Peer-to-Peer Manding

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Selection of appropriate peers as partners

- When possible, target students that have previously shown interest in each other

- Select students who have differing interests in reinforcers, in other words, try to find reinforcers that both students will not both want to have

Assessing student skills prior to implementation

- Select the response form: vocal, signing, written, picture exchange, communication board, electronic device
- Does the student respond socially when instructor pairs social interactions with the delivery of reinforcements
- Does the student display mand techniques across multiple conditions, people, and exemplars
- Does the student have a broad repertoire of mastered mands that can be used in peer to peer sessions
- Does the student have MO for the items selected for peer to peer sessions

Reinforcer Identification

- Basic methods for determining reinforcers to be used in mand training – it is critical to select items to be used as targets and have a variety of items to be used as reinforcers
- Preference inventory
- Observations
- Structured preference assessment
- Conditioned reinforcers

Reinforcer Identification

- Conducting a Preference Assessment – we can only identify reinforcers when we see how presentation of the item or event alters the frequency of the behavior it follows.
- Categories Commonly Included on Preference Assessment:
  - Consumables, food/drink
  - Tangible items, toys, materials
  - Activities that involve movement
  - Games
  - Social Interactions
  - Music

Participants

- Six students grades 1 - 4
- All students are enrolled in an Autistic Support Classroom in Western Pennsylvania that focuses on language development and principles of Applied Behavior Analysis.
- All students demonstrated language skills on the 2nd and 3rd levels of the Verbal Behavior Milestones Assessment and Placement Program (Sundberg, 2007)
- All six students were observed as having limited requests to their peers daily.

Video Baseline

Video Baseline

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Basic Mand Procedures

- Mand Training in a Nutshell

  - Check for motivation (MO)
  - Use of 2-second time delay
  - Use of 2nd trial prompt transfer procedures
  - What is considered to be an error?

Basic peer to peer manding procedures

- Complete preference assessment: choose items students have high MO for and will want during sessions
- Control environment:
  - place students so they have access to each others items, but cannot access their own
  - Students should face each other
  - Sanitize environment
- Reinforce students at a high rate for requesting and delivering items – fade instructor reinforcement as student behavior is shaped

Use of differential reinforcement

- Reinforce responses that meet the goal you are trying to achieve: frequency of responses, duration of peer interactions, latency, etc.
- Use differential reinforcement to shape student behavior during peer-to-peer manding sessions
- Provide high levels reinforcement for desired responses:
  - Low level reinforcer response = Student gives reinforcer to other student with hand over hand from adult
  - Mid level reinforcer response = Student gives reinforcer to other student with physical prompt
  - High level reinforcer response = Student gives reinforcer to other student when student mands for it without needing adult assistance

Intervention Video

Conditioning peers as reinforcers

- Peer to Peer pairing procedure
  - o The goal of peer to peer pairing is to condition peers as reinforcers
- An important piece for students when developing social skills is recognizing that other people in their environment can be of value to them

Data Forms

- Preference Assessment
  - o Ranks reinforcers
  - o Used to choose items to be used for sessions
  - o Choose items the student currently likes and new items

Data Forms

- Peer to Peer session data collection forms
  - o Mands to peer, delivery to peer (prompted/unprompted/spontaneous)

Data Forms

- Graphs – mands, delivery, initiation
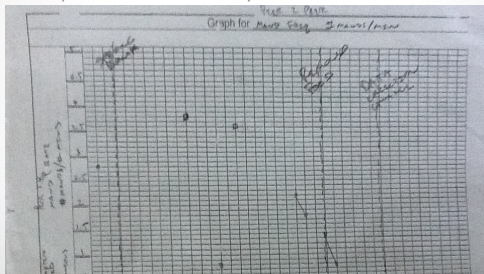
Data Forms

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Data Forms
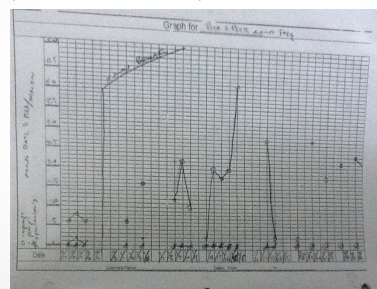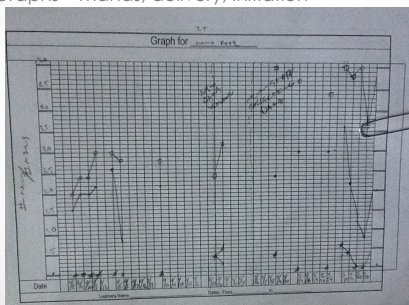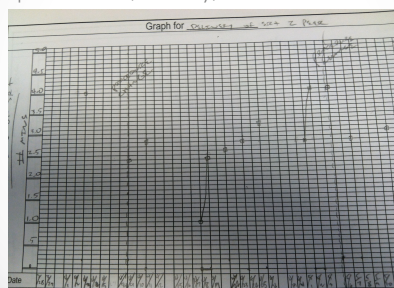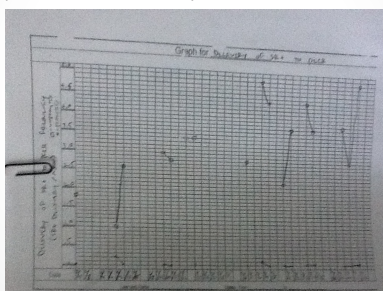- Graphs – mands, delivery, initiation

Data Forms
- Graphs – mands, delivery, initiations

Data Forms
- Graphs – mands, delivery, initiations

Results/Outcomes

- Students see peers as being reinforcing
- Increase in social play skills
- Prerequisite skills for social skills instruction
- Increase in initiation of interaction with peers
- Increase in awareness of peers
- Less parallel play, more cooperative play
- Students share reinforcers with peers
- Students are observed as enjoying the company of their peers

Results/Outcomes

Unprompted Mands/Deliveries with Peers

Participant	Baseline Frequency Mands	Intervention Frequency Mands	Baseline Frequency Deliveries	Intervention Frequency Deliveries
Student 1	0 mands/min	5 Mands/min	0 Deliveries/min	4 Deliveries/min
Student 2	0 mands/min	4 Mands/min	0 Deliveries/min	5 Deliveries/min
Student 3	0 mands/min	6 Mands/min	0 Deliveries/min	5 Deliveries/min
Student 4	0 mands/min	5 Mands/min	0 Deliveries/min	6 Deliveries/min
Student 5	0 mands/min	2 Mands/min	0 Deliveries/min	5 Deliveries/min
Student 6	0 mands/min	1 Mands/min	0 Deliveries/min	4 Deliveries/min

Post Intervention Video
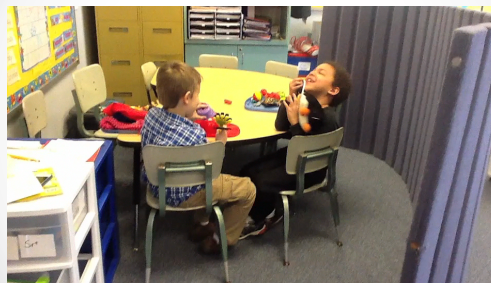
Post Intervention Video

Pit Falls

- Peer directed mands result in a slightly longer delay to reinforcement
  - ○ HOW TO HELP: Reinforce students for manding or delivering to stay on their reinforcement schedule, as the students get faster, fade adult reinforcement
- Peers are situated in close proximity to each other, in the natural environment they may have to approach each other to mand for what they want
  - ○ HOW TO HELP: Set up situations in NET to help students generalize these skills at different times throughout the school day
- Preferred items are typically given for a short duration and do not require reciprocal play
  - ○ HOW TO HELP: Try to find preferred toys that require multiple parts (to get multiple mands from one reinforcer) As peers continue through peer to peer programming their desire for social reinforcers become more prevalent than their desire for toys/foods

Final Remarks