The Use of Picture Exchange Communication System (PECS) in an Early Childhood Special Education Classroom for Students on the Autism Spectrum

Clarisa Delgado & Jennifer Wetherbee
Education Department

COMMUNICATION BARRIERS FOR CHILDREN ON THE AUTISM SPECTRUM

Children on the autism spectrum may display difficulty with their communication and behavior in social situations. This may be due to their impairments in expressive and receptive language. Children on the autism spectrum may tend to use repetitive or rigid language. Their speech may appear to be off topic when conversing with their peers or adults in the classroom setting. Children on the autism spectrum may present patterns of echolalia. Echolalia can either be an immediate or delayed form of communication. Immediate echolalia is often demonstrated by repeating words and phrases that were communicated to the child on the autism spectrum by another peer or adult. Delayed echolalia is often demonstrated by the repeating of words and phrases that were heard in an earlier setting and then were repeated by the child on the autism spectrum in a different setting. Children on the autism spectrum may display rigidity in their communication patterns with others. This may include changing the topic to their own specified interests or exceptional abilities. It is important to state that there are some children on the autism spectrum who are limited in their expressive and receptive communication skills. These children may be categorized as being non-verbal. Children on the autism spectrum often have poorly developed nonverbal communication skills which can include a lack of eye contact and physical interaction. The repeated demonstration of these non-verbal behaviors can lead to their social isolation. As a result, their peers may view them as inattentive or unwilling to socialize. PECS is a AAC system that provides a bridge to further assist children on the autism spectrum in strengthening receptive and expressive language skills with their peers and other adults in the classroom.

HOW PECS CAN BE EFFECTIVELY USED IN THE ECSE CLASSROOM?

PECS can be used by teachers to increase a child’s academic and social capabilities within the classroom. PECS is a unique communication tool because it depends on visual, not auditory information. Children with the previously discussed deficiencies may excel through the implementation of PECS. As the pictures give a greater visual meaning to vocabulary that otherwise may have been abstract to them. Throughout lessons, teachers can incorporate PECS by first reinforcing communication within each lesson or activity. From there, teachers can use PECS to have students comment or reflect on a lesson or an activity. Students can use their picture cards with their classmates. Picture cards can be used to represent familiar vocabulary based on a specific topic, such as numbers or food. This allows students to express their thoughts as well as receive proper feedback and reinforcement from their peers and an adult. Socially, PECS can be customized for children on the autism spectrum to converse with their peers on a more personal level. The PECS picture cards can be customized with visuals of the child’s classroom interests. PECS can also promote greater independence in a child on the autism spectrum. This is because the child can use his picture cards to describe his basic needs throughout the day.

THE SIX PHASES OF PECS

Phase I: How to Communicate: The child begins exchanging single picture cards for his needs and wants. Children complete phase I when they are able to correctly carry out 35 or more exchanges with a therapist. During this time, the therapist will give an immediate extrinsic reinforcer, such as a toy or a puzzle piece, after the child correctly carries out the request.

Phase II: Distance and Persistence: The child will identify who has an object they want, approach them, and hand over a picture to request the preferred object. The therapist’s role is to ensure persistence through the strong continued use of the motivator.

Phase III: Picture Discrimination: The child will be able to look in a communication book, choose from many pictures cards, and take the relevant picture cards to the therapist to make a request. The therapist is then able to create a choice board for the child.

Phase IV: Sentence Structure: The child will be able to make a complete sentence using the picture cards. The child will take the picture cards to a therapist to make requests. After receiving the picture cards, the therapist should continue with immediate and positive reinforcement. This will allow the child to continue making requests to the therapist.

Phase V: Answering Questions: The therapist will ask the child a direct question and the child will respond using his picture card.

Phase VI: Commenting: The child will be commenting on things within his environment using phrases such as “I hear” or “I see”. The therapist will shape a ‘surprise’ response that is tied to the child’s range of interest. For example, if the child comments on the (red) color of a crayon, the therapist may interject that an apple is also red. The therapist may also describe other characteristics of an apple, such as it being shiny or crunchy.

A RESEARCH STUDY ON PECS

In a research study conducted by Odlyurt, Aldemir, and Kaplan (2016) six children on the autism spectrum, between the ages of 3-6 were paired strategically into teams of two. These children were then observed to investigate the effects that PECS had on the initiation and maintenance of communication skills between the children on the autism spectrum and the trained therapist. The study sought to determine if the first two phases of PECS were effective in teaching each team of children, the independent initiation and maintenance of their communication skills. Semi-structured interviews were given to the mothers and fathers of the six children on the autism spectrum in order to collect social validity data. It was determined through this interviewing process that PECS training significantly improved the children’s independent communication and maintenance skills. All mothers and fathers expressed their gratitude for their child’s PECS training. In addition, all parents acknowledged the importance of observational learning for their child with autism. For the six children on the autism spectrum who participated in the study, their communication skills were maintained two weeks after their initial training procedure ended. Their acquired skills (independent initiation and maintaining communication) were able to be generalized to different settings and across different individuals.

CONCLUSIONS

“PECS is a modified applied behavior analysis program for early non verbal symbolic communication training”. PECS is easy to implement and is effective within the classroom. The goal of PECS is to allow children on the autism spectrum who lack verbal communication skills to verbalize their thoughts and needs in varying environments. When implemented correctly, PECS, as an AAC, supports academics, communication skills and social and behavioral growth in a child. The use of PECS over time can promote greater communication independence in children on the autism spectrum within the classroom setting and within their home environment as well.

BIBLIOGRAPHY


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