

Partner-Augmented Input in the Classroom: Bringing Modeling to Your School

Augmentative and alternative communication (AAC) can be invaluable in allowing children with complex communication needs to express themselves at school. However, simply giving a student a communication board or device will not make him or her a communicator any more than giving a girl a piano makes her a musician or giving a boy a basketball makes him an athlete. Rather, to achieve communicative competency, students need instruction in the language of their AAC systems.

An evidence-based strategy for teaching the language of AAC is partner-augmented input (PAI), which is also known as natural aided language, aided

language modeling, or aided language stimulation. This is a modeling strategy whereby communication partners (e.g., teachers, instructional assistants, speech-language pathologists) use the child's AAC system themselves by pointing to the symbols on the child's communication board or device while simultaneously talking. This strategy can help students understand and use symbols, as well as improve their abilities to put symbols together to make phrases and sentences.

Although pointing to pictures while talking may be a familiar idea, having awareness about a strategy alone does not typically result in being able to use

it. Many teachers, instructional assistants (IAs), speech-language pathologists (SLPs) and other school staff require training before they can model effectively in the classroom. The discrepancy between awareness and use can be explained by examining levels of impact. Only at the application and problem solving level can school staff transfer skills to the natural environment and use them along with other strategies in their repertoires. Simply attending an in-service may be sufficient for realizing the importance of a technique; however, reaching the application and problem solving level requires the use of multiple training elements (Joyce & Showers,



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1980). Furthermore, staff learning PAI as a new skill will need more intensive instruction to achieve mastery than staff refining previously learned skills.

In a school setting, PAI can be done throughout the school day, similar to a total communication classroom in which a teacher simultaneously talks and signs as he or she is teaching.

To teach communication partners to use PAI in the classroom, we use an 8-step instructional model proposed by Kent-Walsh and McNaughton (2005), which includes the following training elements:

1. Pre-test 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. Post-test and Commitment of Long-Term Strategy Use
8. Generalization of Targeted Strategy Use

Let's examine each of the steps and how we use them to instruct school staff to provide PAI.

Most frequently, we train all staff members working in a given classroom together. Before any training occurs, whenever possible, pre-test information should be collected from each staff member. Videotaping staff in the classroom can be enormously helpful because instructors can later watch the videos with staff and provide feedback regarding strengths and areas needing improvement. We developed a self-assessment questionnaire that we occasionally use along with videotaping.

Kent-Walsh and McNaughton (2005) suggest that participants who make a commitment to training are more successful in acquiring and implementing new skills, so this is also included in the first step. We typically have staff sign a written commitment statement as part of training; however, oral assurances can also be beneficial.



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

Mo **Model** - Say words/phrases that are related to the contextual information available while pointing to pictures on the child's board or device. Parallel talk (i.e., describing what the student is doing as he or she is doing it) and self-talk (i.e., talking about what you're doing as you're doing it) are helpful tools for modeling. Think about modeling as providing the color commentary for ongoing classroom activities.

R **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 him or herself. For example, if the child points to a water fountain, the adult might generate "DRINK. WANT DRINK."

R **Repeat** - Frequently repeat utterances.

E **Expand** - Repeat and rephrase, building upon your own single word utterances by adding one to two words to provide a more complete phrase or sentence. You can build upon the child's communication as well (i.e., if he/she uses one word or symbol such as "BUBBLE" try expanding the comment to two words, for example, "Yes, that's a BIG BUBBLE.")

S **Stop** - Provide an expectant pause to allow the child time to respond.

We conduct a single session outside of the classroom to introduce steps 2-5. Institute days or early release days work well for this purpose. For schools that contract staff outside of school hours, the pull-out training can be split into two sessions provided before or after school. To provide the theory behind PAI, as well as a description of the strategy, we conduct a brief lecture and provide staff with a handout about PAI. This handout is available as a free download from the Links and Download tab of the Technology and Language Center, Inc. website. A free, 20-minute online video from the DynaVox Implementation Toolkit, entitled Partner Augmented Input – Instructional Video (DynaVox Technologies, 2008), is available for groups to use as an alternate to live lecture. The video includes a description of the strategy, as well as clips of PAI being provided that can be used with strategy demonstration. The video can be paused by instructors to emphasize key points. To enhance strategy demonstration, we often show additional videos of successful classroom modeling so staff can see that the strategy can be used effectively in educational settings similar to their own.

Verbal practice requires staff to describe and explain the steps involved in using PAI. This step can help ensure comprehension and facilitate development of automaticity in participants (Kent-Walsh & McNaughton, 2005). The SMOIRES (slow rate, model, repeat, respect and reflect, expand, stop) mnemonic (Senner & Baud, in press) helps staff remember the steps involved.

The staff members label and describe each step aloud during the training with guidance from the instructors.

Controlled practice first occurs in the initial training session to allow staff to practice PAI without the distractions and pressures of the classroom. Each staff member is provided with a copy of the student's communication board or device. Emulation software can be



Caption: Instructor providing strategy demonstration in the classroom.

used when additional devices are not available. Staff members are given the opportunity to model a variety of practice phrases, as well as to generate phrases based on scenarios provided. The scenarios relate to activities in the classroom and require staff to think about what types of parallel or self-talk they might provide (e.g., "The student takes a bite of cracker during snack. What could you model on the speech-generating device?"). A 45-minute online video produced by Infinitec (2013) is another resource available to instructors for use in guiding teams through steps 2-5 during the initial training session.

The remainder of the training occurs right in the classroom during regularly-scheduled activities, to minimize time teachers are away from their students and to promote generalization. No changes to lesson plans are required nor are any special communication boards or displays used. During the first classroom visit, strategy demonstration is repeated, this time by an instructor who provides PAI on a student's board or device during a classroom activity.

Coaching, a live observation and feedback cycle in the natural environment, is particularly useful in helping staff members transfer learned skills to

the classroom. The provision of coaching by instructors is an important element in the implementation of both controlled and advanced practice.

During the next classroom visit, controlled practice is repeated, this time in the natural environment. The instructor sits next to a target staff member to provide immediate suggestions for modeling and give constructive feedback. The instructor will typically switch to coach another staff member after about 30 minutes so that everybody working in the classroom receives the same amount of controlled practice.

Over the following weeks, instructors gradually fade support, providing school staff opportunities to practice PAI during classroom activities. At the conclusion of training, post-test data can be collected (i.e., videotaping can be repeated) to determine the effectiveness of the training and possible need for additional support and instruction. We developed a PAI monitoring form to sample staff utterances and use this to calculate percentage of utterances modeled. We then compare the percentages between pre- and post-test to document progress. Finally, staff members are observed in activities not targeted during instruction to assess generalization of PAI in other classroom activities.

Because all members of a classroom, department or school collectively participate in the training, staff members can serve as supports for one another. However, following the conclusion of training, team members are encouraged to stay connected with other teams and instructors through social media. The Partner-Augmented Input Facebook group provides a forum for sharing resources and successes and offers members a way to seek support from peers when facing implementation challenges. Some of the resources demonstrated during training sessions, such as motivational posters for the classroom, can be downloaded at no cost from

the Partner Augmented Input Pinterest board.

A follow-up, several weeks after the conclusion of training, is recommended to assess maintenance of PAI use in the classroom. In our follow-up, staff members complete a questionnaire, which asks about changes they noted in themselves, changes they noted in their student(s), as well as the things they liked about the training and suggestions for improvement. On such follow-up questionnaires, staff members frequently report finding coaching a preferred and useful training element.

In a recent research study, the 8-step instruction model described above was used to train a self-contained classroom teacher, speech-language pathologist and two instructional assistants in partner-augmented input. All staff increased modeling on students' speech-generating devices between pre- and post-test measures across activities (Senner & Baud, in press). Benefits to the students including increased frequency and independence of communication were also observed.

Evidence suggests that communication partner instruction has positive effects on communication performance of individuals using AAC (Kent-Walsh, Murza, Malani, & Binger, 2015). In fact, it has been suggested that communication partner training can be considered an effective intervention strategy for individuals using AAC.

Bringing modeling to your school by training classroom communication partners to provide PAI can be a beneficial step towards encouraging AAC use in the classroom.

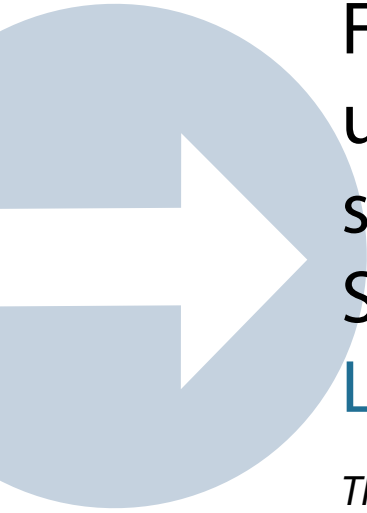
RESOURCES

- DynaVox Technologies (Producer) (2008). Partner Augmented Input – Instructional Video [Video file]. Retrieved from <http://www.dynavox-tech.com/implementation-toolkit/details.aspx?id=261>

- Infinitec (Producer) (2013). Partner-Augmented Input (PAI) [Video file]. Retrieved from <http://www.myinfinitec.org/online-classroom;jsessionid=14767EFC4E239279897681D01EE5D101>
- Partner-Augmented Input in the Classroom Facebook Group <https://www.facebook.com/groups/PartnerAugmentedInput/>
- Partner-Augmented Input Pinterest Board <https://www.pinterest.com/talcaac/partner-augmented-input/>
- Technology and Language Center, Inc. <http://talcaac.com/>

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