A Clear Picture: The Use and Benefits of PECS

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PECS

• PECS is an approach that teaches early communication skills using pictures
• Students are taught to exchange pictures for something they want
• Critical in early teaching is NOT to pre-empt, but wait for students to hand over the picture first, so they initiate the communication

How widespread is PECS?

• Over 86 published articles (including 28 2008-2010)
  – Number 1 downloaded online JABA article in 2009: Charlop-Christy et al. 2002 PECS study
• 63 data based or case studies
• 6 Literature reviews
• Articles generated in 15 countries outside of the USA, including:
  – England, Wales, New Zealand, Brazil, Greece, Japan, Australia, France, Peru, Ghana, South Africa, Italy

The Pyramid Approach to Education
The Base Elements

- **Functional Activities**
  Skills and activities that lead to independence
- **Powerful Reinforcers**
  Powerful motivation that drives learning
- **Functional Communication**
  Skills that are useful now and in the future
- **Contextually Inappropriate Behaviors**
  Focus on functionally equivalent alternative behaviors

The Top Elements

- **Generalization**
  Skills generalized right from the start
- **Effective Lessons**
  Sequential, Discrete, Incidental
- **Specific Teaching Strategies**
  Goal is to eliminate prompts
- **Minimizing and Correcting Errors**
  Opportunities to teach- not just fixing mistakes
- **Data Collection**

What is communication?

- Not all behaviors are communicative
- Must occur between two people
- “Speaker” directs behavior to listener”
- “Listener” mediates access to reinforcer
Advantages of PECS

- Requires interaction with other people
- Individual initiates communication rather than responding to a prompt
- Starts with requesting, not labeling or commenting
- Is based on Skinner’s analysis of verbal behavior

Phase I: *How to Communicate*

- Goal: Approach people to initiate communication
  - To teach initiation, use 2-person prompting procedure
- Teach 3-step sequence
  - Pick up, reach, release
- One picture at a time
  - No discrimination

<table>
<thead>
<tr>
<th>Communicative Partner</th>
<th>Physical Prompter</th>
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</thead>
<tbody>
<tr>
<td>Entice</td>
<td>Wait for initiation/reach</td>
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<tr>
<td></td>
<td>Physically prompt pick up, reach, release</td>
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<tr>
<td>Reinforce within ½ sec (label item)</td>
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</tbody>
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Phase II: Distance and Persistence

- Communicative Partner moves away from student
- Picture on communication book moved further from student (still single pictures, no discrimination)
- Persistence taught
- Variety of people, activities, locations, reinforcers involved

IIIA: Simple Discrimination

- Motivation to use correct picture = getting desired item & avoiding undesired item
- Remember to reinforce at 1st indication of choice!
- 4 Step Error Correction Procedure for mistakes

Phase IIIB

Conditional Discrimination

- Discrimination between equally reinforcing
  - Conduct Correspondence Checks
  - Use 4-step Error Correction Procedure following mistakes
Phase IV: Building Sentences

- “I want” + reinforcer picture put on sentence strip
- Entire strip given to adult

Attributes

- Teach students to request very specific reinforcers
- Increase sentence length through attribute combinations
- Receptive mastery not a prerequisite!

Phase V

Answering “What do you want?”

- Answering “What do you want?”
- Leads to Commenting
- Maintain Spontaneity
Phase VI Commenting

- Answering “comment” questions
  - “What do you see/have/hear/feel?”
  - “Discriminating between commenting Sentence Starters and requesting Sentence Starter
- Spontaneous commenting and requesting

Modality Transitioning

PECS to Speech or PECS to SGD

Students tell us when they are ready!

Criteria:
1. Spoken vocabulary = PECS vocabulary
2. Rate of initiation is equal
3. Length of utterance is equal
4. Speech is 80% intelligible to unfamiliar listener
5. Speed of utterance is as fast or faster with new modality

Do NOT take away skills!!

Research-based benefits of use of PECS

- Facilitates acquisition of speech
- Increases social approach during play
- Reduces Behavior Management Targets rates (even when not specifically addressed)
- Is easily understood in community and by peers
PECS Myths and Misconceptions

- If we’re using pictures of any kind, we’re using PECS.
- We’re using a visual schedule, so we’re using PECS.

PECS Myths and Misconceptions

- PECS just teaches people to request.
- PECS is only for people who don’t speak at all.
- PECS is only for young children.

PECS Myths and Misconceptions

- If we use PECS, the person using the system won’t learn to speak.
- PECS is only for people with autism.
Comparison of PECS and PRT

Schreibman, Koegel, Stahmer & Koegel (in preparation)

• Comparison of two commonly-used early communication interventions
• PRT is vocally based; PECS is visually based
• 39 children with autism
  – Mean age = 29.21 months, SD = 5.67
  – ≤ 10 functional words
• Stratified randomization matched on:
  – Early word use, developmental Level, age
• 258 hours of treatment across 23 weeks (~6 months)
• 14 hours per week consisting of:
  – 4 hours parent training
  – 10 hours in-home intervention
• Follow-up assessments after 3 months

Individual Participant Response Patterns in PRT and PECS

Pyramid Workshops

• PECS Basic Training (2-day)
• Advanced PECS Training
  – PECS Review, Practice and Problem Solving
  – Incorporating PECS Across the Day
  – PECS Implementer and Supervisor Certification
• The Pyramid Approach to Education
• Pyramid Topics including
  – Critical communication skills, Behavior Intervention, Asperger’s syndrome, Language of Emotion, Parent training, Analyzing Language (using Skinner’s Verbal Behavior), Organizing and managing classrooms, and more
Follow Up Options

• PECS Message Board
• Frequently Asked Questions (FAQs) in Manual and on website: www.pecs.com
• On-site consultation
• Consultation via phone or web
• Host your own workshop too!

www.pecs.com

Please visit
http://www.pecs.com/Research.htm
for PECS related research publications