Practices in Selecting Initial AAC Vocabulary for Individuals with Severe Intellectual Disability

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Acknowledgement

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Thank you to the SLPs who responded to this survey and to Drs. Meadan, Halle, and Shogren for their guidance and support.
Key Considerations

Consider the influence of:

• Language impairments and complex communication needs,
• Multiple disabilities (Beukelman & Mirenda, 2013; Light et al., 2008)
• Small vocabulary (Beukelman et al., 1989; Light, 1997; Smith, 2006)

on user’s self-determination & autonomy.

Consider the influence of informants.
The Current Study

Preliminary investigation into how SLPs select initial AAC vocabulary for individuals with severe ID

Research Questions

1. What are the reported practices of SLPs in Illinois in (a) the vocabulary selection process, and (b) the content of the initial vocabulary?
2. How do practices interact with the type of vocabulary selected?

Methods

Online survey
• 105 SLPs responded
• Descriptive and nonparametric statistics
• Vocabulary analysis
A Style Note

AAC = ... 😊

ID = Intellectual Disability

CCN = Complex Communication Needs

SLP = Speech-language pathologist

Informant = Any person who contributes to the vocabulary selection process

AAC User – Assume with ID and CCN
Your Turn

Please list 10 words (including single words, phrases, whole messages, etc.) you typically include in an initial AAC system for an individual with severe ID and CCN.
Vocabulary Type

Explicit
Used about a single or small number of referents

Snack
More
Cookie
Oreo
Banana
Food

Generalized
Used generally across multiple referents

Cookie
Snack
More

Oreo
Cookie
Snack
More

Banana

Oreo
Banana
Cookie
Snack
Food
More

Reichle, York, and Sigafoos, 1991
Vocabulary Type

Explicit

- Trampoline
- Teddy bear
- Oreo
- Banana

Generalized

- I want

Explicit

- I want
- More
- Done
- Help

Generalized

- Oreo
- I want
Vocabulary Type

Explicit

- Banana
- Cookie
- Oreo
- Teddy bear
- Trampoline

I want snack.

Generalized

- I want
- More
- Snack

Bathroom please
## Vocabulary Type - Results

### Explicit

<table>
<thead>
<tr>
<th>Single words</th>
<th>Whole Messages</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball (2)</td>
<td>Mom (5)</td>
<td>Come here (3)</td>
</tr>
<tr>
<td>Bed</td>
<td>Playdough (2)</td>
<td>I am ___ years old.</td>
</tr>
<tr>
<td>Book (2)</td>
<td>Potty (2)</td>
<td>I am/I’m hungry. (3)</td>
</tr>
<tr>
<td>Bubbles (2)</td>
<td>School</td>
<td>I am sick.</td>
</tr>
<tr>
<td>Car</td>
<td>Sleep (2)</td>
<td>I am/I’m thirsty. (3)</td>
</tr>
<tr>
<td>Clothes</td>
<td>Teacher (2)</td>
<td>I am/I’m tired. (2)</td>
</tr>
<tr>
<td>Computer</td>
<td>Toilet (3)</td>
<td>I have to use/need the bathroom. (2)</td>
</tr>
<tr>
<td>Cookie</td>
<td>Video</td>
<td>I need a break. (3)</td>
</tr>
<tr>
<td>Cracker</td>
<td>Water</td>
<td>I need water.</td>
</tr>
<tr>
<td>Cup</td>
<td></td>
<td>I want snack.</td>
</tr>
<tr>
<td>Dad (4)</td>
<td></td>
<td>I’m angry.</td>
</tr>
<tr>
<td>Doctor</td>
<td></td>
<td>I’m happy.</td>
</tr>
<tr>
<td>Dog</td>
<td></td>
<td>I’m sad.</td>
</tr>
<tr>
<td>Doll</td>
<td></td>
<td>Let’s go home.</td>
</tr>
<tr>
<td>Goldfish</td>
<td></td>
<td>My name is __. (5)</td>
</tr>
<tr>
<td>Hungry</td>
<td></td>
<td>Sit down.</td>
</tr>
<tr>
<td>Hurt (2)</td>
<td></td>
<td>Stand up.</td>
</tr>
<tr>
<td>iPad (2)</td>
<td></td>
<td>Take a walk.</td>
</tr>
<tr>
<td>Juice</td>
<td></td>
<td>Time for lunch.</td>
</tr>
<tr>
<td>Leggos</td>
<td></td>
<td>Will you read?</td>
</tr>
<tr>
<td>Milk</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Commonality scores are listed in parenthesis after the vocabulary item when the score was greater than 1.
## Vocabulary Type - Results

### Generalized

<table>
<thead>
<tr>
<th>Single Words</th>
<th>Multi-word phrases</th>
<th>Whole messages</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Again (6)</td>
<td>Me (2)</td>
<td>All done (19)</td>
<td>“Basic social words: hi”</td>
</tr>
<tr>
<td>Bathroom (13)</td>
<td>Mine (2)</td>
<td>All gone (3)</td>
<td>“Greeting”</td>
</tr>
<tr>
<td>Break (6)</td>
<td>More (43)</td>
<td>Bathroom please</td>
<td></td>
</tr>
<tr>
<td>Bye/goodbye (10)</td>
<td>Move</td>
<td>Can I have…?</td>
<td></td>
</tr>
<tr>
<td>Cold</td>
<td>Music</td>
<td>I/don’t like (4)</td>
<td></td>
</tr>
<tr>
<td>Cool</td>
<td>Name (3)</td>
<td>I/don’t want (2)</td>
<td></td>
</tr>
<tr>
<td>Different (5)</td>
<td>Need (4)</td>
<td>Give me</td>
<td></td>
</tr>
<tr>
<td>Dislike</td>
<td>No (30)</td>
<td>I feel (2)</td>
<td></td>
</tr>
<tr>
<td>Do (5)</td>
<td>Not (3)</td>
<td>I like (2)</td>
<td></td>
</tr>
<tr>
<td>Don’t (6)</td>
<td>Now</td>
<td>I need</td>
<td></td>
</tr>
<tr>
<td>Done (5)</td>
<td>On</td>
<td>I see</td>
<td></td>
</tr>
<tr>
<td>Drink (28)</td>
<td>Out</td>
<td>I want (16)</td>
<td></td>
</tr>
<tr>
<td>Eat (27)</td>
<td>Pain</td>
<td>My turn (9)</td>
<td></td>
</tr>
<tr>
<td>Enough</td>
<td>Play (13)</td>
<td>Something different</td>
<td></td>
</tr>
<tr>
<td>Feel</td>
<td>Please (6)</td>
<td>Something else</td>
<td></td>
</tr>
<tr>
<td>Finish/ed (5)</td>
<td>Put</td>
<td>Your turn (2)</td>
<td>I want to do an activity.</td>
</tr>
<tr>
<td>Food (3)</td>
<td>Sad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give</td>
<td>See (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Go (26)</td>
<td>Snack (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Happy</td>
<td>Stop (24)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hello/hi (18)</td>
<td>That (7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help (29)</td>
<td>Toy/s (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot</td>
<td>Turn (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hurry</td>
<td>Uh oh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I (14)</td>
<td>Wait (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In</td>
<td>Want (26)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It (3)</td>
<td>What (6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Like (11)</td>
<td>Yes/yeah (29)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Look (8)</td>
<td>You (10)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Commonality scores are listed in parenthesis after the vocabulary item when the score was greater than 1.
A Framework

Influences on Vocabulary Selection

Informants
- Philosophy
- Curriculum Resources
  - Experience
  - Technology

System Influences
- AAC User
  - Background
    - Age
    - Behavior
  - Comm. Style

Individual Influences
- Comm. Style
  - Experience
  - Technology

- Banajee, DiCarlo, & Stricklin, 2003; Beukelman et al., 1991
- Balandin & Iacono, 1998a, b; Fried-Oken & More, 1992; Morrow et al., 1993
- E.g., Bryen, 2008; Da Fonte, Pufpaff, & Taber-Doughty, 2010; Rackensperger, Krezman, McNaughton, Williams, & D'Silva, 2005; Soto, Yu, & Henneberry, 2007; Wilkins & Ratajczak, 2009
- Beukelman & Mirenda, 2013; Light & McNaughton, 2012; Light, Wilkinson, & Drager, 2008; Soto & Yu, 2014
- E.g., Beukelman, McGinnis, & Morrow, 1991
- Martin, Drasgow, Halle, & Brucker, 2005; Snell, Chen, & Hoover, 2006; Walker & Snell, 2013
- Finke & Quinn, 2012
Philosophy

• Developmental – based on typical language development
  (Holland, 1975; Lahey & Bloom, 1977; Fristoe & Lloyd, 1980)

• Environmental – based on needs in environments accessed
  (Brown et al., 1980; Carlson, 1981; Nietupski & Hamre-Nietupski, 1979)

• Functional – based on communicative functions and/or behavior
  (Carr & Durand, 1985; Reichle, Halle, & Johnston, 1993; Reichle et al., 1991)
Philosophy – Your Turn

Please list the following statements to represent the **order of importance** they have to you when selecting initial AAC vocabulary for individuals with severe ID.

- Vocabulary reflects typical language development and vocabulary used by typically-developing peers
- Vocabulary reflects the user’s needs and preferences in each setting/environment they access
- Vocabulary allows communication for multiple functions (e.g., request, reject, comment)
Philosophy - Results

- Functional-environmental-developmental: 28%
- Developmental-functional-environmental: 4%
- Environmental-developmental-functional: 7%
- Environmental-functional-developmental: 9%
- Functional-developmental-environmental: 52%
Experience

• AAC evaluation experience
• AAC vocabulary selection experience
• Experience providing AAC intervention and support
• Experience communicating with AAC users
• Experience with AAC user’s life

(Balandin & Iacono, 1998a, b; Dark & Balandin, 2007; Fried-Oken & More, 1992; Morrow et al., 1993)
Experience – Your Turn

Note the age of individuals with severe ID & CCN with whom you have worked.

- Early intervention (birth to age 3)
- Early childhood (3 - 5 years)
- Kindergarten – 5th grade
- 6th – 8th grade
- 9th – 12th grade
- 18- to 21-year-olds
- None of the above

How many total years of experience do you have with AAC for individuals with severe ID in a professional capacity?

In your career, for approximately how many individuals with severe ID and CCN have you participated in:

- Selecting vocabulary for their initial AAC system?
- Vocabulary selection after the individual has already learned some AAC vocabulary?
Experience - Results

Experience by Age Group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percent of Respondent with Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth-2 yrs</td>
<td>35%</td>
</tr>
<tr>
<td>3-5 yrs</td>
<td>71%</td>
</tr>
<tr>
<td>K-5th</td>
<td>74%</td>
</tr>
<tr>
<td>6-8th</td>
<td>51%</td>
</tr>
<tr>
<td>9-12th</td>
<td>43%</td>
</tr>
<tr>
<td>18-21 yrs</td>
<td>38%</td>
</tr>
</tbody>
</table>

Experience with Individuals with Severe ID and CCN

- Current: 72%
- Previous: 28%

Experience with Initial Vocabulary Selection

- 10 or fewer individuals: 39%
- More than 10 individuals: 61%
Technology encompasses many influences, but we focused on **preprogrammed vocabulary sets** available in AAC devices.

- More familiar and/or readily available
- May be used even if incongruous with philosophy

(Bryen, 2008; Rackensperger, Krezman, McNaughton, Williams, & D’Silva, 2005; Soto, Yu, & Henneberry, 2007; Wilkins & Ratajczak, 2009)
Technology – Your Turn

When selecting an initial AAC vocabulary for an individual with severe ID and CCN, please indicate how often you use each preprogrammed vocabulary set for AAC devices in your practice, either to program a device or inform vocabulary for a different mode of AAC.
Technology – Your Turn

<table>
<thead>
<tr>
<th>Used in my practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
</tr>
</tbody>
</table>

**DynaVox**
- Communicate 4
- InterAACt®
- Word Power®

**Proloquo2Go®**
- Basic Communication Vocabulary
- Core Communication Vocabulary

**Tobii**
- Communicator
- SonoFlex
- Sono Primo

**Prentke Romich Company (PRC)**
- LAMP
- Picture Word Power™
- The Pixon™ Project
- TALK-ABOUT-AAC©
- Unity®

**TouchChat**
- Primary
- Word Power®

**Other**
Technology - Results

Other

• NovaChat by Saltillo
• AltChat by Saltillo
• Sounding Board™
• Verbally©
• GoTalk® selection

(n = 1)
Curriculum Resources

Curricula or curricula materials used in schools/intervention/therapy

- E.g., Books, classroom curricula, reading/ spelling lists

Specific communication teaching strategies

- E.g., Picture Exchange Communication System (PECS); Functional Communication Training (FCT)

(Carr & Durand, 1985; Da Fonte et al., 2010; Frost & Bondy, 2002; Rackensperger et al., 2005; Soto et al., 2007; Wilkins & Ratajczak, 2009)
Curriculum Resources – Your Turn

Please indicate how often you use each curriculum resource in your practice.
Curriculum Resources – Your Turn

<table>
<thead>
<tr>
<th>Used in my practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
</tr>
</tbody>
</table>

Classroom/Grade level/Course
- Subject area curriculum
- Unit of study
- Routines (e.g., morning meeting, circle time, Daily Language Review©, etc.)

Communication
- Pyramid Approach to Education™ (including PECS)
- Functional Communication Training (FCT)

Sign Language
- Baby Signs Classroom Kit®
- Signing Smart™
- Talking Hands®

Literacy
- Edmark® Reading Program
- ReadWell®
- Unique Learning System® (including News2You®)
- Early Literacy Skills Builder©
Curriculum Resources
Use - Results

Percent of Respondents

Curriculum Resources
- Classroom
- Sign Language
- Communication
- Literacy

Routines (e.g., circle, N=80)
Units of study (N=81)
Subject area curricula (N=81)
Baby Signs Classroom Kit (N=74)
Talking Hands (N=70)
Signing Smart (N=72)
Pyramid Approach to Education (w/PECS; N=73)
Unique Learning System (w/News2You; N=74)
Early Literacy Skills Builder (N=75)
ReadWell (N=73)
Edmark Reading (N=76)
Other (N=26)

Almost Always + Often
Sometimes
Rarely + Never
Curriculum Resources - Results

Other

- Language for Learning©
- Every Move Counts, Clicks and Chats©
- Gail Van Tatenhove’s Core Vocabulary Approach
- Environmental Communication Training (ECT)
- Simple Sign Language
- PODD Training©
- Sign to Speech
- Tangible Symbol Systems© by Design to Learn*
- Laureate Learning©

*Technology

(n = 1)
A Framework

Influences on Vocabulary Selection

System Influences
- Philosophy
- Curriculum Resources
- Experience
- Technology

Individual Influences
- Background
- Age
- Behavior
- AAC User
- Communication Style

Vocabulary Selection

Vocabulary Selection Method Used
Informants Engaged
Vocabulary Decisions

- E.g., Beukelman et al., 1989; Fallon et al., 2001; Fried-Oken & More, 1992; Marvin et al., 1994; Morrow et al., 1993; Reichle et al., 1991; Snell et al., 2006; Trembath et al., 2007; Yorkston et al., 1988
- E.g., Beukelman et al., 1991; Beukelman & Mirenda, 2013; Bornman & Bryen, 2013
- E.g., Beukelman et al., 1992; Beukelman & Mirenda, 2013; Calculator & Black, 2009; Morrow et al., 1993

Informed by

- E.g., Beukelman et al., 1989; Fallon et al., 2001; Fried-Oken & More, 1992; Marvin et al., 1994; Morrow et al., 1993; Reichle et al., 1991; Snell et al., 2006; Trembath et al., 2007; Yorkston et al., 1988

College of Education at Illinois
Vocabulary Selection
Methods Used

Environmental Inventory
- Observe AAC user and peers in environments the AAC user accesses/may access (Mirenda, 1985, Morrow et al., 1993)

Categorical Inventory
- Identify words from a set of categories (e.g., people, places, feelings, actions) (Carlson, 1981; Fallon et al., 2001)

Communication Diary
- Record all words AAC user communicates/ attempts to communicate (Yorkston et al., 1989)

Preference Assessment
- Identify highly motivating items, etc.; identify communicative behaviors (Logan & Gast, 2001; Reichle et al., 1991)

Functional Behavior Assessment
- Identify communicative functions of existing behavior (Reichle et al., 1991; Snell et al., 2006; Walker & Snell, 2013)

Core Vocabulary Lists
- Lists of most frequent or essential vocabulary used by others (E.g., Beukelman et al., 1991; Fallon et al., 2001; Morrow et al., 1993; Yorkston et al., 1988)

Blank Page Method
- Informants list all words they think may be needed by the AAC user (Fallon et al., 2001; Morrow et al., 1993)
Selection Methods – Your Turn

<table>
<thead>
<tr>
<th>I have <strong>tried</strong> this.</th>
<th>I use this to select initial vocabulary.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Never</td>
<td>Never</td>
</tr>
<tr>
<td>Rarely</td>
<td>Rarely</td>
</tr>
<tr>
<td>Sometimes</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Often</td>
<td>Often</td>
</tr>
<tr>
<td>Almost Always</td>
<td>Almost Always</td>
</tr>
</tbody>
</table>

**Environmental inventory**
- Observing the AAC user and peers without disabilities in environments that the AAC user may access and identifying words that are important in each setting

**Categorical inventory**
- Identifying words an AAC user may need for provided categories, such as *people, places, feelings,* etc.

**Communication diary**
- Keeping a record of all words an individual communicates or attempts to communicate over a specified period of time

**Blank page method**
- Asking people to write down all of the words they think may be of importance to the AAC user

**Word lists/vocabulary checklists**
- Selecting and prioritizing words from standard and/or core vocabulary lists

**Preference assessment**
- Identifying highly motivating items, activities, and other referents, and including the words for the individual's identified preferences

**Functional behavior assessment (FBA)**
- Identifying the communicative functions of existing behaviors and providing vocabulary that can be taught to replace or clarify those behaviors
Selection Methods Tried - Results

- Categorical Inventory:
  - Yes: 96%
  - No: 4%

- Preference Assessment:
  - Yes: 92%
  - No: 8%

- Environmental Inventory:
  - Yes: 89%
  - No: 11%

- Checklists/Word Lists:
  - Yes: 82%
  - No: 18%

- FBA:
  - Yes: 75%
  - No: 25%

- Blank Page:
  - Yes: 64%
  - No: 36%

- Communication Diary:
  - Yes: 63%
  - No: 37%
Selection Methods Use - Results

Vocabulary Selection Methods

- Preference assessment (N = 63)
- Environmental inventory (N = 61)
- Categorical inventory (N = 70)
- Communication diary (N = 69)
- Functional behavior assessment (N = 67)
- Word lists/Vocab checklists (N = 68)
- Blank page (N = 69)

- Almost Always
- Often
- Sometimes
- Rarely
- Never

Percent of Respondents

- Preference assessment: 59.0%
- Environmental inventory: 52.0%
- Categorical inventory: 51.0%
Informants Engaged

Who participates in vocabulary selection?

What do they bring?

What level of influence over the vocabulary do they hold?
Informants Engaged – Your Turn

Please indicate how often the following people have participated in the initial vocabulary selection process for individuals with severe ID and CCN in your practice.

<table>
<thead>
<tr>
<th>Informant</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAC user</td>
<td></td>
</tr>
<tr>
<td>Parent/Guardian</td>
<td></td>
</tr>
<tr>
<td>Sibling(s)</td>
<td></td>
</tr>
<tr>
<td>General education teacher</td>
<td></td>
</tr>
<tr>
<td>Special education teacher</td>
<td></td>
</tr>
<tr>
<td>Speech language pathologist</td>
<td></td>
</tr>
<tr>
<td>School/district administrator</td>
<td></td>
</tr>
<tr>
<td>Peer(s) – same age as AAC user</td>
<td></td>
</tr>
<tr>
<td>Peer(s) – same gender as AAC user</td>
<td></td>
</tr>
<tr>
<td>Peer(s) – have relationship with AAC user</td>
<td></td>
</tr>
<tr>
<td>AAC device company representative</td>
<td></td>
</tr>
<tr>
<td>When a member of the AAC team:</td>
<td></td>
</tr>
<tr>
<td>Paraprofessional(s)</td>
<td></td>
</tr>
<tr>
<td>Speech pathology assistant</td>
<td></td>
</tr>
<tr>
<td>School/district assistive technology or AAC coordinator</td>
<td></td>
</tr>
<tr>
<td>Occupational therapist/OT assistant</td>
<td></td>
</tr>
<tr>
<td>Physical therapist/PT assistant</td>
<td></td>
</tr>
<tr>
<td>Teacher for the visually impaired</td>
<td></td>
</tr>
<tr>
<td>Teacher for the Deaf/hard of hearing</td>
<td></td>
</tr>
<tr>
<td>School nurse</td>
<td></td>
</tr>
<tr>
<td>Developmental therapist</td>
<td></td>
</tr>
</tbody>
</table>
Informants Engaged - Results

• 59% report using preference assessments
• 40.3% report using FBA
Vocabulary Decisions

How will the vocabulary be presented to the AAC user in the initial system?

• How many vocabulary items will be included?
• How will the vocabulary items be presented?
  • Single words, phrases, whole messages
Vocabulary Decisions – Your Turn

• How many words do you typically include in an initial AAC system for individuals with severe ID and CCN? __________
  • What is the minimum number of words you would put in their initial AAC system? __________
  • What is the maximum number of words you would put in their initial AAC system? __________

• Return to your initial list of 10 vocabulary items. How many were:
  • Single words?
  • Phrases?
  • Whole messages?
  • Categories?
Vocabulary Decisions: Size - Results

Number of vocabulary items in initial AAC vocabulary

Percent of Respondents

- 1
- 2
- 4
- 5
- 6
- 8
- 9
- 10
- 11-15
- 16-20
- 21-30
- 31-50
- >50

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Vocabulary Decisions: Words per Item - Results

- Single Words: 50% of unique vocabulary items from respondents
- Multi-word Phrases: 5% of unique vocabulary items from respondents
- Whole messages: 20% of unique vocabulary items from respondents
- Categories: 10% of unique vocabulary items from respondents

Words represented in a single vocabulary item
A Framework

System Influences
- Philosophy
- Curriculum Resources
- Experience
- Technology

Informants

Individual Influences
- Background
- AAC User
- Comm. Style
- Age
- Behavior

Vocabulary Selection
- Vocabulary Selection Method Used
- Informants Engaged
- Vocabulary Decisions

Selected Vocabulary

AAC User's Experience
- Instruction
- Opportunities, Practice, & Generalization
- Ongoing Vocabulary Adjustments
- User's expressive AAC repertoire

Vocabulary Selection
- Informants
- Engaged
- Vocabulary Decisions

Selected Vocabulary

System Influences

Influences on Vocabulary Selection
- Philosophy
- Curriculum Resources
- Experience
- Technology

Informants

Individual Influences
- Background
- AAC User
- Comm. Style
- Age
- Behavior
Vocabulary Type Results

Explicit
Used about a single or small number of referents

Generalized
Used generally across multiple referents

Explicit
Trampoline
Teddy bear
Oreo
Banana

I want

Explicit
Generalized

Generalized

Help
Done
More
I want

Reichle, York, and Sigafoos, 1991
Vocabulary Type - Results

711 total vocabulary items contributed

170 unique items
Vocabulary Type - Results

Explicit: 19%  
Generalized: 81%

574 items

137 items

711 total vocabulary items contributed
Vocabulary Type - Results

Explicit

- 40%
- 68 items

Generalized

- 60%
- 102 items

170 unique vocabulary items contributed
## Influences on Vocabulary Type

**Selected Mann-Whitney U Tests of Differences in Mean Ranks of Vocabulary Type by Reported Use of Tools**

<table>
<thead>
<tr>
<th>Curriculum Resource</th>
<th>Group</th>
<th>n</th>
<th>Mean Rank</th>
<th>U</th>
<th>p*</th>
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<tbody>
<tr>
<td>Pyramid Approach to Education™ (with PECS)</td>
<td>Not used</td>
<td>30</td>
<td>39.22</td>
<td>398.5</td>
<td>.039**</td>
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<tr>
<td></td>
<td>Used</td>
<td>37</td>
<td>29.77</td>
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<tr>
<td>Prentke Romich Company (PRC): LAMP</td>
<td>Not used</td>
<td>48</td>
<td>26.38</td>
<td>90.0</td>
<td>&lt;.001***</td>
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<tr>
<td></td>
<td>Used</td>
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<td>PRC: The Pixon™ Project</td>
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<td>195.5</td>
<td>.004**</td>
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<td></td>
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<td>16</td>
<td>41.28</td>
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<tr>
<td>PRC: Unity®</td>
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<td>27.60</td>
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<td>.008**</td>
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<tr>
<td></td>
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<td>Vocabulary Selection Method</td>
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<tr>
<td>Word Lists/Vocabulary Checklists</td>
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<td>28.28</td>
<td>298.5</td>
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<tr>
<td></td>
<td>Used</td>
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<td>Experience</td>
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<tr>
<td>9th – 12th graders</td>
<td>No experience</td>
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<td>29.79</td>
<td>391.0</td>
<td>.012**</td>
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<td></td>
<td>Experience</td>
<td>28</td>
<td>35.79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. *2-tailed probability; **p < .05; ***p < .001*
Vocabulary Type - Results

Explicit

Experience with 9-12th graders
Checklists/Word Lists
PRC: Unity
PRC: Lamp
PRC: The Pixon Project

Generalized

Pyramid Approach

Experience with 9-12th graders
Checklists/Word Lists
PRC: Unity
PRC: Lamp
PRC: The Pixon Project
Implications

- The SLPs who responded to this survey were
  - Aware of and using many of the resources and vocabulary selection tools.
  - Primarily single-word, generalized vocabulary items in initial AAC.
- Some of the influences examined did affect vocabulary type.
- The AAC Vocabulary Selection Framework can be useful in guiding self-reflection about one’s influence as an informant
  - Refining and using the framework with AAC teams
Limitations

- Small number of respondents
- Self-report
- Questionnaire content was skewed toward school-based interventions specific to US/Midwest
- Questionnaire validity untested
- Only SLP and English language AAC perspectives
Next Steps

• Refine the AAC Vocabulary Selection Framework based on these findings for use by AAC teams
• Revise questionnaire and administer to other AAC team members (e.g., parents, teachers)
• Integrate information from practitioners into research efforts
• Examine vocabulary selection efforts of teams
Questions? Comments?

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mrsnodg2@illinois.edu

Reference list available upon request.