<td>III</td>
<td>Body Movements, Early Sounds, Facial Expressions, Visual, Simple Gestures, Conventional Gestures, Vocalizations</td>
</tr>
<tr>
<td>IV</td>
<td>Abstract Symbols</td>
</tr>
<tr>
<td>V</td>
<td>Concrete Symbols</td>
</tr>
<tr>
<td>VI</td>
<td>Language</td>
</tr>
<tr>
<td>VII</td>
<td></td>
</tr>
</tbody>
</table>

(Adapted from Rowland, 2012)
DEVELOPING THE UNIVERSAL CORE
Vocabulary Decisions: Continuum of Usefulness

Useful for a wide range of purposes in a variety of contexts on numerous topics

Core

Lots of opportunities to teach throughout the day.

Useful for restricted purposes in limited contexts on a specific topic

Fringe

 Opportunities limited to specific activities or specials.

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Tier 1: Classroom Wide
Universal Core Vocabulary
Core Vocabulary

- Usefulness of core vocabulary backed by numerous studies and many years of research.
- Primarily composed of pronouns, verbs, descriptors, and prepositions. Very few nouns.
- Words can be combined to increase semantic and syntactic complexity.
- Trade concreteness for dramatic increase in opportunities to teach and learn.
Universal Core Vocabulary

• Extensive review of the AAC research.
• Expressive vocabulary demands in the Common Core State Standards.
• Frequency with which students would encounter words in written text.
• Prioritized list of words reflects the intersection of the most frequently occurring words in social communication and the most important expressive vocabulary in Common Core State Standards.
### Universal Core Vocabulary: First 36

<table>
<thead>
<tr>
<th>like</th>
<th>want</th>
<th>get</th>
<th>make</th>
<th>good</th>
<th>more</th>
</tr>
</thead>
<tbody>
<tr>
<td>not</td>
<td>go</td>
<td>look</td>
<td>turn</td>
<td>help</td>
<td>different</td>
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<td>I</td>
<td>he</td>
<td>open</td>
<td>do</td>
<td>put</td>
<td>same</td>
</tr>
<tr>
<td>you</td>
<td>she</td>
<td>that</td>
<td>up</td>
<td>all</td>
<td>some</td>
</tr>
<tr>
<td>it</td>
<td>here</td>
<td>in</td>
<td>on</td>
<td>can</td>
<td>finished</td>
</tr>
<tr>
<td>where</td>
<td>what</td>
<td>why</td>
<td>who</td>
<td>when</td>
<td>stop</td>
</tr>
</tbody>
</table>

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• 36 location boards
  – Individual use
  – Classroom use

• 4 location x 9 pages books
  – Individual Use
    • 4 square
    • 4 in-line
  – Classroom Use

• Tactual symbols
• Consistent relative positions aimed at supporting effective teaching and student transitions from 4 to 36.
NATURAL EVERYDAY ENVIRONMENTS FOR TEACHING
Natural Everyday Environments for Teaching

• Students do not require continuous prompting and structured practice in order to learn language (Romski & Sevcik, 2006)

• Students do require many meaningful opportunities to use symbolic language in natural settings (i.e., embedded in the events of the day).

• Students require ongoing models of the symbolic language system we are asking them to use.

• Repetition with variety is key!
Natural Everyday Environments for Teaching (cont.)

- Teach the words *and* the symbols
- Students should be encouraged but not required to use symbols to communicate.
- All communication behaviors should be acknowledged, meaning should be attributed, and partners should respond appropriately.
Teach the Word and the Symbol

• What word does this symbol represent?
• What are some meanings of this word?
• What are some interesting contexts for teaching it?
Modeling

• ALWAYS have the universal core vocabulary available.
• Speak in a natural way as you consider the words you can model.
• Point to the symbol representations while saying the 1 or 2 most relevant words in your sentence.
• Repeat and expand using your speech to build a meaningful context.
• Avoid saying, “show me...” and “point to...”
Our Development Process:
Years 1-2

• Work collaboratively with partner schools to fully develop mSAL at Tier 1.

• Work with school professionals (implementation training, resources and coaching support).

• Provide all students who are using intentional communication with access to mSAL Tier 1 communication instruction (and work to determine how to build intentional communication for other students).

• Refine mSAL implementation program and universal core communication vocabulary and system design.
Identifying Universal Core Teaching Opportunities

• Observation of/reflection on current instructional practices.
• Observation of/reflection on naturally occurring opportunities to teach universal core vocabulary.
• Use of above in teacher training and lesson examples.

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Using Core:
Arts/Crafts/Dramatic Play Example

• Potential Communication & Interaction
  – communicate about what you are doing
  – learn about and practice different communication functions:
    • Turn taking
    • Sharing
    • Social roles
    • Opinions/perspective
    • Negotiation
Examples of the Core

• As you introduce the art project, adult models:
  – *Look!*
  – *I opened* the paint.
  – *You can* paint.
  – I *like* the blue.

• In response to the student, adult attributes meaning, repeats and expands:
  – *Like. You like* it?
  – *Open. Open it.*
Examples of the Core

• When student reaches for an item, adult models:
  – You want more.

• As the activity is ending, adult models:
  – We are finished.
  – Look what we made! I like it.
  – It’s time to stop.
Using Core:
High Interest Activities Example

• Potential Communication & Interaction
  – Preferences & Choices
  – Persuasion
  – Predictions
  – Multiple-turn interactions/negotiations

• Opportunity for sustained attention and repeated attention to a topic
Examples of the Core

• As you share your interests with students, adult models:
  – I like Kentucky. I do not like Duke.
  – Do you like the same?
  – Do you like different?
  – Who likes Duke?
  – Who likes Kentucky?
Examples of the Core

• In response to the student, adult points while asking:
  – Do you *want* Duke to win? *Want/Not*?

• In response to the student, adult attributes meaning, repeats and expands:
  – *Stop!* - Kentucky will *stop* Duke?
Using Core: Meal Time Example

- Potential Communication & Interaction
  - Preferences & Choices
  - learn about and practice different communication functions:
    - Turn taking
    - Social roles
    - Opinions/perspective
Examples of the Core

• Comment to students and other teachers using core, adult models:
  – I like muffins. I think you like muffins too.
  – I will help you. I will help open your milk.
  – Look “another student” likes muffins too.

• After student requests an item and begins to eat it, adult models:
  – Do you like it? I like that too.
Examples of the Core

- Student requests using PECS, adult responds and then models:
  - You want more. Not me!
- During cleanup, adult models:
  - Help.
  - Put it in the trash.
  - Finished.
Wrap-up

We believe:

– teachers can learn to effectively implement core vocabulary AAC systems with students with significant disabilities and complex communication needs;

– classroom-wide universal core vocabulary instruction holds promise for improving student abilities to communicate with a range of people for a range of purposes on a variety of topics; and

– SLPs will be empowered to better address the language and communication needs of students with significant disabilities and complex communication needs if mSAL is fully implemented.
Additional Resources to Teach Core

• Dynamic Learning Maps PD Modules
  • [http://dlmpd.com](http://dlmpd.com/)
  • Facilitated and Self-directed modules
  • Virtual Community of Practice with a growing list of Core Vocabulary Resources

• PrAACtical AAC blog:
  • [http://prAACticalAAC.org](http://prAACticalAAC.org)

• Commercial Resources
  • Core vocabulary books (e.g., Tobii DynaVox, PRC)

• CLDS website for Project Core Resources
  [http://www.med.unc.edu/ahs/clds](http://www.med.unc.edu/ahs/clds)

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Contact Information

The Center for Literacy and Disability Studies
The University of North Carolina at Chapel Hill
321 South Columbia St, Suite 1100
Chapel Hill, NC, 27599-7335

Website: http://www.med.unc.edu/ahs/clds

lori_geist@med.unc.edu
karen_erickson@med.unc.edu
penelope_hatch@med.unc.edu
Thank you for attending!

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