# The Basics of Mand Training

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## PaTTAN's Mission

The mission of the Pennsylvania Training and Technical Assistance Network (PaTTAN) is to support the efforts and initiatives of the Bureau of Special Education, and to build the capacity of local educational agencies to serve students who receive special education services.

## PDE's Commitment to Least Restrictive Environment (LRE)

Our goal for each child is to ensure
Individualized Education Program (IEP)
teams begin with the general
education setting with the use of
Supplementary Aids and Services
before considering a
more restrictive environment.

## What is a mand? Common terms:

- Request
- Asking for something
- A question
- Demanding
- Inquiring
- Commanding

- Teaching students to make requests is a central focus of interventions guided by ABA

## The Mand and Autism

- The mand requires:
  - Social approach and initiation
  - Interactions with other people as having value
  - Flexible and specific verbal responses (communication)
- The required skills directly compete with the core deficits of Autism Spectrum Disorders.

## What is a Mand?

- In simple terms, it is a request.
- We ask for something we want

*"Want it, say it, get it"*

- *My guess is most of you have some idea of what a mand is: otherwise you would have gone to some other session….*

# Intro to Mand Video

# Another way of saying that...

- Antecedent: want it (motivation)
- Behavior: saying what you want
- Consequence: getting what you want
- Examples:
  – hungry, say banana, someone gives you a banana
  – need to open a door, ask for key, someone gives the key
  – lost, ask for directions, someone gives directions

## A More Formal Definition

- Mands are verbal behavior
- Motivation is an antecedent to behavior
- The mand specifies its reinforcer

## Verbal Behavior

- What is verbal behavior?
- Behavior that effects the response of listener!
- Often verbal behavior is very complex
- But there are simple forms of verbal behavior:
  - Telling someone what we experience
  - Repeating what others say
  - Answering familiar questions

# The Verbal Operants

- Speaker skills:
  - Tact (labels)
  - Echoic (repeating what someone says)
  - Intraverbal (answering questions, fill-ins, word associations)
- Listener skills
  - Listener responding (receptive)
    - Following directions
    - Selecting things that are named

# Video of Verbal Operants

## Why do we ask for the things the way we do?

- Because, in the past, when we wanted something and asked a certain way, someone gave us what we wanted.
- In other words, we learned to ask in particular ways
  - Since the time we were babies people taught us how to ask for things
  - The people around us responded to our requests when they understood what we were saying.
  - If we asked for something in a way that was not polite or too demanding we were not likely to get the thing
- Asking for things is sometimes (not all of the time) easier than trying to get it on your own
  - Sometimes we are punished for getting things on our own
  - Sometimes it requires less effort to ask someone else than to do it ourselves

## What kind of things do we ask for?

- Things (tangible items, food, toys, and so forth)
- Actions (having someone give, push, help, throw, and so forth)
- Missing items
- Attention (having someone look at you, watch you, walk toward you, smile, and so forth)
- Information (what is it? Where is it? Who has it? Who did it? How do you do it? Why? And so forth)
- To stop something or remove something

# Types of Mands Training Video

# Mands Benefit the Speaker

The way things get better for the speaker will vary depending on how the person asks for what they want, how much they want it, and the timing of when they make the request.

However, things always get better.

## Mands Benefit the Speaker

• Asking for food and getting it when you are hungry reduces the state of food deprivation.
• Asking for a pen and getting it when you need to write takes away the problem of not being able to write when one has to sign a paper.
• Saying "where are my keys?" may provide information regarding the location of the keys. The information will ultimately help the person find the misplaced keys.
• Saying "really?" or "Oh, yeah" in a conversation may serve to keep your partner talking.
• Pointing at an object may result in the "listener" looking in that direction. Thus the listener may then be able to respond to the object in some way that benefits the speaker.

## Defective Mands

– Problem behavior may serve as an effective request:
  • Grabbing, screaming, climbing, hitting, self-injurious behavior, biting, and more
– Inadvertent success of such behavior
– Giving the child what they want when they scream stops the screaming
– It also means the screaming was an effective means of getting what was wanted
– If screaming was effective this time, it may be more likely to occur in the future

## Mands Can Compete with Problem Behavior

**Aggressive Behavior**

**Mand Training**
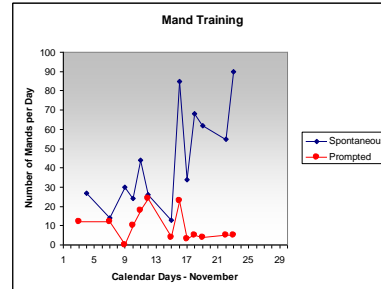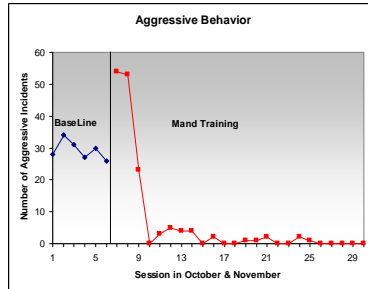
## A Full Set of Skills

- Students with Autism Spectrum Disorders will need to learn how to ask for many different types of things

- How best to sequence this series of tasks?

# Mand Sequences

- Best to start with mands for items that are immediately present
- Then actions and activities

Teaching more complex mands such as mands for information may require having taught other verbal behaviors first

## Several Types of Mand Behavior: Some Examples

- Mand for item present vocal response
- Mand for item present sign language response
- Mand for item present with selection based response (i.e. Picture Exchange Communication System; Frost & Bondy, 1994)
- Mand for item not present
- Mand for attention
- Mand for action
- Mand for information
- Mand for continued verbal behavior

## How do we know when to ask?

- When we want something and there is a listener present
- When something we want may be available.
  – It is not common to ask for something that is likely not available
- When there is someone willing to:
  – Listen to our request
  – And respond to that request

## Without mands we couldn't converse:

- **Conversant 1:** "What did you do last night? (mand for information)
- **Conversant 2:** "I went with my son to see that new fantasy film."
- **Conversant 1**: "Was it good?" (mand for information)
- **Conversant 2:** "I liked it but my son found certain parts a bit scary."
- **Conversant 1:**"Really?" (mand for more verbal behavior)
- **Conversant 2:** "Yes, some of the dark magic stuff was too much, but he did like the flying wizards."
- **Conversant 1:** "I haven't seen the movie yet."
- **Conversant 2:** "Oh, I think you should go, you seem to like that kind of stuff" (mand for action)

And so on….

## How do we ask for things?

- Most the time we "use words": we say things out loud to someone else
- Sometimes we gesture
- Some deaf people ask using sign language
- Some people with physical impairments might request with a voice generating device

## The Person Asking for Something Must Have a Listener

- Individuals with ASD have to learn how to accept things from other people
- They may have to be taught how to stay with or go up to another person
- They must learn that other people can be the source of things they want and appreciate

## We ask for things when we want them. But what does it mean to want something?

- This is probably not a simple as it sounds.
- What causes us to want a particular thing or event at a particular time?
- Wanting something or some event doesn't seem to remain constant:
  - We may want something one time and a little later, we no longer want it.
  - How much we want something seems to vary as our experiences change.

## Motivation: making "wanting it" practical!

- Changes in the environment
- Alter the value of getting something
- Leads to people doing something to get what is valuable
- Unlearned and learned
  - Unlearned: things that have value because they help you survive (e.g., water, warmth, oxygen, food)
  - Learned: things that have value because of a history of reinforcement (e.g., phone charger, car keys, pencil)
- Alter value; Evoke behavior

# Motivative Operations and the Mand: *Jack Michael*

| Motivative Operations | |
|---|---|
| **Value Altering Effects** | **Frequency Altering Effects** |
| Establishes value of stimuli: events or items will serve as reinforcers | Evokes any behaviors that in the past have resulted in obtaining the events or items |
| Abolishes value of stimuli: events or items will not serve as reinforcers | Abates any behavior that in the past have resulted in obtaining the events or items |

| Motivating Operations | |
|---|---|
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**Examples: Unconditioned Motivating Operations and Deprivation**

- After being under water in a pool for more than a few seconds, the body becomes deprived of air (oxygen). The effect of oxygen deprivation is to establish air as a reinforcer. Likewise the effect of oxygen deprivation is to evoke behaviors that result in obtaining air, such as swimming to the surface.

- After not eating for several hours, food is likely established as a reinforcer. The person who is food deprived will be more likely to engage in behaviors that result in obtaining food, such as walking to the refrigerator, driving to a restaurant, or asking someone else for food.

- When one eats salty pretzels (causing water deprivation), drinking water becomes of value and will likely lead to engagement in any behavior that has produced water in the past.

## Videos: Unlearned Motivation

1. Oxygen deprivation
2. Salt
3. Water Satiation

## Conditioned Motivating Operation-Transitive (CMO-T)

When something is presented that makes something else valuable, it is called a transitive motivative operation (CMO-T). CMO-Ts are learned through experience.

| Conditioned Motivating Operation-Transitive | |
|---|---|
| The presentation of one stimulus makes another stimulus more valuable | |
| **Reinforcer Establishing Effect** | **Frequency Altering Effect** |
| Stimulus A makes Stimulus B more valuable | In the presence of stimulus A, behaviors associated with obtaining Stimulus B become more probable |
| **Example** | **Example** |
| Someone asks your to write you name (Stimulus A) makes a pen (Stimulus B) more valuable | Someone asks you to write your name (Stimulus A) evokes the behavior of asking for a pen (behavior associated with obtaining Stimulus B) |

Video of Bubbles in bottle with a lid too tight: Conditioned Motivating Operation-Transitive

## Examples of CMO-Ts include:

- A screwdriver to remove a flathead screw
- Being asked to sign your name makes a pen valuable
- Having a dollhouse with no toy furniture makes the furniture valuable

When the presentation of an event makes the removal of that event valuable, it is called a Conditioned Motivating Operation-Reflexive (CMO-R).
CMO-Rs are learned and are often thought of as warning signals.

| Conditioned Motivating Operation - Reflexive | |
|---|---|
| The presentation of one stimulus makes the removal of that stimulus valuable | |
| **Reinforcer Establishing Effect** | **Frequency Altering Effect** |
| Stimulus A makes its removal more valuable (a warning signal) | In the presence of stimulus A, behaviors associated with the removal Stimulus A become more probable |
| **Example** | **Example** |
| The presentation of a direction that is hard for the student leads to the value of getting away from the teacher or task. | When the direction is given, the student may attempt to move away or engage in other problem behaviors that will remove the demand. |

# Video of Conditioned Motivating Operation-Reflexive ("No work, no monkey")

## Examples of CMO-Rs include:

- Seeing a police car increases the value of slowing down
- The teacher's approach increases the value of getting a task out of the way
- Someone looking at you may make may also lead to escape as valuable

  The reinforcer in each case is getting rid of the warning signal

## So why do some children have trouble learning to ask for what they want?

- Many sorts of things can go wrong:
  - They may not be able to say the words
  - They may have learned to ask for things in ways that are not generally acceptable to others
  - They may have learned that it is easier to get what they want on their own
    - Asking others is too hard because it is not often successful
  - They may only ask when the motivation is strong
  - They may not have learned that other people answer requests
    - They won't look at or approach others

## Teaching How to Approach and Accept Things From Others

- Make it easy at first
- Have the teacher or adult control the reinforcers
- Teach the child that the adult is a source of good things
- Going to the adults is an opportunity
- The time to go to others when something is wanted!

But how can the adult teach a child to ask for what they want if the adult doesn't know what the child wants?

## Careful observation and a little planning!

- Observe approach behavior and gaze
- Control events that may be valuable to the child
- Let the child see that the preferred item or event is available
- Observe if the child approaches
- Contrive and capture

## Capturing an MO

- Teaching mands for food at snack or at lunch.
- Having the child ask for a coat before going out to play.
- Prompting the child to ask for additional colors of crayon while drawing
- Encouraging the child to ask for the remote at the time a favorite show is on.

## Contriving an MO

- Giving the child a bottle with a tight lid. In the bottle is his favorite toy.
- Giving the child a bowl of cereal with no spoon.
- Giving the child a toy that requires batteries but withholding the batteries
- Briefly turning on his or her favorite video.
- Giving a bit of his or her favorite snack to another child.
- Use of an interrupted chain procedure: give the child a task to do that involves a series of steps but withhold the materials needed to complete at least one step (have the child do a puzzle but withhold one piece).

## Videos
- Mike with student

## A word of caution

- Mand training can be easy, fun and gets quick results!

- Mand training is one of the most technical and complex things we do.

- Luckily, if you are new to basing your interventions on ABA/VB, you can get started and learn as you go.

## Mand Training in a Nutshell

- Identify strong motivators
- Select response form child will use to mand
- Pair staff with delivery of reinforcement
- Teach when motivation is strong (MO)
- Pair delivery of reinforcement with mand form (vocal word and sign)
- Prompt child to use mand form
- Fade prompts so the mand is spontaneous
- Teach appropriate sequence of mand forms
- Use data based decision making to adjust mand programming
- Avoid delivering reinforcement if problem behavior is occurring

## Identifying Reinforcers

- Try some things out!
- Remember that motivation changes over time
- Need to know what the individual wants at the moment

## Best Reinforcers to Use

- Controlled by the listener (teacher, parent, etc)
- Can be delivered quickly
- Can be delivered in small quantities
- Allow only a short amount of contact or are consumable
- Easy to say the name
- Are usually liked by the child

## Avoiding Habituation
(adapted from Francis McSweeney, 2006)

- Vary the number of reinforcers used within any one session.
- Vary the way the reinforcers are delivered including what you say during delivery.
- Vary the schedule of delivery. Do not allow the timing of delivery to be completely predictable.
- Stop delivery of reinforcement before it loses its value.
- Vary the type of reinforcer used, for instance do not always use food or always use activities; mix them up!
- Avoid using too much of a reinforcer at any one delivery, less can sometimes lead to wanting it more.

## How the child will ask for what they want? General issues and Pros and Cons

- The shape of the response
  - Vocal talking
  - Sign language
  - Writing
- The selection of what is wanted
  - Picture exchange systems
  - Many augmentative devices/Speech generating devices

| Topography Based Verbal Behavior | Selection Based Verbal Behavior |
|---|---|
| •Vocal<br>•Signing<br>•Written | •Picture exchange<br>•Touch talkers and other devices<br>•Communication board |

- Use assessments to help select response form

- If weak echoic, consider sign language. If weak motor skills or attempts to teach sign fail, try picture exchange or augmentative devices.

## Considerations: Sign Language as Response Form (Carbone, 2005)

- Obtain a sign manual or CD or take a signing course in ASL.
- Make sure that all people who interact regularly with the student are familiar with sign language
- Teach the first signs as mands
- Use teaching procedures that include the fading of physical and gestural prompts to teach signed mands.
- Insure that the student has many opportunities to use signs for mands.
- Data systems should be in place to count the frequency of signed mands and to record how many signed mands the student has acquired.
- Sign language training will need to be used in conjunction with echoic training and other procedures for teaching vocal responses.
- Signs will need to be taught across all the verbal operants.

## Physical prompting of signed mand responses and transfer procedures

- Use the least amount of physical contact that will be effective in having the child produce the motor movements for the sign
- When prompting pay careful attention to the students muscle movements
- Over-prompting a student can result in the student learning that they will get what they want if they allow someone to manipulate their hands
- Avoid physically prompting a student when they are in the process of reaching toward an item
- Fade physical prompts as soon as possible using a transfer trial following delivery of the reinforcer without prompts or a prompt fade transfer trial
- For some students, fading prompts too soon may result in a slower pace of mand acquisition

## Teaching the first few mands

- Start by teaching more than one mand
- Avoid generalized mands
- Don't teach wordy mands too soon
  - Polite is not always saying "Please"
- Observe motivation
- Prompt the right response
- Be sure to fade prompts

Teaching a vocal mand
Teaching a signed mand
(Mand video)

## A Note on Eye Contact

- We look at someone's face to monitor how they will respond as a listener
- Eye contact best taught through the mand
- Teach the mand first without requiring eye contact
- Then use a time delay between the mand and reinforcing
- The pause will serve as extinction and will lead to variability of response: looking at the listener's eyes!

(Carbone, et al., 2013)

## **Criteria for Selecting Prompts**

- Select the prompt that is sure to evoke the desired response
- Select the least intrusive prompt necessary to evoke the response
- Vocal: echoic prompts
- Sign: physical or imitative prompts
- Devices/Picture exchange: Physical or point prompts

# How to fade prompts: 2 methods

- Within trial Prompts
  - Pros and cons
  - Procedure
- Second trial prompts
  - Pros and cons
  - Procedure

# Mand Transfer Trials

- Video of mand transfer trials

# Within Trial Transfer Mand

- Check for Motivation
- Prompt mand
- Move Reinforcer closer and wait for student to re-emit mand
- When mand occurs, deliver reinforcer while modeling the response (say what is delivered.)

# Second Trial Mand Transfer

- Check for motivation
- Prompt mand and deliver reinforcer while modeling response form
- Represent same mand trial with no prompt
- When the mand occurs, deliver differential reinforcer (more or better) and model response form

# Shaping, Prompting and Fading Prompts Video

# Sometimes you can't fade prompts all at once!

- Partial prompt fading
- Transfer trials involve a partial prompt

## Types of Errors in Mand Frame

- Student emitting the wrong response form for a mand
- Scrolling: error pattern is one in which the child says words or uses signs that in the past have resulted in the delivery of reinforcers but are not the correct word for the particular item they want at the time

## Error Correction and Reducing Scrolled Responses

1. Make sure errors **do not** contact reinforcement:
2. Signal non-availability of reinforcement
3. Wait a few seconds
4. Re-present item with "0" second-delay prompt
5. When possible provide a transfer trial

- Mand Error Correction Video

Keep two kinds of data on mand training:
        1. mand acquisition
        2. mand frequency

• Mand Data Systems Video

**Mand Probe and Rate Sheet**

Learner: _____     Week of: _____

| ITEM | V=vocal S=sign | I=Item S=spont. | Prior #Y's | Check | M | T | W | TH | F |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Was there an MO?→ | No MO / MO | No MO / MO | No MO / MO | No MO / MO | No MO / MO |
| | | | | If MO, did the child emit correct mand response?→ | Y N | Y N | Y N | Y N | Y N |
| | | | | Was there an MO?→ | No MO / MO | No MO / MO | No MO / MO | No MO / MO | No MO / MO |
| | | | | If MO, did the child emit correct mand response?→ | Y N | Y N | Y N | Y N | Y N |
| | | | | Was there an MO?→ | No MO / MO | No MO / MO | No MO / MO | No MO / MO | No MO / MO |
| | | | | If MO, did the child emit correct mand response?→ | Y N | Y N | Y N | Y N | Y N |
| | | | | Was there an MO?→ | No MO / MO | No MO / MO | No MO / MO | No MO / MO | No MO / MO |
| | | | | If MO, did the child emit correct mand response?→ | Y N | Y N | Y N | Y N | Y N |
| | | | | Was there an MO?→ | No MO / MO | No MO / MO | No MO / MO | No MO / MO | No MO / MO |
| | | | | If MO, did the child emit correct mand response?→ | Y N | Y N | Y N | Y N | Y N |

| Date | Total Manding Time/Session | Mands Prompted | Mands Unprompted | Mands Spontaneous | Mands/min | | |
|---|---|---|---|---|---|---|---|
| | | | | | Prompted | Unprompted | Spontaneous |
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Cold probe mand trials always involve a check for motivation.

The probe involves two steps.
  1. First probe for motivation
  2. then probe for response.

MO/NO MO
Yes/No

## Mand Training Guidelines:

- Have a variety of reinforcers available across categories (toys, edibles, actions) that include:
  1. **Items you are targeting** (prompt/fade throughout session)
  2. **Mastered items** (no prompting, error correction if necessary)
  3. **Future targets:** Items that are valuable but not yet mastered or targeted (no prompting, just deliver and say the name of the item)
  4. **Novel items:** Expose student to novel items and activities that may acquire reinforcing value and serve as future targets
- Make sure you run enough easy trials (mastered mands or free delivery)

## Some Important Reminders

- Teach mands for items present until a large set of mand skills is developed (broaden first!)
- Don't expand to multiple word utterances too soon!
  - Problems with carrier phrases
  - Use of pivot mands at right time
- Keep an eye out for unexpected mands
  - Observe carefully!

## Another important reminder!

- Once children learn to mand they sometimes mand too much!
  - Teach "gives up reinforcers"
  - Teach "accepts no"
  - Monitor not only if the child mands but *how they mand*! (you may need to error correct if inappropriate tone is used)
  - Intersperse other types of trials or activities when teaching the mand

Remember mand training does not end with teaching the child to ask for things that are immediately present or offered. Some other mand skill programs:

> mands under control of MO
> mands for actions
> mands for attention
> peer to peer mands
> yes/no mands
> mands for information

## Peer To Peer Manding

- For children with autism, peer relations will often fail to develop unless specifically taught.
- If peers become sources of reinforcement to one another, such relations may be more readily established.

# Peer To Peer Manding

- Other children need to be established as sources of reinforcement
- Peers need to be taught to deliver reinforcers
- Select reinforcers and peers carefully
  - Reinforcers valuable to one student, not to the other
- Use promise reinforcer for peer who is to deliver
- Adults must prompt use subtle prompts so as not to replace peer as source of reinforcement
- Otherwise procedures are not much different than child to adult mand training

## MO Variables and Mands for Information

- MO must be for verbal response (Involves CMO-T)
- Avoid having item or activity reinforce the mand
- Correlate type of question with MO conditions (i.e., where with info about location)

# Mands for Information Protocol

- "A question is a mand which specifies verbal action". (Skinner, 1957)
- Student will request information using what, where, who, whose, which, when, why, how, can, does, and will questions.
- Student will need to have a well established repertoire of tacts as well as following a variety of instructions related to people, places, adjectives, prepositions, and pronouns.
- Do NOT teach until spontaneous mand repertoire well established

| What is already reinforcing to student? (TERMINAL REINFORCER) | What do I need to do to establish something else as a reinforcer? (CMO-T) | What now is established as a reinforcer? | What response do I need to deliver as a prompt? (TARGET MAND) | What response is delivered as a reinforcer? | Was the response prompted or unprompted? (U or P) |
|---|---|---|---|---|---|
| Example: Drinking from juice box | Remove straw and hide it under the table. If he mands for the missing item say, "I don't have it but I know where it is" | The location of the straw | Say, "Where is it?" or "Where's Straw?" | "It's under the table" | P |
| | | | | | |
| | | | | | |
| | | | | | |

## So when do you teach mands?

- Mand sessions if needed
- Build large repertoire of mands!
- Through out day
  - Set up opportunities!
  - Catch naturally occurring opportunities

## Mands in Natural Circumstances

- Mands during various activities
  - Snack/dressing/play or game activities
  - Mands for missing items during academic tacts
  - Mands for specific programs/videos/apps on computers or other devices

- Teach mands in the situation where they will be needed
  - Monitor through probes

## Interrupted Chain

- For teaching mands related to task completion or job performance
  - Teach only when student has acquired sizeable tact and mand repertoire and mands for missing items
  - Teach task completion/job completion
  - Teach tacts of all steps and materials
  - Set up a missing step needed to complete chain
  - Prompt mand as necessary
  - Vary step taught as mand

## Interrupted Chain/Mand for Missing Items Video

# Mand Treatment Integrity

- Establishing treatment fidelity important for any intervention
- Providing performance based feedback to instructors will allow more accurate data based decisions

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Mand Training
Treatment Integrity Checklist
Student: _____    Time Start: _____   Response Form: sign  vocal  selection
Instructor: _____    Time Finish: ____    Total duration: _____

| Mand: List Item | Non-Mand trial or other demand | | Check for MO? | No MO? | Pair ? | Model sign/ vocal? | Time delay ? | Pro mpt? | Emit mand ? | Item not Delivered ? | praise ? | Spon Mand? | Diff. Sr+ of vocal (circle if trial results in acceptable mand; X if it does not result in acceptable mand) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | +    - | | | | | | | | Y N | | | I Pu | 1 2 3 |
| | +    - | | | | | | | | Y N | | | I Pu | 1 2 3 |
| | +    - | | | | | | | | Y N | | | I Pu | 1 2 3 |
| | +    - | | | | | | | | Y N | | | I Pu | 1 2 3 |
| | +    - | | | | | | | | Y N | | | I Pu | 1 2 3 |

## Vocal Manding Checklist

Staff:_____   Student:_____   Observer:_____   Date:_____

### Section 1: Setting

_____Area is sanitized
_____Materials needed are organized and ready
_____Variety of reinforcers are available

### Section 2: Manding Procedure

_____Staff has selected appropriate response form (vocal, sign, etc.)
_____Staff establishes MO for item
_____Staff presents echoic prompt
_____Staff attempts to get independent mand (transfer trial)
_____Staff delivers item immediately
_____Staff fades prompts as quickly as possible
_____Staff attempts to fade to MO
_____Staff DOES NOT use questions as prompts, such as "What do you want?"
_____Staff provides adequate number of teaching trials (approximately 2-3 per minute)
_____Staff consistently utilizes procedures across a variety of motivational categories
_____Staff uses appropriate error correction procedures

### Section 3: Initial Mands

_____Initial mands have dissimilar topographies (do not sound the same)
_____Initial mands are specific, not general (ex. "more")
_____Initial mands are from several different categories (ex. A food, toy, activity, etc.)
_____Initial mands are not for removing an aversive
_____Initial mands do not require politeness (ex. "please")
_____Initial mands are strong reinforcers
_____Initial mands are easy to deliver in small quantities
_____Initial mands should be items that can be offered frequently
_____Initial mands are developmentally appropriate in relation to mean length utterance (MLU)

### Section 4: Data Collection

_____Frequency of mands is collected daily
_____Frequency of mands is graphed at the end of each day

**Rating:**   1= Yes/Consistently   2= Sometimes/Inconsistent   3= No/Not Occurring   4= N/A Not Applicable

**Timing:**

| | Rate of Manding: 3 Minutes | | | |
|---|---|---|---|---|
| | Staff #1 | | Staff #2 | |
| | Prompted | Spontaneous | Prompted | Spontaneous |
| Student #1 | | | | |
| Student #2 | | | | |
| Student #3 | | | | |

(Adapted from Dr. Vince Carbone)

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## Sign Language Manding Checklist

Staff:_____   Observer:_____   Date_____

### Section 1: Setting

_____Area is sanitized
_____Materials needed are organized and ready
_____Variety of reinforcers are available

### Section 2: Manding Procedures

_____Staff has selected appropriate response form (vocal, sign, etc.)
_____Staff establishes MO for item
_____If item is not a targeted mand, staff does stimulus/stimulus pairing
_____If item is new target, staff uses 3-step teaching procedure:
    _____Staff signs and says name of item
    _____Staff prompts student to sign and says name of item
    _____Staff delivers item and says name of item
_____Least prompt needed to prevent error is used
_____Staff has correct number of open targets
_____Staff fades prompts as quickly as possible
_____Staff delivers item immediately
_____Staff attempts to fade to MO
_____Staff DOES NOT use questions as prompts, such as "What do you want?"
_____Staff provides adequate number of teaching trials (approximately 2-3 per minute)
_____Staff consistently utilizes procedures across a variety of motivational categories
_____Staff uses appropriate scrolling/error correction procedure
_____Any vocalizations are differentially reinforced

### Section 3: Initial Mands

_____Initial mands have dissimilar topographies (do not look the same)
_____Initial mands are specific, not general (ex. "more")
_____Initial mands are from several different categories (ex. A food, toy, activity, etc.)
_____Initial mands are not for removing an aversive
_____Initial mands do not require politeness (ex. "please")
_____Initial mands are strong reinforcers
_____Initial mands are easy to deliver in small quantities
_____Initial mands should be items that can be offered frequently

### Section 4: Scrolling Procedure

_____Staff prevents scrolling from occurring (errorless teaching)
_____Staff blocks error and prompts students' hands into neutral position
_____Staff physically prompts correct sign and delivers item

### Section 5: Data Collection

_____Frequency of mands is collected throughout the day
_____Sign mand shaping first/last probe data sheet is used daily
_____Frequency of mands is graphed at the end of each day
_____Sign mand shaping first/last probes are graphed at the end of each day

**Rating:**   1= Yes/Consistently   2= Sometimes/Inconsistent   3= No/Not Occurring   4= N/A Not Applicable

**Timing:**

| | Rate of Manding: 3 Minutes | | | |
|---|---|---|---|---|
| | Staff #1 | | Staff #2 | |
| | Prompted | Spontaneous | Prompted | Spontaneous |
| Student #1 | | | | |
| Student #2 | | | | |
| Student #3 | | | | |

(Adapted from Dr. Vince Carbone)

| Mand Training | | |
|---|---|---|
| 28. Form selection procedures (vocal, selection-based, sign) *Evidence that staff have made decisions regarding communication response form based on observation and/or data: use of ABLLS, VB-MAPP or BLAF is sufficient. Also acceptable is data showing lack of response to other response forms. Score this item yes in the case wherein all students appropriately use vocal response forms. Score no if teacher can not explain selection of response form, based on assessment and data.* | | |
| 29. Density of opportunity *(lots of opportunity, not just during snack: an average of at least one mand within two five minute periods for two students. Criteria must be met for all students with mand programs including advanced mand programs.* | | |
| 30. MO manipulation *(capturing and contriving MO )Evidence that staff is attending to student's motivation by checking for/capturing motivation when strong (staff ensures student demonstrates motivation such as reaching for or looking at the item) as well as contriving motivation (when MO not present)* | | |
| 31. Shaping *Evidence that staff are actively and systematically shaping new mands for most students in the class; including, when appropriate, evidence of advanced mand training* | | |
| 32. Mand prompt system *Evidence that staff have in place and use procedures to fade prompts used to evoke mands; observing several instances of mand prompt fading during instruction is sufficient; data documenting such processes can also be used to score this item* | | |
| 33. Staff provides mand discrimination opportunities by varying reinforcers used in mand training. *For early learners must include minimum of two active items in session. Mand target selection for students will include multiple types of reinforcers (i.e. food, play items, physical activities, etc).* | | |

## Remember

- Mand training is central to communication skill acquisition
- Mand training can address core deficits of autism
- Mand training is tied to natural events and training functional skills
- It can reduce problem behavior!
- Mand training can be fun…

Thank you for your attention!

## The End of the Presentation

# Questions?

## Contact Information     www.pattan.net

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