

## Module: Picture Exchange Communication Systems (PECS)

### CASE STUDY EXAMPLE

#### Joe

Joe is a sixth-grade student with ASD who attends an inclusive middle school. Joe has limited verbal abilities (i.e., he frequently vocalizes); however, it is very difficult to understand him unless the person with whom he is speaking knows him well and is able to use a communication book with a limited number of symbols. While Joe is not easy to understand when he does attempt to vocalize, it has been noted that he is somewhat echolalic in his speech. Joe participated in PECS training as a young child, but it was discontinued when his family moved to another school district. Historically, Joe has been very passive in terms of communicating with others. Though he will respond (with limited choices) to a question from another individual, rarely will Joe begin the interaction or seek out a communicative partner. Joe's IEP team has set a goal for him to learn how to initiate communicative interactions with a greater number of people. They feel that a return to PECS may equip Joe with the initiation skills he needs, while broadening his vocabulary and helping him gain confidence in interacting with people he does not know well.

#### *Reinforcer Sampling*

Mr. L is Joe's case manager and also acts as the transition coordinator for the school district that Joe attends. Prior to beginning PECS training, Mr. L observes Joe across the school day and talks with his mom and brother, Lee, who is three years older, and with whom Joe is very close. Lee enjoys the kinds of things that Joe likes to do, wear, eat, listen to and watch. From this information Mr. L constructs a list of possible reinforcers, adding to the list other options that come to mind. He then conducts a reinforcer sampling, being sure to alternate left and right presentation and pairing old known reinforcers with new ones. From the notes he takes during the sampling, Mr. L identifies 10 items that can be used during the PECS training.

Mr. L prepares for PECS training by gathering symbols of the reinforcing items identified through a reinforcer sampling. Because Joe already uses some symbols, Mr. L decides to use symbols rather than photographs. He prints out multiple copies of the symbols on his classroom computer, organizing two sets and backup copies into two binders. One binder will be used as Joe's at-school communication book. The other will be sent home for Joe's mom and brother to use. Because Mr. L knows that Joe spends time at his grandparents' house, he gives his mom a CD with copies of the symbols. This way, Joe's family can print out new pictures if the old ones are lost or left at his grandparents' house. After going over the PECS procedures with the two educational assistants who are available to help Joe during the school day, identifying times throughout the school

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day during which PECS trials can be implemented, and setting up a table in the school library, Mr. L is ready to begin training.

#### ***PECS Phase 1***

Because Joe already uses a communication book with three to five symbols by pointing to indicate a choice, Mr. L is careful about teaching the physically assisted exchange. He explains to Joe that with the symbols, Joe must hand the card to Mr. L rather than point. The educational assistant provides a hand-over-hand (i.e., full physical) prompt to begin. During this part of the PECS training, the use of Joe's communication book is stopped, to avoid confusing Joe. Initially, Joe does not like the physical assist. Once he understands that he is to pick up the card rather than point to it, it is easy to fade out the physical prompt. The teacher has no trouble fading the open-handed prompt either. Because Joe does at times echo words that are spoken to him, Mr. L says, "I want \_\_\_\_\_" rather than "You want \_\_\_\_\_" during the communicative exchange. Soon Joe is readily exchanging symbol cards for desired items. The challenge with Joe is that the teacher and educational assistants have to refresh the reinforcer pool on a regular basis because Joe is easily bored with his choices. They suspect this is because his grandparents spoil him on the afternoons he stays with them.

#### ***PECS Phase 2***

Joe enjoys coming to the library for the PECS training, so Mr. L continues training there for the time being. To promote Joe's use of the communication book and to expand his ability to persist in seeking to communicate, Mr. L works with the school librarian to develop an in-school job for Joe. Joe helps the librarian to re-shelve books during study hall. The goal is for Joe to use his communication book to initiate interactions with the librarian to indicate that he is ready for another book and to ask for a break (which he does frequently). In order to do this, Joe must go to the table where his book is kept, find the symbol he wants, and take it to the librarian for the exchange. Over time, Joe learns to do this quite well and naturally begins to take his communication book with him from place to place in the library. Other training that still involves two people (i.e., Mr. L, an educational assistant) occurs during home room and across the classes Joe attends throughout the day.

#### ***PECS Phase 3***

Because of Joe's limited use of the communication book, Mr. L had anticipated that Joe would have trouble learning to discriminate among three or more symbols. Mr. L does repeated trials using the discrimination correction procedure. This gives Joe practice in matching the desired symbol with the appropriate item. Within the PECS instruction, Mr. L incorporates some symbols of non-desired items that are in black and white rather

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than color. This is done to help Joe further discriminate among a variety of symbol options. Finally, just to be certain that Joe knows what he is asking for, Mr. L conducts a periodic correspondence check. To do this, he accepts the symbol that Joe offers and responds with, “You want \_\_\_\_\_, go ahead and take it.” Mr. L makes a note of whether or not Joe takes the item that matches the symbol he presented. After Joe reaches 80% accuracy during this phase of training and maintains it for four days, Mr. L proceeds to Phase 4.

#### ***PECS Phase 4***

Mr. L introduces Joe to the sentence strip, fashioning it after Joe’s old communication book. Joe learns to place the “I want” symbol on the strip with only a touch prompt because he did not like the full physical prompt; however, this is quickly faded. After he learns to also place the picture of the desired item, Joe intently watches as Mr. L reads the strip to him, “I want [expectant pause] \_\_\_\_\_. ” Because Joe occasionally verbalizes, Mr. L accurately predicted that Joe would say the name of the item he wanted before Mr. L. Mr. L is quick to reinforce him with the presentation of the requested item and with verbal praise for talking. However, because of Joe’s unintelligibility when speaking, it is not a goal for him to rely fully on speech for communicating with others.

#### ***PECS Phase 5***

This phase of training is easy for Joe because he has used a communication book to respond to questions in the past. During the early trials of being asked, “What do you want?,” Joe has to be reminded to use the sentence strip to construct “I want” with a symbol of a desired object rather than simply pointing to what he wants or to its symbol. Over time, Joe gets in the habit of using the sentence strip to answer as well as initiate.

#### ***PECS Phase 6***

Again, because of his experience with a communication book, Joe quickly advances through labeling items in response to the question, “What do you see?” Once Joe is able to consistently use “I see \_\_\_\_\_,” he gets to engage in a favorite activity (e.g., listening to his headphones, playing his finger drum, having a TicTac), but not experience the item just labeled. Joe has come to enjoy the interactions and treats it like a game. Sometimes he turns the tables on Mr. L and hands him the sentence strip and a symbol card to put together. When Mr. L labels the item verbally, Joe allows him to listen to his headphones or tap out a drum beat on his finger drum. Rarely does he offer to share his candy though. Mr. L is careful to use the first person so that if Joe does echo, he imitates saying “I” instead of “You.” After several weeks of labeling practice, Mr. L reintroduces the “What do you want?” question and provides many opportunities

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for Joe to practice this skill throughout the day and across school and community settings. Joe has really warmed up to the PECS training and seems to be increasingly comfortable with initiating communicative interactions as well as responding to them.

#### ***Next Steps***

The biggest accomplishment for Joe during the PECS training is that he is much more likely to initiate interactions with others. This is important because he soon will transition to high school and adult life. Also, as he moves from class to class in a larger school setting, he will need to communicate with others independently. A valuable next step is to arrange for an assessment to determine the need for an electronic communication device such as a “TuffTalker Plus,” “Hand Held Voice,” or a “Say It Sam.” With an AAC device such as these, Joe will be able to use the skills learned through PECS to both initiate and respond to others. The sky will be the limit with his ability to quickly learn new symbols!