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Teaching Communication to Individuals with Autism

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Participant Outcomes

- Overview of Communication strategies
- Ideas on ways to teach communication





"Qualitative impairment in **COMMUNICATION**, manifested by at **least one** of the following":

- Delay in or total lack of spoken language.
- Impairment in ability to initiate or sustain conversation.
- Stereotyped use of language.
- Lack of make-believe play





Communication and Autism

- Deficits in nonverbal communication is one of the earliest signs of the disorder
- Deficits in vocal communication often the first symptom noted by others





Communication and Autism

- Importance of communication as a foundation for the development of social, play, academic behaviors, etc.
- Importance of appropriate communication to replace or prevent the development of inappropriate communicative behaviors such as tantrums, SIB, aggression





Modes of communication

Topography Based

- Involves producing a unique response form for each word
- Examples:
 - Vocalizations
 - Sign language





Modes of communication

Selection Based

- Involves scanning an array of pictures, words or symbols and selecting one via point/touch
- Examples:
 - PECS
 - Dynavox
 - Go Talker
 - Intellikeys





Communication

It is important that the communication we teach is:

Motivating

Functional





Motivation

• If the words, signs, or pictures we attempt to teach are not motivating to the child it will be difficult for them to acquire the word.





Mand

- Type of verbal operant in which a speaker asks (or states, demands, inquires, etc.) what he needs or wants.
- Example: asking for a shoe when you want a shoe.
- Asking for a gummy bear when you want a gummy bear
- Asking someone to stop tickling you when you want them to stop tickling





Mand Training

- Mands are the first verbal operant acquired by by a human child.
- They usually occur in the form of crying when a child is hungry, tired, in pain, cold, wants toy, afraid, etc.
- Typically developing children quickly learn to replace crying

(Cooper and Heron, 2007)





Mand Training

- Manding not only lets children control the delivery of reinforcers, but it begins to establish the speaker and listener roles that are essential for further verbal development.
- Manding is the only type of verbal behavior that benefits the speaker.
- Meaning the mand gets the speaker reinforcers.

(Cooper and Heron, 2007)





Mand Training

- It is important that mand training occurs throughout the day for individuals on the autism spectrum.
- This will include contriving situations and providing opportunities for these mands to occur.





Contriving Manding Opportunities

- For example, Mickey loves vacuums and everyday after school he rushes to the hall closet to look at the vacuum.
- To contrive a mand for the vacuum you place the vacuum in another location. When he arrives prompt the mand for vacuum.





Contriving Manding Opportunities

- Sally always comes into the playroom to grab the ball out of the toy box. You place the ball on the top shelf where Sally cannot reach it.
- You have now contrived the opportunity for multiple mand responses.

Examples; help, ball, where is it, which shelf, etc.





Pivotal Response Training

 Procedures made to help "increase motivation, and promote generalization" using naturalistic and loose training techniques





Pivotal Response Training

- Reinforcement of approximations/ attempts
- Reinforcement has a specific relationship to the desired behavior natural reinforcement ("ball" gets ball, not praise. Child chooses object for instruction and that object is used. This is done to increase motivation)





Pivotal Response Training

- Motivation Child Attention
- Child Choice Reinforce Attempts Direct Reinforcement Intersperse Maintenance Tasks Shared Control (Turn Taking)
- Responsivity Tasks Involve Simultaneous Multiple Cues





Sign Language

Teaching sign language to children with autism can serve the purpose of functionally replacing other disruptive behaviors such as aggression

Teaching a child with autism to communicate using sign language may be an easier transition to vocal communication





Advantages of Sign Language

- May help to develop motor imitation
- Stimulus & response often resemble each other, providing a built in prompt
- Topography based, like speech
- Single stimulus and single response relation, like speech
- Community of signers already exists
- Can be used to teach all operants





Disadvantages of Sign Language

- Parents & teachers must learn the child's signs
- Parents & teachers need to use sign language when interacting with the child
- Parents & teachers must teach/shape each individual sign





Begin Sign Training by teaching Mands

- Identify items and activities that are reinforcing for the learner
- Select reinforcers that instructors can easily control and that provide many opportunities to mand (request)
- Determine the manual sign for each of the reinforcers the child will learn to mand for





Selecting Mands

- Do <u>NOT</u> teach the following until the learner can mand for <u>many</u> items:
 - Yes/no
 - More
 - Finished
 - Please
 - Potty
 - Help
 - Eat
 - Drink
 - Help
 - Carrier phrases ("I want ." "Give me .")





Why not teach these mands?

- These are generalized responses.
- If a child is signing "more" it will be difficult for the the listener to understand and reinforce their request.





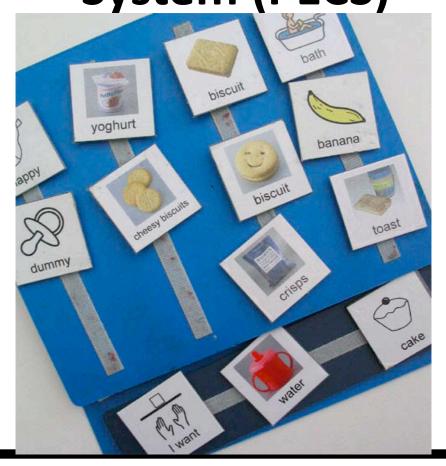
Picture Exchange Communication System (PECS)

- designed to teach functional communication with an initial focus on spontaneity
- There are 6 phases
 - How to communicate
 - Distance and persistence
 - Picture discrimination
 - Sentence structure
 - Answering questions
 - Commenting





Picture Exchange Communication System (PECS)







Picture Exchange Communication System (PECS)

- If PECS is chosen as the communication system it is important that the book is available throughout their day.
- Make sure it is available at home, school, on the bus, etc.
- This will increase use as well as initiation of communication





Advantages of PECS

Each exchange is clearly intentional and readily understood. When a child hands you a picture or sentence strip, the request or comment is quickly determined

Communication is initiated by the child

Communication is meaningful and highly motivating





Disadvantages of PECS

Parents and educators must be trained

After pictures and binders, it can get expensive

In order for a child to request something, there must be a picture. Therefore, there must be pictures of almost everything in their environment





In Summary

One of the most important things we can teach individuals with autism is the ability to communicate.

- Choose a communication system(or let them choose)
- Be consistent
- Have the communication available all the time





Thank you so much for coming!!

Questions??





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