




**Ingredients to Successful Modeling:
SMoRRS and Partner-Augmented Input**
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Speaker Disclosures

- Financial – Jill E Senner is the owner and director of Technology & Language Center, Inc. where she provides services and products related to partner-augmented input and communication partner instruction in AAC. Matthew R Baud owns a private practice where he provides similar services and products related to AAC.
- Nonfinancial - No relevant nonfinancial relationship exists.

Learner Outcomes

1. Participants will be able to define partner-augmented input.
2. Participants will list three benefits of providing partner-augmented input.
3. Participants will list the 6 modeling ingredients.



Communication Partner Instruction

- Kent-Walsh & McNaughton (2005) devised an 8-step instructional program for communication partners based on Ellis et al. (1991) including:
 - 1) Pretest and Commitment to Instructional Program
 - 2) Strategy Description
 - 3) Strategy Demonstration;
 - 4) Verbal Practice of Strategy Steps;
 - 5) Controlled Practice and Feedback;
 - 6) Advanced Practice and Feedback;
 - 7) Posttest and Commitment of Long-Term Strategy Use; and
 - 8) Generalization of Targeted Strategy Use.






Communication Partner Instruction

- “Being an effective communication partner or AAC facilitator is not intuitive. It often requires one to change long-established, unconscious ways of communicating” (Blackstone, 2006, p. 12).





Communication Partner Instruction

- Training an AAC user’s significant communication partners (e.g., parents, teachers, teacher aides, friends) can be of great benefit in increasing participation in daily interactions by individuals using speech-generating devices (Light et al., 1992; Douglas, McNaughton, Light, 2013).
- There is consistent evidence that communication partner instruction not only improves the skills of communication partners but also has a positive impact on the communication of people who use AAC (PWU AAC, Kent-Walsh, Murza, Malani, & Binger, 2015; Shire & Jones, 2015).
- Communication partner training can be used effectively as an intervention strategy for individuals using AAC (Kent-Walsh et al., 2015).






AAC Implementation





<http://quotivee.com/2013/quote-wallpapers/the-finish-line/>

Langley (2015)

Infants Learn Language...

Not Through "Instruction"

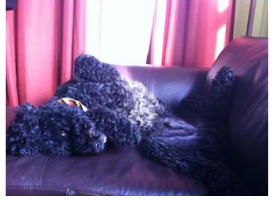




- **dog** *n.* 1. A domesticated carnivorous mammal, *Canis familiaris*, raised in a wide variety of breeds and probably originally derived from several wild species.







...But Through Modeling

- "Look at the dog!"
- "He's feels so soft. Let's pet the dog."
- "The dog is barking. That's loud."


Learning Language...

- Initially infants don't understand what we're saying... But we keep talking to them...







Learning Language

- "From the moment a baby is born, they hear and respond to the spoken word. We bombard that infant with language for the first 12-18 months of their lives. During that time, we do not expect that they will utter a single understandable word."

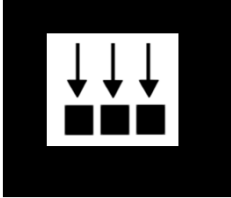




<http://atto.buffalo.edu/registered/ATBasics/Populations/aac/consider.php>

Learning AAC

- Why then do we expect a child to spontaneously begin using an AAC system from the first day (s)he receives it?!
- Simply giving a child a board or device does not make him/her a communicator!
- We have the benefit of being able to read the words on a child's board. Look at the symbol to the left- Do you know what this means?

Learning AAC



- AAC users also need and deserve a period of learning from the models of others. This modeling can and should be done by parents, peers, siblings, professionals and others on a regular basis for an extended period of time.

DO's and DON'Ts of AAC

Do use the AAC system to talk yourself

Don't expect the AAC user to communicate without you modelling how



<http://www.assistiveware.com/dos-and-donts-aac-use-aac-system>

Learning AAC



“It is recommended that classroom instruction include the child’s targeted AAC language to promote the child’s understanding of the symbol and referent.”

Dodd & Gorey (2014).



What is Partner-Augmented Input?

- Partner-augmented input (PAI), also referred to as “Natural Aided Language,” “Aided Language Modeling” or “Aided Language Stimulation,” is a modeling strategy whereby communication partners use the child’s AAC system themselves by pointing to the symbols on the child’s communication board or device while simultaneously talking.
- “Augmented input can be broadly defined as an umbrella term for systematic modeling input from two or more modalities, one of which must include the learner’s AAC system.” (Allen, Schlosser, Brock, & Shane, 2017).



How is it Provided?

- Communication partners (e.g., school staff, parents, peers) use visual language themselves by pointing to the symbols on the child’s communication board or device while simultaneously talking.



Research Suggests that PAI:

- increases vocabulary comprehension (*Dada & Alant, 2009*)
- increases symbol comprehension and production (*Drager et al., 2006; Harris & Reichle, 2004*).
- provides models for appropriate language and communication (*Cafiero, 1998*).
- provides children with a model for how AAC can be used, in what contexts, and for what purposes, reinforces the effectiveness of using the system (i.e., children experience the utility and the power of the system), and makes an implicit statement to children that AAC provides an acceptable vehicle for communicating (*Romski & Sevcik, 1996*).
- is an effective method to teach early semantic-syntactic relations (*Lund, 2004*).
- increases production of multi-symbol messages (*Binger & Light, 2007*) and can improve utterance length and complexity (*Bruno & Trembath, 2006*).
- increases responsiveness and use of AAC (*Beck, Stoner & Dennis, 2009*).
- increases in use of morphemes such as past tense –ed and plural –s (*Binger, Maguire-Marshall, & Kent-Walsh, 2011*).



Why Partner-Augmented Input?

- Almirall et. al (2016) found that “using an SGD within an effective naturalistic developmental behavioral intervention may facilitate longer and more frequent reciprocal communication interactions, leading to gains in verbal and nonlinguistic communication skills” (p. 11) of 5-8 year-old children with autism.
- In the SGD group, significant differences were seen in spontaneous communicative utterances and initiating joint attention.
- “...the gains made by children... could be explained by the therapist modeling SGD use, with or without child SGD use” (p. 12).





Systematic Reviews

- “The results of the review indicated that AAC modeling intervention packages led to meaningful linguistic gains across four areas including (a) pragmatics, marked by increases in communication turns; (b) semantics, marked by receptive and expressive vocabulary increases; (c) syntax, marked by multi-symbol turn increases; and (d) morphology, marked by increases in target morphology structures (Sennott, Light & McNaughton, 2016).
- “A broad conclusion would be that evidence for improvement of communication skills in persons with developmental disabilities and CAS is promising” (Allen, Schlosser, Brock & Shane, 2017, p. 156).




Why Partner-Augmented Input

- The purpose of providing partner augmented input is to establish a solid *receptive* language base upon which the child's AAC use is built. The expectation is that expressive language will eventually follow. The child should be encouraged but *not required* to use symbols during your interactions.




Prompting and PAI

- Caregiver utterances that are both synchronized with the child's focus AND are undemanding in quality are correlated with better language development (Siller & Sigman, 2002).



Prompting and PAI

- Avoid using “mand models” in which there is an expectation that the child will say what we want them to say (Burkhart, 2015).
- “Compliance is not communication” (Post, 2017).

Prompting and PAI

- “Current teaching practice which employs hand-over-hand modeling, combined with frequent verbal and gestural prompting... may limit the effectiveness of modeling in atypical learners.” (Biederman, Fairhall, Raven & Davey, 1998, p. 510)
- “Passive modeling was overall significantly more effective than hand-over-hand modeling...” (Biederman, Fairhall, Raven & Davey, 1998, p. 503)

Partner Outcomes

- Van Tatenhove (2006) notes that augmented input:
 - Slows down partner speech rate
 - Shortens partner sentence length
 - Forces emphasis of key words and ideas
 - Emphasizes gaps in core vocabulary
 - Shifts talking by teacher from referential question asking to commenting and modeling
 - Builds natural support networks.



Learning AAC - Goossens' (2000)

- “To become a proficient user of an augmentative communication system, the child must undergo a substantial portion of his/her training within the many environments in which he/she is expected to communicate.”



Learning AAC - Goossens' (2000)

- “Furthermore, to achieve mastery, the child must be inundated with seeing the system being used frequently, interactively and generatively.”
- “In short, to maximize acquisition, augmentative communication training is best conducted with an immersion approach.”



Learning AAC - Goossens' (2000)

- “...We must begin to view AAC training as being analogous to second language learning.”



Second Language Acquisition

- Basic Interpersonal Communication Skills (BICS) - 2-3 years to achieve proficiency (in a supportive environment)
- Cognitive Academic Language Proficiency (CALP) - 5-7 years to achieve




Input v. Output




Input v. Output

“Often familiar and unfamiliar communication partners use an oral language system with an individual learning an AAC-based language. In a sense, this dichotomy requires the AAC user to ‘code switch’ between a verbally symbolic language system and a visually symbolic language system.”




Dodd & Gorey (2014)




AAC Competency Takes Time

- The average 18 month old child has been exposed to 4,380 hours of oral language at a rate of 8 hours/day from birth. A child who has a communication system and receives speech/language therapy two times per week for 20-30 minutes sessions will reach this same amount of language exposure in 84 years (Korsten, J.)





<http://atto.buffalo.edu/registered/ATBasics/Populations/aac/consider.php>





Modeling Ingredients

- Slow speech rate. Speak in slow, clearly articulated manner.


Modeling Ingredients

- Model. Say words/phrases that are related to the contextual information available while pointing to pictures on the child’s board or device. For example, while looking at a book, the adult might say: "I see a dog. I like dogs."
 - Parallel talk. Describe the ongoing actions/interests of the child.
 - Self-talk. Describe the ongoing action/interest of the adult. Talk about what you are doing as you are doing it (e.g., "Put in CD. Turn on music.")






Modeling Ingredients

- Respect and reflect. Provide the words to code the child’s wants, feelings, and intended messages. When the child communicates something through gesture or word approximation model a word or phrase to communicate the same thought or feeling *without making the child repeat himself*. For example, if the child points to a water fountain, the adult might say: "Drink. Want drink."





Respect & Reflect!

Respect & Reflect

- “Following the child’s lead enables the communication guide to contingently respond to all of the child’s communicative attempts. This demonstrates to the child that his or her language has meaning while providing AAC language models.”

Dodd & Gorey (2014)

Modeling Ingredients

- Repeat. Frequently repeat utterances.
- Expand. Repeat and rephrase adult utterances by adding elements to provide a more complete expression of intended meaning. For example, "Bath time. It's time for your bath." *Build up* the child's communication as well (i.e., if he/she use one word or symbol such as "BUBBLE" expand the comment to two words, for example, "Oh, that's a BIG BUBBLE.")



Modeling Ingredients

- Stop. Pause to allow the child time to respond.

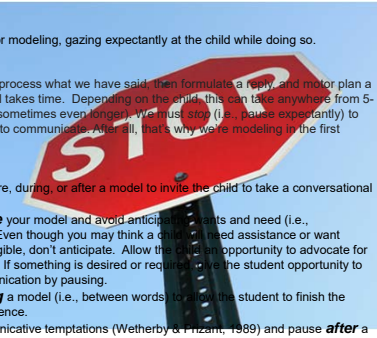


What
Stop talking and/or modeling, gazing expectantly at the child while doing so.

Why
Students need to process what we have said, then formulate a reply, and motor plan a response. This all takes time. Depending on the child, this can take anywhere from 5-30 seconds (and sometimes even longer). We must stop (i.e., pause expectantly) to allow a child time to communicate. After all, that's why we're modeling in the first place.

How
We can stop before, during, or after a model to invite the child to take a conversational turn.

- Pause **before** your model and avoid anticipating the child's wants and need (i.e., preempting). Even though you may think a child will need assistance or want something tangible, don't anticipate. Allow the child an opportunity to advocate for him or herself. If something is desired or requested, give the student opportunity to initiate communication by pausing.
- Pause **during** a model (i.e., between words) to give the student to finish the phrase or sentence.
- Create communicative temptations (Wetherby & Fizzell, 1989) and pause **after** a model. Produce a comment relative to an available object or action to entice the child to initiate communication.



Preempting

- Untrained conversational partners may inadvertently "restrict the AAC users' needs and opportunities to communicate by anticipating their wants and needs to the point that communication is no longer necessary" (Calculator, 1988).
 1. Environmental Preempting – the physical environment is arranged so as to obviate any need to communicate.
 2. Nonverbal Preempting – inaccessible materials, events, and activities are provided by others who anticipate the individual's wants and needs.
 3. Verbal Preempting – others prompt (e.g. question, present choices, or instruct individuals to respond) before they can initiate messages of their own.



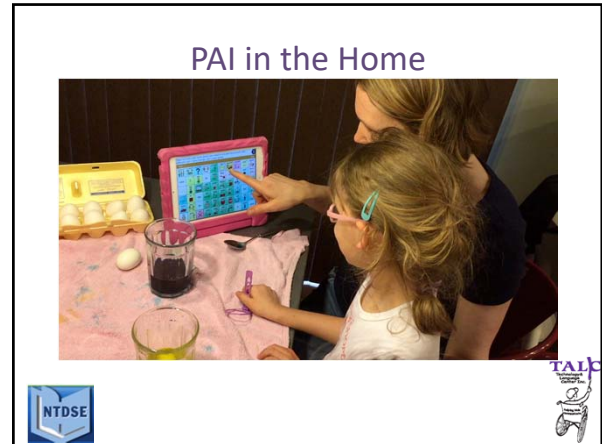
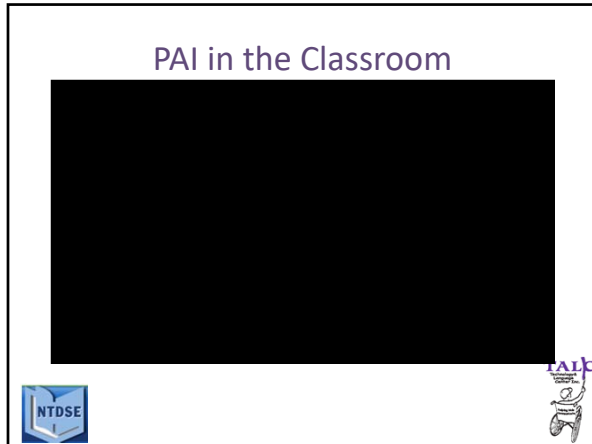
Prompting

- Some children quickly become dependent on prompts, and wait for an adult to provide that prompt before they make any type of response. While prompts are useful tools in teaching, it is important to use them thoughtfully (Wolery et al., 1986).
- Expectant pausing allows children time to respond to a discriminative stimulus occurring in the natural environment and one in which typically developing peers typically use when performing a particular behavior (Wolery et al., 1986).




SMoRRRES







Resources




Partner Augmented Input in the Classroom Facebook Group:



<https://www.facebook.com/groups/PartnerAugmentedInput/>


Resources



- Partner-Augmented Input at Home Facebook Group
- <https://www.facebook.com/groups/303660193371937/>







Resources





Partner Augmented Input: Modeling AAG in the Classroom, Section 1 Presented by Jill Senner, PhD, CCC-SLP and Matthew R. Baud, MS, CCC-SLP Learning Credits: 0 All 3 pairs must be completed. Running Time: 44:30 More Information


- Infinitec Online Classroom
 - <http://www.myinfinitec.org/online-classroom>
 - Infinitec serves school districts in Illinois, Minnesota, Kansas, and parts of Pennsylvania.
- [Talcaac.com/products](http://www.talcaac.com/products)






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 https://www.youtube.com/channel/UCTG5ahrCU-3zfglv-MUjr6w?view_as=subscriber

QUESTIONS ???

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