Creating a Core Vocabulary for a Common Core Curriculum

ISAAC 2012

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A Challenge and an Opportunity for Students with Complex Communication Needs (CCN)

• The Common Core State Standards
  – US national standards for English Language Arts and Mathematics
  – Finland, Singapore, and South Korea have employed similar systematic core curriculum standards with good outcomes
  – Focus is on college and career readiness for all students
  – Standards require critical thinking, building a foundation of information, and use of known information to develop new knowledge
The Common Core emphasizes:

- 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.
Challenges for students with CCN

• Access to adequate vocabulary to express new knowledge and increasingly complex ideas.

• The ability to express a variety of communicative functions.

• Adjusting to the communication demands of different contexts.

• Use of the alphabet for reading and spelling.

• Vocabulary that allows expansion of the semantic and syntactic complexity of expressive language.
Core Vocabulary: A Familiar Solution
## Core Vocabulary Research Studies

<table>
<thead>
<tr>
<th>Adults:</th>
<th>Preschoolers:</th>
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<tr>
<td>•  Stuart, Beukelman &amp; King, 1997</td>
<td>•  Beukelman, Jones, &amp; Rowan, 1989</td>
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<td>•  Balandin &amp; Iacono, 1999</td>
<td>•  Banajee, DiCarlo &amp; Stricklin, 2003</td>
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<td>•  Hill, 2001</td>
<td>•  Trembath, Balandin, &amp; Togher, 2007</td>
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<td>•  Marvin, Beukelman, &amp; Bilyeu, 1994</td>
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None of these studies have examined the language of students in academic settings.
Oakland Schools (Michigan)

• Observations Before Implementing Core:
  • Inconsistent use of AAC systems
  • Limited use of all communicative functions
  • Heavy focus on fringe or expanded vocabulary rather than core
  • Minimal turn takes during communicative exchanges
  • Reduced communicative opportunities because current vocabulary did not occur frequently enough in classroom activities
Oakland Schools

• **GOAL:** Expansion of AAC service delivery model to include:
  – Universal and systematic use of “core vocabulary”
    • On manual display, low tech, or high tech devices
• Chose initial core by reviewing research & current solutions
• Included core for emergent language learners and when updating devices for current users
Oakland’s 32 Location Core Vocabulary
**Observations**

- Increased investment by staff (SLPs embraced “core vocabulary”)
- Increased use of AAC systems
  - Multiple word phrases even without expanded vocabulary available
  - Use of words not easily represented and not taught specifically but rather embedded in daily communicative exchanges
- Increased expectations for students to use language in flexible ways
- Focus shifted from the device and programming to the language needed for communication
One Classroom Example

Specifically, ASD classrooms with many students using AAC systems saw change in 3-4 months:

– Increased use of a variety of communicative functions
– Increased use of target vocabulary
– Modeling of language use increased because vocabulary became familiar more quickly to staff
Learning from Oakland Schools
Our process

- Review of extant core vocabulary research
- Review of several existing core vocabulary sets
- Review of vocabulary used in Common Core
- Review of Clendon’s list of 150 most frequently used written words by K-4th graders
- U scores
- Provide an alphabet and access to numbers
## Core Comparison

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<th>Vocabulary</th>
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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)
How much instructional language do students need?

- **Character**
  - e.g., man in book; big, mad woman; sick animal
- **Setting**
  - e.g., hot dry there; down by water; at home
- **Subtraction**
  - e.g., take from
- **Addition**
  - e.g., put together
However: Equal and same are not equivalent concepts

• We will need to add some specific instructional vocabulary.
• Since this is a core vocabulary, these words need to apply across multiple settings (e.g., equal as a math concept, equal as it applies to measurement, equal as applied to fairness, equal as applied to the equal rights for all citizens)
AAC systems designed to meet the needs of a variety of students

- Static core – 36, 18, 12, 9, & 4 location versions
- Dynamic core – 36, 18, 12, 9, and 4 location versions
- Systems grow within and across grades
- As locations are added to the static core, the relative location of previous icons/messages stays the same.
4 Location Core
9 Location Core
12 Location Core
18 Location Core
36 Location Core
In the works

• We are still in the process of refining the vocabulary.
• Determining what if any vocabulary gets added at each new grade level
• Adding morphological markers
• Determining how to best provide access to large numbers
• Adding necessary symbols for punctuation and mathematics
Our Questions

Does this approach:

- Provide vocabulary that allows students to successfully develop language in academic settings?
- Support students in developing increasingly complex language and communication skills over time?
- Are there certain words that are necessary in academic instruction that we have not previously considered in existing core vocabularies?
You are cordially invited …

• You are welcome to join us immediately after this session in Room 310 in the conference hall to discuss “core issues.” We will be there from 2:15 to 3:15 today.

• We are very interested in:
  • Your ideas
  • Your expertise
  • Your experience with students who use core vocabulary