THIRD EDITION

A Picture's Worth

PECS AND OTHER VISUAL COMMUNICATION STRATEGIES IN AUTISM

ANDY BONDY, PHD, & LORI FROST, MS, CCC-SLP



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This book is dedicated to our parents, Jack, Char, Lily, and Harry, for all the love and support they've provided over the years!

About the Authors

Lori Frost, M.S., CCC-SLP, is a speech/language pathologist and co-founder of Pyramid Educational Consultants, Inc. She is co-author of the *PECS Training Manual*, 2^{nd} *Edition* and *Autism 24/7*. Lori has taught international workshops and graduate courses on PECS, Verbal Behavior, and Functional Communication Training and consults to schools and families to create effective communication training protocols. She is co-creator of PECS, a unique system that allows learners with limited communication abilities to initiate communication with teachers, parents, and peers.

Andy Bondy, Ph.D., has over 50 years of experience working with children and adults with autism and related disabilities. For over a dozen years he served as the Statewide Director of a public school program for students with autism. With Lori Frost, he co-developed the Picture Exchange Communication System (PECS) as well as the Pyramid Approach to Education that combines broad-spectrum behavior analysis with an emphasis on functional communication. He is the co-founder of Pyramid Educational Consultants, Inc., an internationally based team of specialists from many fields working together to promote integration of the principles of applied behavior analysis within functional activities and an emphasis on developing functional communication skills independent of modality.

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Introduction

I first learned about Nate from a friend who worked in the local children's hospital. He told me that staff had worked on developing a type of body armor for this three-year-old boy, complete with helmet, elbow, wrist, and knee guards! When I asked why this boy needed so much protection, my friend answered, "Well, it's to protect him from himself." I had worked with a number of children who hurt themselves, but never one so young. He was scheduled to visit our school the next day.

Nate's mother, who appeared very caring but apprehensive, brought him to the school. She told us that he did not speak and although there were many things he liked, he almost always did them by himself. She started to talk about his "outbursts" while he was quietly sitting on her lap. Suddenly, he made a small noise and leaped out of her lap.

Instantly, Nate was on the floor, slamming his forehead onto the hard tiles. Before I could reach him, he started to run toward the door. I quickly picked him up and he immediately scratched my face and pulled my beard. While still holding him, I turned him around so his hands were further from my face. He responded by kicking backward into my stomach. I put him down, and watched as he jumped up and down on his knees. He then bolted away and smashed his face into the door. During this entire episode, which lasted no more than a minute, his mother sat quietly, looking as bewildered as all the professionals in the room.

What is the problem here? Nate was a young boy diagnosed as having autism. He was three years old but had not used speech. Were his problems with communication related to his behavioral difficulties? Were his behavioral difficulties related to his communication problems?

Were his communication difficulties only related to the absence of speech or were the issues even deeper? Finally, what strategies could Nate's mother, family members, and professionals use to best help him?

This book is intended to help parents and professionals understand the communication difficulties of children and adults such as Nate who do not speak, including those with autism spectrum disorders. This edition of the book builds on the information provided in the first edition, which was published in 2001. We have revised this book because new research has continued to provide new strategies and improved support for using these strategies to promote independent communication for children with autism and related disabilities. The problems associated with the lack or weak use of critical functional communication skills remain a significant barrier for the independent functioning of many children and adults. The recommendations in this book regarding both skills to target as well as strategies to teach those skills reflect the ever-growing body of researchers from the fields of applied behavior analysis and speech pathology.

In the early chapters of this book, we describe some of the characteristics of people who are nonspeaking, and provide examples of our approach to understanding communication. We also describe the relationship between communication and various behavioral difficulties.

In the next chapters, we describe several intervention strategies, including the use of sign language and other less formal gestural systems, and various picture- or symbol-based systems. Included in this review are a number of low-tech approaches (use of photographs and line drawings) as well as high-tech approaches (use of electronic systems, such as voice-output devices). Throughout this review, we discuss ways to assess whether an approach is appropriate for a particular child or adult.

In the last chapters, we describe various strategies using visual cues to enhance a person's understanding of our instructions, issues associated with learning to wait and deal with transitions, and how such strategies can enhance the effectiveness of different motivational strategies.

Why should we devote an entire book to helping children who have difficulty acquiring speech to communicate through other means? I think continuing with the story about Nate will help answer this question.

Nate started an intense full-time special training program organized within the public schools. First, his teachers figured out what Nate

liked and what could help him pay attention to his surroundings. It was clear that while he needed to learn to imitate what people said and did, he had no such skills on entering the program.

Within a few days, Nate was taught to use the Picture Exchange Communication System (PECS). During the first training session, Nate learned to calmly give a picture of a pretzel (his favorite treat) to his teacher. This lesson was taught without using any questions from the staff—in fact, Nate was able to spontaneously give the picture to the teacher when he saw her holding the pretzel. Within a few days, he learned to use single pictures to request other favorite items.

Nate next learned to put two icons on a card to form a simple sentence. He then learned to clarify some of his requests—communicating that he wanted the BIG pretzel, for example. As he learned new ways to ask for things, he also learned to tell his teachers about simple things in the classroom. During this period of training, his parents used PECS at home to help Nate communicate with everyone in his family. Both at school and at home, Nate became much calmer and had far fewer tantrums since he now had an effective, easy system to use to let others know what he wanted.

Many people are afraid that if they introduce children to non-speech communication systems such as Nate learned to use, they will be less likely to learn to talk. We will discuss that point in more detail later, but the simple truth is that there is no evidence that visual systems interfere with or inhibit the development of speech. On the contrary, there is evidence that using such systems has a beneficial impact on speech development. As you can see, Nate learned to become an effective communicator even though he had not yet learned to speak. But the primary point of this book is *not* to emphasize strategies that will always lead to speech. Instead, this book will focus on ways to help children learn to quickly become effective communicators.

Our emphasis is on helping children to develop functional communication skills—that is, the ability to direct behavior to another person in order to receive direct rewards (such as the item they want) or social rewards (such as praise or a pleasant interaction).

The table on the next page lists the nine critical functional communication skills that are the focus of this book.

When children (and adults) acquire functional communication skills, their lives—and those of their families and teachers—become greatly enriched.

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Critical Functional Communication Skills				
Productive (Expressive)	Responsive (Receptive)			
Request reinforcers (desired items or activities)	1. Respond to "Wait" and "No"			
2. Ask for help	2. Follow functional directions			
3. Ask for a break	3. Follow a schedule			
4. Respond "No" to "Do you want?"	4. Transition			
5. Respond "Yes" to "Do you want?"				