Introduction To PECS

Picture Exchange Communication System

Let's get to know each other!

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 Regional TOPSoccer Coach of the Year 2020

 Multiple family members living with disabilities



Introduce yourself Mention a memory

If you are sitting at a table with someone new...introduce yourself with 3 facts, get creative! (e.g. I am bilingual, I have traveled to Central America, and I was trained classically in chorus for 7 years.)

This one time on the pitch...

What is PECS? PECS?

 A unique alternative/augmentative communication system

 It combines knowledge from the fields of applied behaviour analysis and speech-language pathology to produce an effective method for teaching functional communication

• The primary goal of PECS is to teach functional communication.

- PECS consists of six phases
 - teaching an individual to give a single picture of a desired item or action to a "communicative partner" who immediately honors the exchange as a request

 teach discrimination of pictures and how to put them together in sentences

 more advanced phases, individuals are taught to use modifiers, answer questions and comment.

Phase 1, 2 & 3

Phase 1

 How to Communicate - Individuals learn to exchange single pictures for items or activities they really want.

• Phase 2

 Distance and Persistence - Still using single pictures, individuals learn to generalize this new skill by using it in different places, with different people and across distances. They are also taught to be more persistent communicators.

Phase 3

 Picture Discrimination - Individuals learn to select from two or more pictures to ask for their favorite things. These are placed in a PECS Communication Book—a ringed binder with self-adhesive hook fastener strips where pictures are stored and easily removed for communication.







Phase 4



- Phase 4
 - Sentence Structure Individuals learn to construct simple sentences on a detachable Sentence Strip using an "I want" picture followed by a picture of the item being requested.

- Attributes & Language Expansion
 - Individuals learn to expand their sentences by adding adjectives, verbs and prepositions.

Phase 5 & 6



- Phase 5
 - Responsive Requesting Individuals learn to use PECS to answer questions such as "What do you want?"
- Phase 6
 - Commenting Individuals are taught to comment in response to questions such as, "What do you see?", "What do you hear?" and "What is it?" They learn to make up sentences starting with "I see", "Theor" "They learn to make up sentences starting with "I see",

"I hear", "I feel", "It is a", etc.

Collaborate with family, and other professionals

Plan sessions accordingly

Knowing the phase of communication your player is in will

help you understand their functional communication level.

Recognize current athlete skill set in communication

But what about other PECS systems?

PECS does use pictures, but it is a specific protocol for teaching expressive use of pictures for an individual to communicate wants and needs, and to comment about the world.

Certain picture symbols may be used and incorporated in the following supports but PECS is not these entirely:

- Visual schedules
- Choice boards
- Task analysis

* Note: We will review these later on !*

Who is PECS for?



- What has been discovered over the 20 plus years since its inception, though, is that PECS can serve as an effective communication system for a range of individuals.
- PECS has been used around the world with people aged from 14 months to 85 years

- PECS can provide a very effective functional communication system to individuals with no verbal communication, but it can also teach important skills to those who talk
- the PECS protocol emphasizes teaching a person to approach others to initiate a communicative interaction

Examples

Low Tech boards

- A no/low-tech device requires something external to the person using it that is either non-electronic or a very simple electronic device.
- Examples of no/low-tech communication strategies
 - PECS (Picture Exchange Communication System)
 - communication boards
 - communication books/notebooks





Low Tech boards

Benefits of no/low tech devices:

- Can help facilitate early implementation of AAC
- Low cost
- Portability

Disadvantages of a no/low tech device:

- Vocabulary is limited to the display in front of the user
- Communicating complex ideas is difficult
- Heavy reliance on communication partners due to a lack of voice or print output.
- Due to the lack of symbols or vocabulary, a low-tech system could lead to an underestimation of the AAC user's abilities.

High Tech boards



- A high-tech device is a complex electronic device that permits the storage and retrieval of messages, many of which allow the use of speech output.
- Examples of high-tech communication strategies
 - Ipads (with appropriate apps such as Proloquo2go),
 - o other tablets/electronic devices
 - eye gaze devices (such as Tobii Dynavox)



High Tech boards

Advantages of high-tech devices:

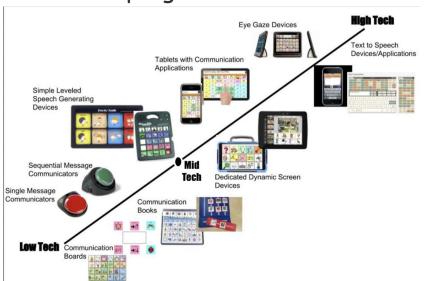
- Limitless options of vocabulary
- Most have word prediction features at the phrase/sentence level
- Auditory and visual feedback provided to user
- Allows communication to occur at a distance
 - Allows the user to send messages without first obtaining the partners' attention through another mode
- Additional options available (email, internet, phone, environmental controls)

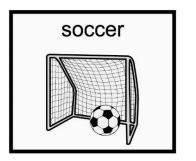
Disadvantages of a high-tech device:

- Most of these devices can cost thousands because they come with specialized software.
- Technology breaks down and gets outdated (which is why it's always necessary to have a backup low-tech device!)
- Lack of portability (in some cases)

Soccer Examples

 Various symbols for soccer depending on PECS programs





uniforms



soccer team





teams



How might this look in TOPSoccer?

New Athlete

Send out/have families fill out form for registration

 Form should have a communication section for family commenting

Identify preferred communication for athlete (e.g. ASL, AAC w/PECS, verbal communication et.)

Research preferred communication/ask families for more information on communication

Prior to 1st Session

Prepare for a variety of communication needs

Have families introduce topic of soccer to athlete

Plan session to fit the communication needs of athletes

TOPSoccer Session

Incorporate communication systems in the session

Have a backup communication strategy just in case

Find out what works best for the athlete, buddy, and coach during the session

 Note: It may take some sessions to work this out and that's ok!

Integration & Support

Prepare for new skills being taught for following sessions

 Let families/professionals know what new vocabulary or actions the student will be working on.

Reach out to professionals/personnel that work with athlete on their communication

Email teachers/SLPs

Don't be afraid to ask for support or ask questions!

Have you seen a PECS in your program?

TALK IT OUT

- What has PECS looked like in your TOPSoccer program?
 - O What did you do to support the athlete?
 - O Who did you reach out to for questions?
 - O How did you incorporate alternative communication in your sessions?
- Note: If you have not had any exposure yet...think potentially what it might look like in your program, brainstorm

Time to move!

If not PECS...then ____?

Reminder!

PECS teaches functional communication.

An expressive use of communication specific to the athlete

Explicitly taught in phases

What other visual supports can I incorporate?

Visual Schedule

Task Analysis

Choice Board

Visual Schedules



What is a visual schedule?

• a graphic representation of scheduled tasks and activities

 They are very useful for breaking down tasks that have multiple steps and ensuring that children follow rules and deadlines.

 Visual schedules reduce anxiety by providing consistency and reducing resistance that comes with certain activities

• The visual schedule itself is a constant reminder to students where they should be, what they should be doing and when she should start and finish.

How and When can I use it?

- Make sure athlete has an understanding of sequence
 - o E.g. first, second, third first, then etc.
- Make schedule manageable
 - Does athlete need every activity listed? Do they need one activity at a time listed?
- Personalize schedule
 - Create schedule and visual supports to match tasks
- Cue and prompt as necessary to look at schedule
- Mark it as completed
 - Check mark box
 - Moving PECS symbol off board
- Reinforce
 - E.g. snack, favorite activity for last 5-10 minutes of session, using new materials etc.

How and When can I use it?

- Use when athletes have anxiety about what comes next
- Use when athletes need support during activity transitions
- Use when session has many activities



Why use it?

Reduce anxiety

- Some athletes get nervous when they do not what comes next
- Some athletes may not want to participate if they do not know what is happening.

Provide security for time management

- Athletes may review to schedule to either identify that the session is almost completed
- Pushes athletes to continue participation in the session from knowing what comes next

Task Analysis

Packing a Lunch Box



What is task analysis?

the process of breaking a skill down into smaller, more manageable components

Once a task analysis is complete, it can be used to teach athletes a skill that is too challenging to teach all at once

The target skill should consist of a series of chained discrete steps

Skills that require a task analysis typically consist of multiple components that comprise a larger skill

• E.g. multi step drills, complex foot skills, passing movements, introduction to build out line/regulations etc.

How and When can I use it?

Identify what prerequisite skills the athlete needs in order to complete the task

- E.g. Which part of the foot to use for passing to try a new passing sequence
- Make sure your athlete has prerequisite skills to complete the new task

Break the target skill into manageable chunks

• Croife 1. Ball is in front of players feet. 2. Player moves dominant foot over the soccer ball 3. The foot is placed in front of the soccer ball with the heel 6 inches of distance from the soccer ball. etc

Test out task analysis

Teach new skill

Why use it?

- Introducing a complex skill/move
- Individual skill building
 - Send home task analysis as practice for a skill

Build independence and understanding of a specific complex task



Choice Boards



What is a choice board?

A visual support that includes objects, photos, pictures, line drawings or text which can be used by your child to communicate what activity, item or task they would like.

Typically a minimum of 2 choices would be presented to your child at one time for them to make a choice.

In order for a choice board to be an effective strategy, the athlete must be able to make a choice between a preferred and non-preferred item/activity

How and When can I use it?

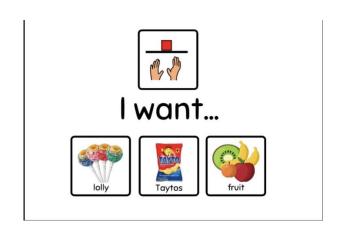
- 1. Coach/buddy creates a board with writing or pictures of the choices being offered that are relevant to the task (e.g. favorite soccer activity, snack break, free time to pass, extra water break etc.)
 - It is important to make sure that each of the chosen activities are available and to always honour the choice your child makes.
- 2. Review the choices with the athlete.
- 3. Allow the athlete to select from the available choices.
- 4. Once the athlete selects their choice, coach/buddy immediately provides the choice, and rewards/reinforces the athlete uses

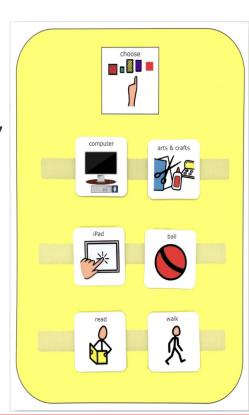
How and When can I use it?

To offer a choice in the order of tasks to be completed

To offer a choice to pick what to work on/for

To offer a choice in the materials being used for an activity





Why use it?

May increase athlete motivation by providing them with a choice over which activity comes next or what they would like to work for.

Providing this choice may give the athlete a sense of control over their environment and therefore increase their level of participation.

Used to offer the athlete a choice before an activity/task begins in order to increase participation and decrease the possibility of the athlete engaging in challenging behaviours.

Summary

PECS

- a unique alternative/augmentative communication system
- the PECS protocol emphasizes teaching a person to approach others to initiate a communicative interaction
- Explicitly taught in phases
- An expressive use of communication specific to the athlete

Other Visual Supports Visual Schedule

- a graphic representation of scheduled tasks and activities
- Use when athletes need support during activity transitions
- Use when session has many activities

Task Analysis

- the process of breaking a skill down into smaller, more manageable components
- Introducing a complex skill/move
- Build independence and understanding of a specific complex task

Other Visual Supports Choice Board

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Questions

Resources

https://www.erinoakkids.ca/getmedia/3c701adc-46a1-4f4e-9813-5ff6121fff65/000103-AODA-Choice-Boards.pdf

https://app.snapandread.com/workspace#action=open_url&source=https%3A%2F%2Fautismpdc.fpg.unc.edu%2Fsites%2Fautismpdc.fpg.unc.edu%2Ffiles%2FTaskAnalyis_Steps_0.pdf

https://www.appliedbehavioranalysisprograms.com/faq/what-is-visual-scheduling/

https://www.lispeech.com/differences-no-low-tech-high-tech-aac-devices/#:~:text=A%20no%2Flow%2Dtech%20device,the%20use%20of%20speech%20output.

https://pecsusa.com/pecs/

https://app.snapandread.com/workspace#action=open_url&source=https%3A%2F%2Fpecsusa.com/w2Fdownload%2FMythsandMisconceptions2010.pdf