



INFORMATION SHEET

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Picture Exchange Communication Systems

PECS is a form of [augmentative/alternative communication intervention](#) (AAC) for individuals with autism spectrum disorder and related developmental disabilities. It is useful in situations where individuals experience language delays. The goal of PECS is to teach individuals to communicate independently without providing any prompts. Prompts are cues or hints meant to induce a person to perform a desired behavior. Consider the following [case study](#) adapted from the National Professional Development Center on Autism Spectrum Disorders.

Leah is a two-year-old girl with ASD who does not use any words. Her parents are concerned that she does not initiate any communication. Her parents have noticed that when her needs are misunderstood she easily becomes frustrated. Leah's mom is able to tell what Leah wants by closely observing non-verbal cues such as gazing at the snack cupboard or refrigerator when she is hungry. When her mom is not around, Leah frequently has tantrums where she will scream and cry because her dad and sisters are not as good as her mom in understanding Leah's cues. The team decides to use PECS as a way to teach Leah some communication skills so that she can get her needs met. The team agrees that a communication system used at the neighborhood preschool will prepare her to go there when she turns three.

The team, including Leah's parents and siblings, brainstorms a list of some of Leah's favorite activities and snacks. They add some new items that they think Leah might enjoy. Using this list, Leah's speech language pathologist (SLP) uses procedures from PECS to determine which items are effective reinforcers. Reinforcers are the items Leah selects most frequently. Leah's mother continues to sample reinforcers throughout the week and document the items on a preferred/nonpreferred/neutral chart. After repeating this process for several days, the SLP and Leah's family feel that they have identified many highly desired items and are ready to begin PECS training.

The team takes pictures of the items identified as highly desired from the reinforcer chart. The team organizes the pictures in a communication book. Each page of the book is sorted into categories like bath items, snack drawer, toy box, etc. This way, the entire page can be removed and transported to the location where the items are in the home to encourage more opportunities for exchanges. The team decides to set up a place at the kitchen table where the family can do PECS trials and then the team reviews the PECS procedures so that everyone can perform the trials according to the manual.

Leah and her team practice the phase 1 exchange during her weekly sessions with her SLP while her mom acts as the helper. Her parents also practice time during a morning snack, and at bath time, where Leah has the opportunity to request bath toys. Leah learns to hand the picture to her mom, her dad, or her therapist. At first, she has a tantrum when her mom does not respond immediately to her eye gaze. Her communication helper consistently needs to support her to take the picture and place it in her

partner's hand. In time, Leah becomes used to the picture exchange. She no longer needs prompts and independently picks up pictures to request items.

The team creates laminated request boards for areas of the house where Leah might want to ask for things. They put pictures next to the fridge and the pantry, in her toy closet, and in the bathroom. Leah continues to make exchanges. Every now and then, a helper has to remind her to initiate an exchange when she is tired. Leah's sisters learn to be communication partners too. Leah's sisters are happy to see that she is crying and screaming less, and able to ask them for what she wants. Leah's family creates opportunities to exchange on shopping trips and out in the community by remembering to bring the PECS book with them on outings.

Leah's team feels confident that Leah has learned the physically assisted exchange in Phase 1. In order to begin Phase 2, Leah's team plans to move the communication book with all of her pictures to a set place in each room of the house. Leah will have to learn to remove the picture from the book and then travel to the communication partner and place it in his or her hand. During the training trials when the SLP comes to work with the family, they practice having the communication partner move further and further away so that Leah will have to walk over to that person to give him or her the picture. The team works hard to shape Leah's behavior. They want to make sure that she continues to try to communicate without getting too frustrated. By the time fall arrives, Leah has successfully made phase 2 exchanges in many rooms in the house. At enrollment time, the team is able to sit down with the preschool and share Leah's PECS progress with her new teachers.

Leah's SLP and preschool teachers continue to work with the family to complete [the four remaining phases](#) of PECS as she gets older and moves to elementary school. Eventually, with practice, Leah will be able to create sentences, answer questions, and make comments.

As this case study illustrates, PECS works in a range of settings, and is appropriate for use by families, educators, and resident care providers. PECS has been successful with individuals of all ages demonstrating a variety of communication, cognitive, and physical difficulties. One of the great things about PECS is that it does not require expensive or complex materials or technology. Some learners using PECS also develop speech. Others may transition to a voice output system.

PECS is a registered trademark of Pyramid Educational Consultants and the [PECS website](#) has additional information about the theory underlying the PECS approach and how to get started.

Resources:

[The PECS website](#)

[PECS Videos](#)

[PECS: Steps for Implementation](#) (from the National Professional Development Center)

[PECS: Case Study Example](#) (from the National Professional Development Center)

[Successfully Using PECS with Children with ASD](#) (from Indiana University)

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