NSSLHA Community Service Grant: Impacting of Early AAC Intervention In Rural Wisconsin

University of Wisconsin-Stevens Point
Maggie Watson, Ph.D., CCC-SLP
Gary D. Cumley, Ph.D., CCC-SLP
Linda Lang, CCC-SLP
Wood County Birth to Three
Wisconsin Rapids, WI
Introduction

- AAC services and supports into early intervention programs have been hindered primarily by the myths regarding the role AAC plays in early communication development (Romski & Sevick, 2005).

- Young children having motor, language, cognitive, and/or sensory impairments are at risk for the development of speech and language skills, resulting in these children having a complex communication needs (CCNs).

- Children with CCNs may have reduced access to different environments, limited interactions with communication partners, and fewer opportunities for communication (Light, 1997).
Importance Of Early Intervention

- The purpose of early intervention for young children with CCNs is to maximize their potential and provide opportunities for the development of communication and interaction skills (Hustad, K., et al., 2005; Jensen, E., 1998; Ferrier, L. J., et al., 1996; Paul, R. 1997; Bartman & Freeman, 2003; Johnston, S., 2003).

- Assistive Technology (AT) allows young children with CCNs the opportunity to increase, maintain, or improve their functional communication (IDEA, 2004).
Why Introduce AAC into Early Intervention Programs?

- Children who cannot speak face both social, and future educational isolation, because they are unable to communicate their necessities, desires, and emotions. This results in communication frustration and the emergence of undesirable behaviors (Romski & Sevcik, 2005).

- ASHA’s 1991 position paper supports the concept of “multimodal communication and that AAC intervention should foster and develop the full communication potential of individuals by facilitating any residual speech or vocalizations, gestures, signs, and aided communication as a means of communicating (ASHA, 1991).”
The use of AAC is mandated as part of the implementation of Part C of the Individuals With Disabilities Education Act (Romski & Sevick, 2005).

AAC plays four roles in early intervention:
- AAC can augment existing natural speech.
- Provides the primary output mode for communication.
- Provides an input and output mode for language and communication.
- AAC services as a language intervention strategy. (Romski & Sevcik, 2005).
Both “high and low tech” systems can support the communication development of children at risk for the development of communication.

AAC may enhance the development of spoken communication, which should be a simultaneous goal for intervention (Cress, 2003).

IDEA (2004) states that the role of early interventionists must provide assistance not only to the child, but also to their families as well.
Myths About AAC

- AAC is the last resort in speech-language intervention.
  - AAC plays many roles in early communication development (Cress, 2003).
  - It is critical to introduce AAC before communication failure occurs (Romski & Sevcik, 2005).
Incorporating AAC into early intervention must include:

– Families being involved in the AAC assessment process.
– Training families to incorporate and facilitate the use of AAC system(s) into everyday activities and routines of their child.
– Families being involved in the process of securing AAC system(s) (Hustad, K, et al., 2005).

AAC and AAC strategies are a tool, a means to an end-language and communication skills -not the end (Romski & Sevick, 2005).
Myths About AAC

- AAC hinders or stops further speech development.
  - Supporting Evidence that AAC Doesn’t Hinder Speech Development
    • Meta-Analysis of studies between 1997 and 2003 looked at the affect of AAC on speech production (Millar, Light & Schlosser, 2006).
      - No individual demonstrated decrease in speech production when AAC introduced.
      - 11% showed a change in speech production
      - 87% demonstrated gains in speech production
    • For very young children the use of AAC does not appear to hinder speech development (Cress, 2003).
Evidence Based Practices: AAC Use With Young Children

- Significant increased rate of turn-taking behaviors and increased rate of vocabulary acquisition (Binger & Light, 2006; Hustad, K., et al., 2005).


- Increased range and use of different communicative functions (Light & Drager, 2007; Jensen, E. 1998; Ferrier, L. J., 1996; Paul, R., 1997).
Positive impact on the communication skills of young children across different AAC systems.

- **Unaided Systems**
  - Signs and gestures (Bartman & Freeman, 2003; Sigafoos et al., 2004).

- **Aided systems**
  - Nonelectronic systems (Carlop-Christy et al., 2002; Johnston, et al., 2003).
  - Electronic systems (DiCarlo & Banajee, 2000; Romski et al., 2006).
NSSLHA Community Service Grant

- The Community Service Grant award program provides funding to local chapters that wish to provide resources to nonprofit organizations that assist others living with a communication disorder.

- Nonprofit organizations in education, health and human services, or local chapters of a nationally established nonprofit self-help/support group are eligible to receive support.
NSSLHA Community Service Grant

- Funds may be used to purchase equipment and other types of materials to donate to the recipients.

- The National Office will provide matching funds to the local NSSSLHA chapter of up to $1,000.
The Community Service grant was used to support the development of children enrolled in a local Birth-to-Three program.

Prior to implementation of the grant, the children in the Birth to Three program did not have access to assistive technology useful for the development of cognitive, social, and communication skills.
NSSLHA Grant
UW- Stevens Point

A total of $1000 was given to the Birth-Three program, allowing the purchase of a variety of materials and devices, including:

– Boardmaker software
– A sign language training program (DVD)
– A variety of voice & sound-activated toys and communication devices
Parents Perception of Benefit of Grant

- 35 families benefited from the items.

- Survey was distributed to determine the families perception of the overall benefit to them and their child.

- Out of the 35 families involved 18 or 51% responded to the survey.
## Survey Results

<table>
<thead>
<tr>
<th>Item</th>
<th>1 (strongly disagree)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (strongly agree)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The item was easy to use.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 17</td>
</tr>
<tr>
<td>The item was convenient to use.</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>My child vocalizes sounds more when using this item.</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>My child produces words more when using this item.</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>My child takes conversational turns with me when using this item.</td>
<td></td>
<td></td>
<td>5</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>My child initiates interaction with me when using this item.</td>
<td></td>
<td></td>
<td>5</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>I enjoy interacting with my child when using this item.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>My child has learned new skills by using this item.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 17</td>
</tr>
<tr>
<td>I would recommend this item to other families.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>My child is able to communicate his/her needs and wants through use of this item.</td>
<td>1</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>I am able to understand what my child wants.</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
Parent Comments:
How did your child benefit from the item?

- He pays attention well, so I think he is absorbing some of it.
- Learning basic signs.
- Greatly, she has increased her sign vocabulary a great deal.
- Yes, it holds her attention and has made her aware of her hands and her ability to move them.
- He learned more and increased his signing repertoire.
Parent Comments: Did you benefit from the item?

- Yes, I have learned a great deal from working with it and reinforcing it with my child.
- Very much. The entire family learned with him.
- Yes, I’ve learned lots of signs and songs that my child enjoys interacting with me.
- Yes, I’m learning too!
- Yes, it helps me to figure out other ways to communicate with him.
- It brought to light many ways we could improve our communication with our child.
- We were able to pick up on the little ways that we could communicate with our child that worked.
Parent Comments
What sort of change have you seen since using this item?

- An increase in talking.
- An increased ability to communicate with fewer tantrums.
- She is more aware of her hands and is beginning to sign.
- He picks up signs more quickly and will sit and watch.
- I now have creative ideas and fun ways to work with our son and his communication needs versus just drilling him.
Parent Comments

How has this affected your 0-3 intervention?

- Another means of communication.
- It has enabled her to become familiar with the signs her therapists use with her and she gets more out of therapy because of that.
- It has enabled my child and me to get more out of therapy sessions.
- It reinforced that most of the ways we were interacting with our son were appropriate.
Comments

OT

– My experience with use of signing time videos have been positive. It has been a great tool to use in the B-3 philosophy of "natural environment" that allows parents to use the resources with their children outside of regularly scheduled visits. The videos are very kid friendly and the kids love to watch and learn from them and as a result have increase use and carry-over of learned signs. It is a cost effective way for parents to borrow and learn sign language for communication with their child.
Comments

- **SLP**
- The opportunity to receive outside funding for our birth to three program has been a huge benefit. Our budget is limited and often we can not purchase anything beyond the basics. We have seen positive results in children and in families since using many of these items. Most families have found the materials to be effective and easy to use, plus they have been able to interact more closely with their child. Programs, such as USWP NSSLHA, that are able to provide resources for community and county programs are very much appreciated.
Conclusions

- The NSSLHA Grant provided multiple benefits, including:
  - Improving the lives of young children with CCNs and supported families.
  - Heightened undergraduate students awareness of the grant writing process and the benefits of writing a grant.
  - Increased the students’ awareness of the needs of individuals within their community.
  - Provided students an opportunity to increase their awareness and knowledge regarding the positive benefits of Assistive Technology.
  - Seeing the positive effect incorporating AAC into an early intervention as a means of helping to facilitate the language and communication development of young children with CCNs.
  - Creating a partnership between the University and a local agency.
References

References