The Use of Augmentative and Alternative Communication in Early Intervention

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Disclosure

Hello, my name is Daniel Dardiz

I am a salaried, regional consultant for PRC, as well as one of more than 100 employee owners.
Learning Outcomes

• After today, you will be able to:
  • state the basic connections between early speech and language development and AAC
  • explain the difference between core and fringe vocabulary
  • describe why motor planning is critical to organizing vocabulary and language on an AAC system
  • Understand the basic requirements for an AAC evaluation
Speech vs. Language vs. Communication

Speech

A complex motor system fluently coordinating breathing, voicing, and articulation to transmit language.

Replacing or augmenting this impaired motor system with the simpler AAC motor system.
Speech vs. **Language** vs. Communication

**Language**

Symbolic system for encoding meaning
- Vocabulary
- Syntax
- Morphology
- Pragmatics

“Discrete Infinity”

Language is what is represented on the AAC system.
Speech vs. Language vs. Communication

Communication
Exchanging information from one person to another, for a variety of purposes and in a variety of ways.

AAC is another tool in the communication toolbox.
From LAMP

Motor automaticity is achieved through practice when a consistent motor movement produces a consistent result. In order to achieve automaticity with AAC, each word should be accessed using a unique and consistent motor pattern regardless of the activity.

From the Language Acquisition through Motor Planning (LAMP) manual
“Communication is based on the use of the individual words of our language. True communication is spontaneous and novel. Therefore, communication systems cannot be based significantly on pre-stored sentences. Communication requires access to a vocabulary of individual words suitable to our needs that are multiple and subject to change. These words must be selected to form the sentences that we wish to say.”

http://www.asha.org/public/speech/disorders/AAC-Glossary/
ASHA’s Thoughts:

AAC involves attempts to compensate for temporary or permanent impairments, activity limitations, and participation restrictions of individuals with severe disorders of speech-language production and/or comprehension, including spoken and written modes of communication.
Why Single Words?

Easier to learn – pairing a motor act with an auditory output followed by a meaningful natural response

Provide flexibility in expression (*generative language*)

20 phrases... only 20 things to say

Remember early language development
Core Vocabulary

• Every language has this basic feature:
  • The vast majority of everything spoken or written in a language is produced using a small subset of the overall vocabulary

• In English
  • 80% of spoken/written language comes from 400-500 words
  • 20% comes from bank of 10,000’s of words
    • Vanderheiden & Kelso (1987)
    • Boenisch, J. (2014)
    • Boenisch, J. & Soto, G. (2014)

• Which word is more useful across a variety of situations?

  pumpkin

  help
Toddler Vocabulary

23 core words shown at right comprise 96.3% of the total words used by toddlers in this study.

Banajee et al. 2003

<table>
<thead>
<tr>
<th>Words</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>I</td>
<td>9.5</td>
</tr>
<tr>
<td>no</td>
<td>8.5</td>
</tr>
<tr>
<td>yes/yea</td>
<td>7.6</td>
</tr>
<tr>
<td>my</td>
<td>5.8</td>
</tr>
<tr>
<td>the</td>
<td>5.2</td>
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<tr>
<td>want</td>
<td>5.0</td>
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<tr>
<td>is</td>
<td>4.9</td>
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<tr>
<td>it</td>
<td>4.9</td>
</tr>
<tr>
<td>that</td>
<td>4.9</td>
</tr>
<tr>
<td>a</td>
<td>4.6</td>
</tr>
<tr>
<td>go</td>
<td>4.4</td>
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<td>mine</td>
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<tr>
<td>you</td>
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<td>more</td>
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<td>out</td>
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<td>2.3</td>
</tr>
<tr>
<td>help</td>
<td>2.1</td>
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<tr>
<td>all done/finished</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>96.3</strong></td>
</tr>
</tbody>
</table>
“Repetition with Variety”
Gail VanTatenhove

• Do different activities, but keep the vocabulary constant
  • Use the same core words throughout the day
  • Keep those words in the same spot

• Do the same activity, but vary the target vocabulary
  • Making a smoothie

• Change one thing at a time, not both
  • When learning about ‘go’, systematically introduce new situations where we can say ‘go’
  • When making a smoothie for the first time, introduce ‘in’ and ‘on’. The second time around, introduce ‘cold’ and ‘yum’.
So, an AAC device...

- Gives an individual an alternate way to produce speech
- Gives an individual another way to acquire language without having to rely on his/her speech alone
- Gives an individual another way to communicate
Organize a Team

• Necessary team members
  • ASHA certified Speech-Language Pathologist
  • Physician
    • Reviews recommendations
    • Provides a prescription for the DME
  • Client

• Other team members
  • OT/PT
  • Teacher
  • Rehabilitation counselor
  • Family/caregiver/staff
Main Funding Sources

- **Medicaid** Managed Care Organizations
- **Medicare** Managed Care Organizations
- **Private insurance/ Tricare**
- Veteran’s Administration
- Maybe one or more funding sources

- Alternative Sources: local civic organizations, charities, fundraisers, grants, (www.disabilityresources.org), Go Fund Me, etc.
Check Funding Source(s)

• Before you call...
  https://www.prentrom.com/funding/insurance-tips

• **Call** to check on coverage for Durable Medical Equipment (DME) for these codes for a Speech Generating Device (SGD):
  • E2510 (SGD)
  • E2599 (SGD Accessories)
  • E2512 (Mounts)

Hello, does my policy cover DME? And more specifically does it cover SGD's?
Conduct the Evaluation

1. Client's Background Info
2. Speech and Language Abilities: Receptive and Expressive
3. Cognitive Abilities
4. Physical Abilities/Mobility Status
5. Hearing and Vision
6. Daily Communication Needs
7. Rationale for Device Selection
8. SGDs Considered and/or Tried
9. Recommended SGD and Accessories
10. Functional Communication Goals
11. Treatment Plan, Disclosure, and Signature
Device Trial Resources

• Contact the device manufacturer or their local company representative
• Local Assistive Technology Lending Libraries
Thank you!

• Questions
• www.prentrom.com
References


• http://www.asha.org/public/speech/disorders/AAC-Glossary/