**Picture Exchange Communication System (PECS)**

**Category:** Communication

**Grade Level:** All grades

**1. What is the purpose of Picture Exchange Communication System (PECS)?**

Developed by Bondy and Frost, PECS is an augmentative and alternative communication (AAC) system that uses pictures instead of words to help children and adults with autism and other communication deficits to initiate communication and acquire functional communication skills.

**2. With whom can it be used?**

The tool was originally developed for children with autism who have delays in speech development, but it is now also widely used for individuals who (a) cannot functionally communicate, (b) are frequently misunderstood, (c) do not use language complex enough to meet their needs, and (d) do not spontaneously communicate. In general, it is an effective means of functional communication for any individual who has no or impaired speech.

**3. What teaching procedures should be used with Picture Exchange Communication System (PECS)?**

PECS is a relatively low- technology communication system which requires rather inexpensive materials:

1. A binder for storing PECS picture cards
2. VelcroTM strips to attach picture cards to the front cover of the binder when they are being used
3. Picture cards, which could be self-drawn, cut out from a magazine, or taken from an actual photograph of an object (more expensive alternatives of ready-to-use PECS systems are also available for purchase from Pyramid Educational Consultants Inc. with commonly used picture cards)
4. PECS training manuals available at $40-70 for parents and other caregivers

PECS is usually taught in the following six phrases:

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| ***Phrase*** | ***Teaching target*** |
| *1:* Basic Picture  Exchange | *Initiate students to communicate through exchanging a single picture card for a highly desired item* |
| 2: Distance and  Persistence  Approach | *Learn to be persistent communicators, using single pictures to generalize the new skill to different places, people and across distances* |
| 3: Picture  Discrimination | *Discriminate a variety of pictures to select the items the students want* |
| 4: Sentence  Construction | *Learn to construct sentence structure “I want\_\_\_\_\_\_\_” to make a request* |
| 5: Answering Direct  Question | *Respond to question “What do you want?” using PECS*  |
| 6: Commenting | *Learn to comment about things in the environment both spontaneously and in response to a question* |

**4. In what types of settings should Picture Exchange Communication System (PECS) be used?**

PECS as a communication system can be used in a variety of settings (home, school, community). A parent, therapist, caregiver, or even another child who has learned about the method can implement the system.

**5. To what extent has research shown Picture Exchange Communication System (PECS) to be useful?**

A growing body of research has shown that PECS is a promising system for individuals who have insufficient speech to communicate functionally with others. Research has found that communication skills improve in the vast majority of PECS users (both children and adults). An increase in speech and social approaching and a decrease in maladaptive behaviors were also found among some PECS users. The concern that children with autism would become dependent on PECS and not move on to develop natural speech has been challenged by research showing that those who have learned to use PECS developed speech more quickly than those who had not been trained in it. Despite these encouraging findings, more Randomized Controlled Trial (RCT) studies are needed to clarify the inconsistent and unclear data on whether PECS affects speech development. Future studies should also investigate the degree to which treatment effects are maintained once active intervention ceases.
 **References**

1. Adkins, T., & Axelrod, S. (2001). Topography-versus selection based responding: Comparison of mand acquisition in each modality. Behavior Analyst Today, 2, 259-266.

2. Bondy, A., & Frost, L. (1994). The picture exchange communication system. Focus on Autistic Behavior, 9, 1–19.

3. Bondy, A., & Frost, L. (2001). The Picture Exchange Communication

System. Behavior Modification, 25, 725-744.

4. Drager, K. D. R., Light, J. C., & Finke, E. H. (2009). Using AAC technologies to build social interaction with young children with autism spectrum disorders. In P Mirenda & T. Iacono(Eds.), Autism spectrum disorders and AAC. Baltimore: Paul H. Brookes.

5. Ostryn, C., Wolfe, P. S., & Rusch, F. R. (2008). A review and analysis of the picture exchange communication system (PECS) for individuals with autism spectrum disorders using a paradigm of communication competence. Research and Practice for Persons with Severe Disabilities, 33(1/2), 13-24.

6. PECS Canada is a site that presents the full text of many essential information about PECS (<http://www.pecs-canada.com/>)
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