

Picture Exchange Communication System (PECS)

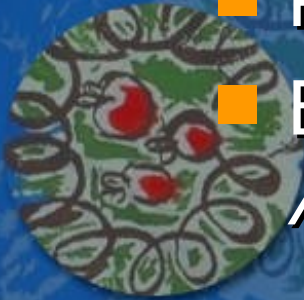
Presented by:
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Introductions

- The Picture Exchange Communication System (PECS) second ed. training manual
- A method of teaching functional communication skills
- Was designed by Lori Frost, M.S., CCC/SLP and Andy Bondy, Ph.D
- Published by Pyramid Education Products, Inc
- Based on the methodologies of *The Pyramid Approach to Education*





Goals and Intended Outcomes

- Functional Communication
- Social Skills
- Preventing and reducing contextually inappropriate behaviors
- Generalization/Independence





Intended Population

Any child or adult who has communication difficulties or disorders

- Autism spectrum disorders
- Neurological disorders
- Developmental delays





Teaching Strategies/ Evaluation Procedures

- Teaching strategies include:
 - Shaping
 - the gradual change in the criteria we set for reinforcement
 - Fading
 - (verbal, gestural, modeling, physical prompts)
 - Prompt hierarchies
 - (most to least, least to most)
 - Delayed prompting
 - (constant, progressive)
 - Chaining strategies
 - (forward, backward chaining)
- Data-based Evaluation Procedures





Preparation for Training

- Assess student communication skills
- Organize training environment
- Establish reinforcer hierarchy
- Prepare materials





Materials



yes 	no 	more 	all done 
please 	thank you 	I want 	help 
my turn 	later 	stop 	wait a minute 
breakfast 	lunch 	dinner 	snack 
eat 	wipe face 	brush teeth 	get dressed 



Phase I - “How” To Communicate

Materials: Picture symbols and highly preferred reinforcers

- Student learns the “nature” of communication
- Pick-up → Reach → Release
- Physically Assisted Exchange (Two-Person Prompting)
 - Backward Chain
- Independent Exchange
- Picture discrimination not yet required
- Structured and relaxed settings

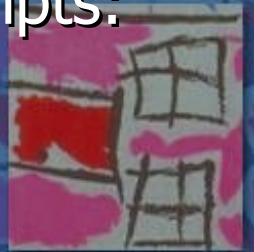




Phase II - Distance and Persistence

Materials: Communication board, picture symbols, and reinforcers

- Teach students to communicate in “real world” situations and to “keep trying”
- Step 1: Remove picture from comm. book
- Step 2: Increase distance between trainer and student
- Step 3: Increase distance between student and comm. book
- Step 4: Assess and eliminate additional prompts:
 - Distance to communicative partner
 - Variety of communicative partners
 - Variety of rooms (environments)

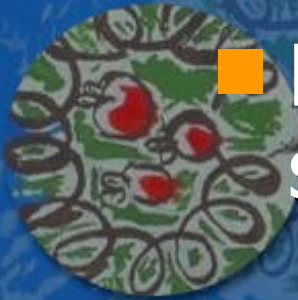




Phase III - Picture Discrimination

Materials: Communication book, highly preferred and low/non preferred R+ items, and their corresponding picture symbols

- Phase IIIA: High Preferences vs Low/non preferences
- Phase IIIB: 2-5 High Preferences
- Looks inside book
- Discrete Trial at structured table top setting

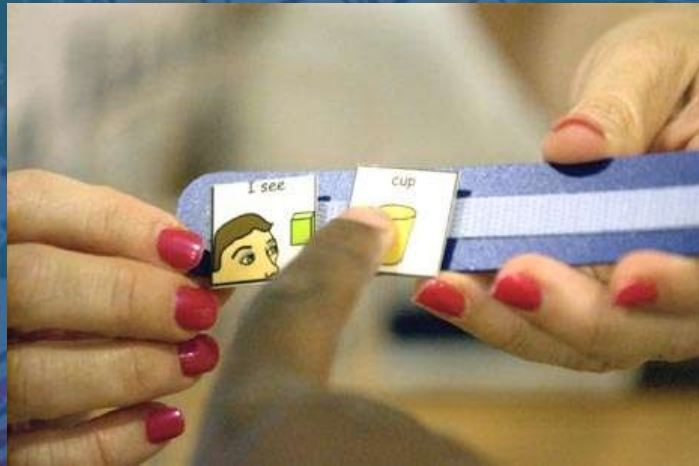




Phase IV - Sentence Structure

Materials: Communication book, communication board, sentence strip, "I want" picture, reinforcers and corresponding pictures

- Adds R+ icon to sentence strip
- Constructs entire strip
- Points to pictures during read-back





Attributes

Materials: Communication book, communication board, sentence strip, "I want" picture, reinforcers with varying levels of preferred attributes and corresponding pictures

- Constructs 3 icon sentence
- Discriminates High vs. low preference attribute icon
- Discriminates 2+ preference attribute icons
- Uses multiple exemplars
- Uses multiple attributes





Phase V – Responding to “What Do You Want?”

Materials: Communication book, communication board, sentence strip, “I want” picture, reinforcers and corresponding pictures

- 0 second delay
- 3-5 second delay
- Answers independently
- Answers and spontaneous requests

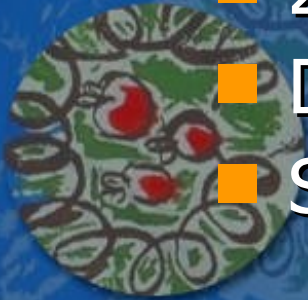




Phase VI - Commenting

Materials: Communication book, communication board, sentence strip, "I want" "I see" "I have" "I hear" "It is" pictures, reinforcers, stimuli and corresponding pictures

- First comment question
- Discriminate comment vs. request sentence starters
- Comment + Request + spontaneous request
- 2nd comment question
- Discriminates all sentence starters
- Spontaneously comments





Additional Skills

- Request assistance
- Indicate "no"
- Indicate "yes"
- Request "break"
- Respond to "wait"
- Follow functional directions
- Transition between activities
- Follow schedule





Modifications

Although PECS is specially designed for students with special needs, additional modifications can be made

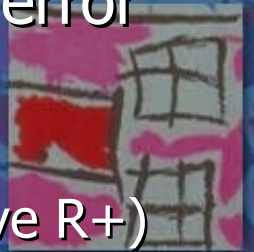
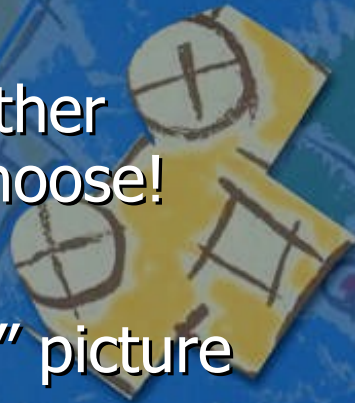
- Varying levels of PECS implementation based on skill set
- Use of Assistive Communication Devices
- Different formats/sizes of pictures





Activity

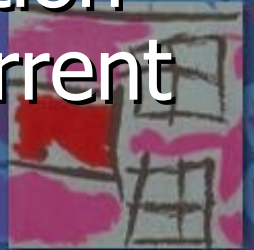
- Phase IIIA: Discrimination between preferred and non-preferred items
- Groups of 2: Teacher and Student
- One picture represents preferred and the other represents the non-preferred item – You Choose!
- Complete Discrete trials
- Give praise and R+ for choosing “Preferred” picture
- If student chooses “non-preferred” picture, allow access to non-preferred item then complete error correction procedure:
 - Model - Tap target picture
 - Prompt - Hold out hand for picture (but do not give R+)
 - Switch – compliance or remove eye contact
 - Repeat





Summary

- PECS is a adaptive system of functional communication intended for individuals with communication challenges.
- There are six phases.
- PECS can be used as a person's primary mode of communication or can be phased out as verbal communication abilities progress beyond their current level of functioning with PECS





Resource

- Frost, M.S., CCC/SLP, Lori, and Andy Bondy, Ph.D. The Picture Exchange Communication System Training Manual. Newark: Pyramid Educational Products, Inc., 2002.

