

Module: Picture Exchange Communication Systems (PECS)

CASE STUDY EXAMPLE

Alex

Alex (short for Alexandra) is a 5-year-old girl with ASD enrolled in an inclusive kindergarten classroom. Alex's teachers and parents have been working with her to develop behavioral, communication, and social skills that will enable her to succeed in first grade without one-on-one instructional support. It has become evident to everyone that Alex needs a way to initiate her wants and needs. Alex is mostly nonverbal. To this point, she has utilized a combination of gestures, vocalizations, and idiosyncratic signs to indicate her desires. Most often, Alex waits for others to interact with her before attempting to communicate. Her educational support team has decided to implement PECS as a means of teaching her some consistent communication skills, with an emphasis on initiating. Alex's parents are hopeful that PECS training will encourage her to begin to use verbal language.

Reinforcer Sampling

After talking to Alex's parents and observing her in the classroom, her teacher, Ms. M, gathers some of Alex's favorite toys, books, and snacks along with some new items. She spends a few minutes sitting with Alex and offering her items, two at a time, being sure to switch between left and right presentation across trials. After repeating this process on another day, Ms. M feels that she has identified enough desired items to begin PECS training.

Pre-Training Tasks

Ms. M prepares for Alex's PECS training by taking digital pictures of the items identified as highly motivating from the reinforcer sampling. She prints out multiple copies of the pictures on her computer, organizing two sets and backup copies into two binders. One binder will be used as Alex's at-school communication book. The other will be sent home for Alex's parents to use there. Because Ms. M knows that Alex has a younger brother who is very active, she includes a CD with copies of the pictures with the book. This allows Alex's parents to print out new pictures if the old ones are lost or destroyed. After going over the PECS procedures with Alex's current one-on-one educational assistant, identifying times throughout the school day during which PECS trials can be implemented, and setting up a table in the corner of the room at which to begin the training, Ms. M is ready to begin training.

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PECS Phase 1

Alex makes excellent progress learning the communication exchange taught in PECS. She quickly learns the advantage of handing the picture to her teacher or educational assistant to have a book read to her or to get a taste of a favorite snack food. Alex also enjoys the extra attention she is receiving with the two-person training. Alex's classmates also are intrigued by the PECS training. Soon, they are asking if they can be involved. Ms. M thanks them for their interest and tells them that they will be able to communicate with Alex this way in the near future.

PECS Phase 2

Ms. M is pleased with how quickly Alex learned the physically assisted exchange in Phase 1. They have been able to quickly fade the physical assist and open-hand prompt. Alex's parents report that while they have had some success in using the PECS system at home, it is difficult to find the time to do it as Mom and Dad are rarely home and unoccupied at the same time. They also comment on how independent Alex is at accessing the things she wants or needs in their home. Alex's parents agree to keep trying to implement PECS and Ms. M assures that Alex is making excellent progress on the system at school. From Phase 1, Alex transitioned smoothly to picking up the pictures herself. During Phase 2, Ms. M and the educational assistant move the communication book with pictures to a bookshelf near the table where they have been teaching Alex. During the training trials, Ms. M will now move from the table to her desk or to another area of the room so that Alex will have to walk over to her to give her the picture. Everyone is delighted when Alex begins to go through the communication book to find pictures of items she wants. This means that Ms. M does not have to teach her to discriminate from a variety of pictures. Occasionally, Alex will be in a hurry to get an item and will not look carefully at the pictures. This is sometimes the case with pictures of favorite story books. However, when Ms. M takes the picture and verbally confirms, "You want name of book," Alex will make the correction if it is the wrong book by pointing to the correct book or going to get the correct picture of the book and switching it for the wrong picture.

PECS Phase 3

Much to everyone's surprise, Alex has not only led the way to adding new pictures to her book (e.g., bringing an item to the teacher, pointing to the book indicating that she would like it in the book), she has also initiated bringing new people into the training scenario. Like her classmates, Alex wants other children to be involved. Ms. M has responded to this request by having Alex's peers participate in the training trials across the day. For example, during story time, when it is Alex's turn to choose a book, Ms. M invites a classmate to interact with Alex to determine which book she would like read.

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This has been so successful that Alex's school friends are now volunteering to take the communication book to inclusive classes like art and music, as well as to the lunchroom and playground. This is all timely, as during Phase 3, one of the goals is to increase opportunities for requesting. Also, throughout the PECS training, it is important to generalize across stimuli, settings, and people.

PECS Phase 4

During Phase 4, Ms. M is working with Alex to use sentence strips by placing an "I want" picture on the left side of the strip and an already learned picture request card to the right. Initially, Ms. M and the educational assistant do this training with Alex. Ms. M is concerned that if too many people are involved, Alex may become confused. As Alex has repeated practice and learns to place the "I want" symbol without help, other communicative partners are added. This is also an excellent opportunity for other students in the classroom to practice their reading skills. While Alex progresses rapidly in this phase, her parents are disappointed to learn that she is not initiating verbalizations during Step 9 of Phase 4. (i.e., Communicative partner pauses after reading, "I want" from the sentence strip, before saying the name of the pictured item). Ms. M tries to encourage Alex's parents by telling them that Alex may pick up the verbalizations in time. She also comments on how anxious, and sometimes impatient, Alex is to complete the exchange. In time, perhaps she will learn that if she says the word she will get the item faster.

PECS Phase 5

Ms. M decides to make a game out of Phase 5 (i.e., responding to "What do you want?") and has a small group of students sit around a circular table with a pile of pictures in the middle. She goes around the table, asking, "What do you want?" The students have the option of finding a picture with the desired item on it and using a sentence strip like Alex or of answering verbally. When it is Alex's turn, Ms. M uses the sentence strip and points to the "I want" card, asking "What do you want, Alex?" Alex uses the picture cards on the table to complete the sentence and receive the desired item. All of the children enjoy this activity and frequently ask if they can do it. Ms. M incorporates it into snack time and free time on a regular basis.

PECS Phase 6

During this phase of instruction, Ms. M is working toward teaching Alex to answer questions and label. This is difficult for Alex because she wants to receive each item she labels, and it is important for her to learn the difference between answering a question and asking for something. Initially, some exchanges end in tantrums when Ms. M does not give Alex the item that she labels after being asked, "What do you see?" Ms

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M talks to Alex's mom, and together they identify some activity reinforcers that will make Alex happy and help to prevent a tantrum. These activities include Alex going for a short walk to say hi to another teacher in the building, listening to music on headphones for a minute, taking a drink of a preferred juice, and looking briefly at a picture of Mom and Dad. These are all preceded by Ms. M praising Alex for her work (e.g., "Nice job, Alex, that is a _____. Let's go say 'hi' to Ms. K.") In a short while, Alex is able to use the sentence strip on her communication book to answer the question, "What do you see?" with the "I see" symbol and a picture. Now Ms. M feels comfortable alternating these questions with request for items. Alex's tantrums have subsided during the labeling questions, and to everyone's delight, in general. She clearly understands the difference between labeling and requesting.

Next Steps

For Alex, PECS training has been a huge success. In just a little over a month, she has learned to answer labeling questions and to initiate when she wants something. She is ready for first grade with a solid start on a systematic means of communicating with adults and peers. While Alex still needs a significant amount of one-on-one educational support, she will be able to work independently for short periods of time and to interact with peers without much assistance. An important next step for Alex is to continue to build her vocabulary with pictures in her book. Another next step might be to begin to incorporate some symbol pictures (e.g., simple line drawings) into the collection of photographs. Being able to use symbols, rather than photos, might broaden Alex's vocabulary and help her generalize newly acquired skills to other objects, people, and settings. Finally, teachers should continue to build the expectant pause into reading sentence strips, "You want [pause] _____" because Alex's parents still would like her to develop verbal skills. As Alex continues to use PECS to communicate with same-age, nondisabled peers, she may learn to verbalize her wants and needs.