



## The Picture Exchange Communication System (PECS) Shorthand Notes

*(BBB Autism - PDF article #16)*

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**Objective:** Using the PECS, the student learns to **spontaneously initiate communicative exchanges**. PECS can be used with children or adults who are not yet initiating requests, comments, etc. People using PECS are taught to approach and give a picture of a desired item to a communicative partner in exchange for that item. While advancing through the phases of PECS, the student learns to sequence words to create sentences. Pointing to pictures is discouraged as pointing does not require interaction with a person. Using PECS, students learn to gain the attention of the communication partner in order to make a request.

### **Phase I – The Physical Exchange**





**Objective:** Upon seeing a highly preferred item, the student will pick up the picture of the item, reach toward the communication partner, and release the picture into the partner's hand.

**Note:** At this phase, it is not essential for the student to look at or identify the pictures.


### **Preparing for Phase I:**

-  identify all of the objects, foods, activities, etc. that the student is interested in Note: avoid focusing only on one activity (such as food); it is important the student learns that communication occurs in all activities
-  develop a representational set for those items (i.e., photographs, Picture Communication Symbols (PCS), etc.)
-  identify for yourself which activities you are going to start training in

### **Notes:**

-  No verbal prompts are used during this phase (such as "What do you want?" or "Give me the picture").
-  Plan to use a variety of pictures, but only one at a time.
-  Try to "practice" PECS during naturally occurring situations throughout the day.
-  Although two trainers are helpful, it is possible to do this phase with only one.

### **Training Procedure:**

-  when you see the student reaching for a desired item, take that opportunity to work on the physical exchange



- allow the child to engage in the activity for a short period and then remove the item (or stop the activity)
- get the picture that represents the identified item
- sit directly in front of the student
- place the picture of the item between you and the student
- hold the desired item in one hand while showing it to the student (the reason for holding it is so that the student cannot take it)
- hold out your other hand as a cue for the student to give you the picture ("open-hand cue")
- initially, the student is going to reach for the desired item
- without saying anything (i.e., no verbal cuing!) and using hand-over-hand, help the student to pick up the picture and put into your "open hand" (put the object down while doing this)
- as the student releases the picture into your hand, you label his action by saying something like "oh, you want the play dough!" (this is beneficial for those children who tend to repeat sentences exactly how they are presented as well for those who have difficulty with pronoun reversals)
- without delay, give the desired item to the student

#### **Helpful Hints:**

- only give parts of the activity at a time, so that you can practice this for several turns/trials during one activity
- if there is only one item, take away the item after a few seconds (or one turn, etc.) and practice the exchange several times
- only use items that the student has shown an interest in at that moment – the child must *want* the item or else the exchange will not be reinforcing

#### **Fading Cues:**

- as the student becomes familiar with the expectations of the exchange, start fading the physical assistance (i.e., hand-over-hand)
- next, start fading your "open-hand" cue
- move on the Phase II once the student is consistently and independently exchanging a picture in order to retrieve a desired item



## Phase II – Expanding Spontaneity

**Objective:** The student will go to his/her communication board/book, pull the picture off, go to the communication partner, and release the picture into the partner's hand.

### Preparing for Phase II:

- create a communication board (i.e., a piece of laminated cardboard with Velcro on it, the front of a binder with Velcro on it, etc.)
- store the pictures in a binder using Velcro; arrange the pictures in a meaningful way so that you can easily find them (i.e., sort by themes)

### Notes:

- no verbal prompts are used
- teach a variety of pictures – using only one at a time (the student is not required to be discriminating between the pictures at this phase)
- use a variety of trainers/communication partners
- train in naturally occurring situations

### Training Procedure:

- once the desired activity has been established by the student, place the appropriate picture on the communication board
- the student must now remove the picture from the board and give it to you
- once the student learns to do this, increase the distance between you and the student
- now, the exchange must become more intentional first by reaching for you and then by getting up and moving towards you
- the next step is to increase the distance between the student and the picture (slowly increase the distance)
- the trainer is the one expected to return the picture to the board once the student has given the picture – do not tell the student to "Put your picture back" – you would not ask a verbal child to "Put your words back"
- move on to Phase III once the child consistently and independently goes to get the picture of the desired item and brings it to you



### Phase III – Picture Discrimination

**Objective:** The student will request the desired items by going to a communication board, selecting the appropriate picture from an array, going to a communication partner and giving the picture.

#### Preparing for Phase III:

- in addition to having pictures of desired items, you should now identify and get pictures of non-desired items
- non-desired items could be those that the student dislikes or shows no interest in, or are contextually irrelevant (such as a shoe during snack time)

#### Notes:

- no verbal prompts are used during this phase
- rotate the position of the pictures on the communication board so that the student does not learn to identify them by their location (this will discourage *looking*)

#### Training Procedures:

- present the student with one desired item and one strongly disliked, non-preferred item
- at first, pair the pictures with the real objects (i.e., by placing the picture between the object and the student)
- almost immediately, try to fade away the real objects and just present the student with the pictures
- give the student the object that corresponds with the given picture (even if it is the non-preferred or contextually irrelevant item); you can then say "You asked for the shoe" or "You want the shoe" – wait a few seconds and then return the two pictures to the board when the student responds to the non-preferred item, point to the desired item and say "If you want a cookie, you need to ask for a cookie"
- if this occurs continually, check that the student is, in fact, interested in the "desired item"
- you can also start reducing the size of the pictures to  $\frac{3}{4}$ " – 1"
- correspondence checks: every once in a while let the student take the requested item after giving you the picture. This will tell you whether or not the student is making the connection between the picture and its corresponding object
- once the student has learned to look at the pictures and to discriminate between them, start adding more pictures to the board so that the student learns to request from a variety of pictures
- continue doing this until the student can discriminate amongst 1- - 20 pictures
- at this point, you can develop theme boards and place in the environment or in a book (or both)
- you may also want to start putting desired objects out of reach to increase opportunities for requesting
- the student is ready to move on to Phase IV once he/she is able to discriminate between a variety of pictures and is able to request a preferred choice from amongst a group of pictures



## Phase IV – Sentence Structure

**Objective:** The student requests present and non-present items using a multi-word phrase by going to the book, picking up a picture/symbol of “I want”, putting it on a sentence strip, picking out the picture of what is wanted, putting it on the sentence strip, removing the strip from the communication book, approaching the communicative partner, and giving the sentence strip to him/her. By the end of this phase, the student typically has 20 – 50 pictures in the communication book (or board) and is communication with a variety of partners.

### Preparing for Phase IV:

- create a sentence strip out of cardboard (laminated and add Velcro) and with Velcro, attach to the communication binder
- create a picture for “I want”
- it is helpful for some children to use colour coding for teaching sentence structure; a widely used colour-coding format is known as “Fitzgerald Key”  
\*Please see attached “Fitzgerald Key” for colour-coding information

### Notes:

- no verbal prompts are used during this phase
- continue periodic “correspondence checks”
- continue to use during a variety of activities and with a variety of partners

### Training Procedure:

- attach the “I want” picture to the far left of the sentence strip
- the student should be guided to place the picture of the desired item next to the “I want” picture
- the student then gives you the sentence strip
- as the student is giving you the strip, you should verbalize the request by saying “I want \_\_\_\_\_” or tell the student “You told me...I want\_\_\_\_\_” (pause as if expecting the student to repeat or fill in the blank)
- once the student consistently does this, move the “I want” picture to the top left hand corner of the board/page
- when the student wants something, guide him/her to the “I want” picture, help him/her to place it on the left side of the sentence strip and then help the student to place the picture of the desired item next to it
- continue doing this until the student can complete these steps independently
- start placing desired items out of sight

## Phase V – Responding to “What do you want?”

**Objective:** The student can spontaneously request a variety of items and can answer the question “What do you want?”

### Training Procedures:

- at this phase, the student can initiate requests independently using the starter phrase “I want” followed by a picture of the desired item
- ideally, the student has not yet been exposed to the prompt “What do you want?”



- it is inevitable that people will continue to ask the student this; therefore, this phase teaches the student how to respond to this prompt (by this phase, the student may already be doing this)
- however, it is extremely important that the student still be able to request most things spontaneously, without being prompted
- you should be able to move through this stage quite quickly

## Phase VI – responsive and Spontaneous Commenting

**Objective:** The student expands communicative functions to include commenting, expression of feelings, likes and dislikes, etc.

### Preparing for Phase VI:

- create pictures for "I see", "I like", "I feel", etc.

### Notes:

- reinforcers should match the communicative act (i.e., tangibles for requests and social responses for comments)
- use the pictures when you communicate with the student to model how to use them for these expanded functions (you can either use the sentence strip or point to the pictures)
- colour coding may be helpful at this stage

### Training Procedure:

- create opportunities for commenting during naturally occurring activities
- for example, during snack time, you could make a comment "mmmm, I like cookies" (using the child's pictures), "What do you like?"
- another example could be "I feel happy", "How do you feel?"
- at the end of this phase, the student may be ready to start pointing to the pictures; however, the student needs to bring the communication book/board to his/her communication partner while pointing so the person-to-person interaction is still occurring

### Colour/Size/Location Concepts

- the student should learn to use these concepts in communicative functions within his/her current repertoire (i.e., rather than just saying "I want the ball", the child can add "I want the *red* ball" or "I want the *big* ball" or "I want the *big red* ball")
- this can be taught in a more structured format as well as within natural contexts

### Differentiate yes/no request vs. yes/no label

- the student learns to answer both "Do you want \_\_\_\_\_?" and "Is this a \_\_\_\_\_?" questions
- remember, the reinforcers for the "Do you want" questions should be tangible and the reinforcers for the "Is this a" questions should be social



**References:**

Frost, L., and Bondy, A. (1994). The picture exchange communication system: Training manual. Pyramid Educational Consultants, Cherry Hill, N.J.

**Fitzgerald Key**

Any colour system can be used with the *Picture Communication Symbols (PCS)* as long as it is consistent. The recommended colours are as follows:

People	Yellow
Verbs	Green
Descriptions	Blue
Nouns	Orange
Social	Pink
Miscellaneous	White

It is believed that if this colour system is followed, it will encourage some consistency within the non-verbal population. It will also provide more flexibility in terms of combining different types of symbol programs with one another.

If you do not have a colour printer, you may use colour paper and photocopy your symbols onto the corresponding coloured sheet.

Note: Also check out the following website regarding colour keys:

<http://www.cwu.edu/~setc/Tech-Assistance-Papers/Color-coding-symbol-displays-RAW.htm>

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