VERBAL BEHAVIOR

Colleen D. Cornwall, M5, BCBA
Board Certified Behavior Analyst

What is Applied Behavior Analysis?

- In 1938, Skinner published *The Behavior Of Organisms*, which described operant conditioning, or the process by which learning occurs as the result of selection by consequences of behavior. Skinner also discussed how antecedent stimuli, when correlated with the function altering effects of consequences, also alter future occurrences of that behavior.
- This is known as a three-term contingency (A-B-C) – Antecedent – Behavior - Consequence – the basic unit of analysis of behavior, and was the first description of the discrete trial.
- In addition to describing the instructional trial, Skinner detailed the basic experimental methodology that led to his findings, which he termed the experimental analysis of behavior (EAB). Later applications of this science to education, and to other matters of socially significant behavior, by behavior analysts led to what is now known as Applied Behavior Analysis (ABA).

Where did verbal behavior come from?

- In 1957, as applied behavior analysis was developing, Skinner published *Verbal Behavior*, which detailed a functional analysis of verbal behavior. What Skinner’s text did was to extend operant conditioning to verbal behavior in order to fully account for the range of human behavior. The Verbal Behavior body of research serves as the basic and applied foundation of teaching VB as part of an ABA program, or what is now sometimes referred to as the Analysis of Verbal Behavior (AVB).

So What Is It?

- In *Verbal Behavior*, Skinner outlined his analysis of VB, which describes a group of verbal operants, or functional units of language. Skinner explained that language could be analyzed into a set of functional units, with each type of operant serving a different function.
- He coined terms that didn’t exist (to separate these operants from anything described by traditional linguistics) for these operants. AVB is ABA with a focus on Skinner’s analysis of verbal behavior; it is the application of the science of behavior analysis to teaching verbal behavior.

Skinner’s Analysis of Verbal Behavior

- A word is not analyzed as a word
- The unit of analysis and of teaching is the OPERANT (rather than the word)
- When language is significantly delayed, OPERANTS, rather than words are functional units in the behavior of the individual speaker and listener

Verbal Behavior

- **Verbal Operants** (Speaker Behavior)
  - Echoic
  - Motor Imitation
  - Mand
  - Tact, TFFC, T-FFC
  - Intraverbal
  - Autoclitic (Syntax)
  - Textual (Reading)

- **Non-Verbal Operants** (Listener Behavior)
  - Receptive
  - RFFC (Receptive given feature, function or class)
  - Match to Sample
THE VERBAL OPERANTS

THE MAND
“The Reason We Bother to Talk at All”

- Skinner says MAND; root word derived from “command, demand, reprimand”
- We say REQUEST; what the learner wants at the moment he wants it

HOW BEHAVIOR HAPPENS

Motivational Operations
After the value and frequency of some behaviors in two ways...

- ESTABLISHES the value of the reinforcer
- ABOLISHES the value of the reinforcer
- EVOKE the behavior
- ABATES the behavior

Motivational Operations

- Momentarily increases the value of some reinforcer
  AND
- Increases the likelihood that all behavior which has produced the reinforcer in the past will occur

Understanding MO’s

- Water Deprivation (Reinforcer?)
  - ESTABLISH OR ABOLISH?
  - EVOKE OR ABATE?
- Return to comfortable environment after being too cold (Reinforcer?)
  - ESTABLISH OR ABOLISH?
  - EVOKE OR ABATE?
Independent Variables Related to the MO

- Quality of Reinforcer
  - Hungry - not any food will do
- Magnitude of the Reinforcer
  - Amount (dose) will influence effectiveness
- Immediacy of Reinforcer
  - Immediate versus delayed
- Response Effort
  - Require great deal, lowers effectiveness of reinforcers

THE MAND

- A verbal behavior in which the form of the response is controlled by the motivational or aversive condition which determined the behavior
- While MANDS can be contrived by trainers, they are never controlled by trainers

MAND

- A verbal behavior in which the form of the response is controlled by the motivational or aversive condition which determined the behavior
  - Occur when learner’s motivation are strong
  - Occur under a state of deprivation
  - Usually first form of VB to be acquired because it may produce immediate and specific reinforcement requested
  - Most maladaptive behaviors are dysfunctional mands

MANDS

- The TRAINER withholds a preferred ball for a while, or shows the ball and removes it, or, as the learner reaches for the ball, prevents the learner from obtaining the ball (MO)
- The LEARNER says or signs <ball> or <red ball> (R)
- The TRAINER provides a ball or a red ball (SR)

The MAND

- The MAND is the ONLY operant that is controlled by the learner’s motivation rather than by the trainer.
- The MAND is the heart of compliance and “teachability”

Teaching Example: Missing MO
After Repeated Correlations

Teacher Demands & Instructional Materials

WARNING STIMULUS

Establish removal of Teacher Demands & Instructional Materials

Evoked behavior that Removed teacher Demands and Instructional Materials

Problem Behavior

Teacher Demands & Instructional Materials

Evoked cooperative behavior that produce teacher Mediated positive Reinforcement

Teacher is paired with SR+

For Target Responses: Higher value of SR+ Higher Rate of SR+ Greater Magnitude of SR+ More Immediate SR+ Less Effortful Response

Abolishing the Desire to Escape

Control the Independent Variables that Influence the Effectiveness of the Reinforcer

USE TEACHING PROCEDURES THAT ENSURE Teacher is paired with SR+ For Target Responses: Higher value of SR+ Higher Rate of SR+ Greater Magnitude of SR+ More Immediate SR+ Less Effortful Response

MAND ACTIVITY

Activity 1: Generate a list of known reinforcers

Activity 2: Using an item on the table, generate a "plan" for creating motivation in your learner

Using an educational material, generate a "plan" for creating motivation in your learner

DUPLICS

Echoic and Motor (Mimetic) Imitation

Verbal behavior whose form is controlled by someone else's behavior with 1-1 correspondence

Shaped by parents; useful to parents

Typical adults use echoic repertoire to make their VB more effective

Can usually be developed in learners with developmental delays, but do not transfer to other, more useful situations and rarely occur spontaneously (functionally)

DUPLICS- ECHOIC

The TRAINER says "say <ball>" or "ball" or "red ball" (SD)

The LEARNER says "ball" or "red ball" (R)

The TRAINER provides praise (SR)

ECHOIC ACTIVITY

Using an item on the table, contrive a mand situation with a partner

When your partner indicates a desire (or when one is created) prompt the request (MAND) using an echoic prompt

Practice fading the echoic prompt using the TRANSFER TRIAL procedure demonstrated
DUPLICATE-MIMETIC
Motor Imitation
- The TRAINER says "do this" and touches her/his nose (SD)
- The LEARNER touches her/his nose (R)
- The TRAINER provides praise (SR)

MOTOR IMITATION ACTIVITY
- Using an item on the table, contrive a mand situation with a partner
- When your partner indicates a desire (or when one is created) prompt the request (MAND) using a motor imitation prompt
- Practice fading the motor imitation prompt using the TRANSFER TRIAL procedure demonstrated

But My Learner Didn't Cooperate
- And sometimes, they won't...
- Shaping a motor response using
  1.) Physical prompting
  2.) Prompt Fade Procedure
  3.) Differential Reinforcement

Physical Prompt - Fade - Diff. SR+
Activity
- Physically prompt
- Fade from the back of the sign
- Several opportunities to practice
- Use Differential Reinforcement with each trial
- Use TRANSFER TRIAL procedure

TACT
"ContACT" with the Environment
- A verbal behavior under the control of the non-verbal environment which includes nouns, adjectives, pronouns, etc.
- Strengthened by social reinforcement
- Persons who are not susceptible to social reinforcement do not readily acquire tacts during initial language training
- Myth: Once a learner can follow commands to touch or obtain items and can tact items, they then posses the “meaning” of the word and should ask for or talk about the item
- Many teachers believe that the inability to ask for things or talk about them once they can be tacted is an indication of the depth of the learner’s disability
- It is the teacher who has failed to make the associations, not the learner
- Every new tact does not have to be taught directly due to the process of tact extension; identify all books contingent after having been taught to tact a few books
**TACT**
A Label or Description

- The TRAINER points to a ball (or a picture of the same and says or signs “What’s this?” (or “What do you see?”) (SD)
- The LEARNER says or signs “ball” or “a red ball” or “my red ball” or “a red ball rolling down the hill” (R)
- The TRAINER provides praise (SR)

**TACT ACTIVITY**

- Practice Tact Trials Using Materials on your table
  - What is this?
  - What do you see?
  - What am I holding?
  - What do I have?
  - Look, it’s a________

  Hint: How will you prompt the learner if she does not respond to your cue?
  If you have to prompt, what will you do next?

**TFFC**
Tact GIVEN Feature, Function or Class

- The TRAINER points to a ball (or a picture of a ball) and says or signs “What can you bounce” or “Name something you bounce” or “You bounce a _______” (SD)
- The LEARNER says/signs “ball” or “a red ball” or “my red ball” (R)
- The TRAINER provides praise (SR)

**T-FFC**
Tact THE Feature, Function or Class

- The TRAINER bounces a ball (or points to someone bouncing a ball) and says or signs “What can you do with a ball?” or “Name something you can do with a ball” or “When you have a ball, you can _____” (SD)
- The LEARNER says or signs “bounce” (R)
- The TRAINER provides praise (SR)

**FFC Activity #1**

- Select five items on your table
- For each, generate a list of features, function(s) and class...

**FFC Activity #2**

- TFFC
  - Using the FFC’s generated in activity #1, script some cues you will use to evoke the tacting response
  - Practice these cues using the materials with a partner at your table
FFC Activity #3

★ T-FFC
- Using the FFC's generated in activity #1, script some cues you will use to evoke the tacting of the FFC response
- Practice these cues using the materials with a partner at your table

The INTRAVERBAL
★ A verbal behavior under the control of other verbal behavior that is strengthened by social reinforcement
★ No 1-1 Correspondence
★ Talk about items even when they are not there (when you do NOT have contact with them)
★ The intraverbal repertoires must be taught directly

INTRAVERBAL
Fill-in-the-Blank, Answer to a Question, Response to a Statement
★ The TRAINER says “you can bounce a ______ or “What can you bounce” or “Something you bounce is a ______” (SD)
★ The LEARNER says or signs “ball” or “my red ball” (R)
★ The TRAINER provides praise (SR)

The AUTOCLITIC
Talking About What You Are Saying, Syntax
★ The TRAINER is playing with a ball
★ The LEARNER says or signs “I really want the ball” or “Ball, please” (R)
★ The TRAINER provides the ball (SR)

The AUTOCLITIC
★ The TRAINER asks “Where’s your ball?”
★ The LEARNER says or signs, “I think it is under the couch” (R)
★ The TRAINER provides praise (SR)

The AUTOCLITIC
★ The TRAINER asks “What did you play with?”
★ The LEARNER says or signs “I played with my ball” (R)
★ The TRAINER provides praise (SR)
The NON-VERBAL Operants

TEXTUAL (Reading)
- The TRAINER looks at the printed word "ball"
- The LEARNER says or signs "ball" (R)
- The TRAINER provides praise (SR)

RECEPTIVE
Demonstrating association between word and item
- The TRAINER places a ball, a cup and a toy car (or pictures of the same) close to the learner and says or signs "point to" (or "touch" or "find" or "show me" or "where's") "the ball" (SD)
- The LEARNER points to the ball (R)
- The TRAINER provides praise (SR)

RECEPTIVE ACTIVITY
- Using Materials on the table, practice a receptive session with a partner at your table
  - Get the
  - Touch the
  - Find the
  - Point to the

RFFC
Receptive by Feature, Function or Class
- The TRAINER places a ball, a cup and a brush (or pictures of the same) close to the learner and says or signs "point to" (or "touch" or "find" or "show me" or "where's") "the one you throw" (or "the one that's round" or "the one you put in a toy chest") (SD)
- The LEARNER points to the ball (R)
- The TRAINER provides praise (SR)

RFFC Activity
- Using the materials on your table and the list you generated earlier (FFC), conduct a training session of RFFC's CUES:
  - Find the one that...
  - Get the one that...
  - Point to the thing that...
MATCH-TO-SAMPLE

- The TRAINER places a ball close to the learner and a ball and a cup just behind the first ball (or pictures of the same) and says (or says and signs) “find the same one” (SD)
- The LEARNER brings the balls together (R)
- The TRAINER provides praise (SR)

THE OPERANTS

REVIEW

VERBAL OPERANTS

- Trainer says “Say X”
- Learner says “X”
- Trainer provides praise

What is the importance of this operant? In what other operants is it used?

VERBAL OPERANTS

- Trainer points to an item and asks the learner to name the item or some characteristic of the item with a vocal response, sign, picture or other augmented communication
- This is an example of the __ operant
- In this operant, the learner must have __________ with the item
- Learner can name the item, or a __________ or __________ of the item.

VERBAL OPERANTS

- The trainer provides a fill-in statement or a question
- The learner fills in the statement with a related word(s) or answers the question
- The trainer provides praise

VERBAL OPERANTS

- Learner desires an item or activity
- Learner says, signs or uses augmentative communication to request the item
- Trainer provides the item or activity
- What is the importance of this operant?
VERBAL OPERANTS

- The learner looks at a printed word
- The learner says or signs the word
- The teacher provides praise

VERBAL OPERANTS

- The learner talks about what she is saying by emphasizing a request, talking about events in different tenses

NON-VERBAL OPERANTS

- Trainer places items in the environment
- Trainer asks learner to touch or point to or show the item
- Learner points to or hands the item to the trainer
- Trainer provides praise

NON-VERBAL OPERANTS

- Trainer presents items and asks the learner to bring two like objects together
- Learner brings two like objects together
- Trainer provides praise

VERBAL OPERANTS

- Trainer says “do this” and touches his nose
- Learner touches his/her nose
- Trainer provides praise

This is an example of the _____ operant

Now that you know the operants

- Utilize the materials at your table to develop VB lessons on the form provided
- List targets/cues under each of the specified operant areas
- Yellow Paper - Early Learner
- Blue Paper - Intermediate Learner
- Complete 4 lesson plans at your table
  - 2 Early Learner, 2 Intermediate Learner
Put It Into Practice...
- In your group, utilize your lesson plans to practice VB teaching sessions
- Each member should practice being both the teacher and the learner
- Remember to include MANDS into your sessions

Errorless Teaching
- \[\text{CUE} + \text{PROMPT} = \text{BX} = \text{SR}+\]
- \[\text{CUE} + \text{PRoMpt} = \text{BX} = \text{SR}+\]
- \[\text{CUE} + \text{Prompt} = \text{BX} = \text{SR}+\]
- \[\text{CUE} = \text{BX} = \text{SR}+\]

Errorless Activity
- Utilizing Known Items at your table and the hieroglyphics cards, conduct a training session.
- Focus On:
  - Using Appropriate Prompts
  - Fading Prompts
  - Transfer Trial from Prompted to Unprompted
  - Using Differential Reinforcement

Transfer Procedures

Echoic to Mand Transfer Procedure
- Motivation: smiles when presented, looks toward, reaches for or points to the item or event
- PROMPTS
- 1. Show the item (tact) and say the word (ech)... says the word or approximation... the item or event
- 2. Show the item (tact)... says the word or approximation... the item or event
- 3. Wait (I)... says the word or approximation... the item or event
- With each presentation of the consequence, also say the word

Motor Imitation to Mand Transfer Procedure
- MOTIVATION: Smiles when presented, looks toward, reaches for or points to the item or event
- PROMPTS
- 1. Show the item (tact)
- 2. Demonstrate the sign (G)
- 3. Provide full physical prompt...exhibits the sign or an approximation... the item or event
- 4. Provide Partial Physical (P)...exhibits the sign or an approximation... the item or event
Motor Imitation to Mand Transfer Procedure

<table>
<thead>
<tr>
<th>PROMPTS</th>
<th>RESPONSE (R)</th>
<th>CONSEQUENCE (SR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Show the item (tact)</td>
<td>Demonstrate the sign (G) exhibits the sign or approximation...the item or event</td>
<td></td>
</tr>
<tr>
<td>4. Show the item (tact)</td>
<td>...exhibits the sign or approximation...the item or event</td>
<td></td>
</tr>
<tr>
<td>5. Wait (I)</td>
<td>...exhibits the sign or approximation...the item or event</td>
<td></td>
</tr>
</tbody>
</table>

With each presentation of the consequence, also say the word.

TRANSFERRING MANDS TO TACTS

Two Ways:

1. At a time when the learner is requesting (manding) for a desired item, and has gained it a few times previously, rather than cueing with a "What do you want?" or a positional prompt, ask the learner, "What is this?" or (what do you see here, what do I have in my hand, etc.) Learner responds, praise and then present an opportunity to mand. Quickly separate the mand from the tact trial in time, permitting them to stand alone.

TRANSFERRING MANDS TO TACTS

#2: At a time when the learner's motivation is low to request a previously desired object (a mastered mand), present a tact.

- Learner likes cookie, but is not hungry
- Trainer asks, "What do you see here?" (may echoically prompt response)
- Learner responds, "A cookie."
- Trainer says, "That's right, it's a cookie. It's is crunchy and it has chocolate chips."
- Trainer "comes back around" in a few trials and represents the tact trial.

TACT or TFFC to INTRAVERBAL

- Trainer presents a trial for a mastered tact (label). e.g., "What do you see here?" student responds "It's a truck."
- Trainer presents either an intraverbal fill-in, (e.g., the vehicle your dad drives is ________)"
- Learner responds "a truck."
- Consider prompting the echoic first

TACT to Wh Question

- Trainer- points to card and asks, "What is that?"
- Learner responds, "It's a truck."
- Trainer asks, "What does your dad drive?" and points to the truck.
- Learner responds, "A truck."
- Trainer continues with interspersed trials, including the wh question. Once the learner is exhibiting the response to the wh question without hesitation, trainer turns the card over. (Begin fading from a tact to an intraverbal). continues process until point prompt and tact prompt (the card) are gone from the environment completely and the learner is responding without hesitation.

"BRIDGE" from RFFC to Intraverbal

- Trainer selects a target that was previously taught as a tact. Generates 2 features, 2 functions and 1 class.
- During interspersed trials, trainer uses errorless teaching procedures to teach each feature, function and class.
- Tact cue to an intraverbal cue, fade the tact (card or object) by topography
- Trainer continues presenting mixed trials, separating the target's tact response and intraverbal response until they stand alone.
Additional Transfer Procedures

- Tact to Mand: For those items one does not generally mand for (e.g., paintbrush)...teach tact, contrive situation that will increase the learner's motivation to request a paintbrush
- Tact to Textual: Sight Vocabulary

Echoic to Mand Transfer

- Learner indicates desire for item or event
- Trainer says “say <Elmo>”
- Learner says “Elmo”
- Trainer says “Elmo”
- Trainer provides Elmo to learner
- Fade vocal prompts first, then the item (tact prompt)

Motor Imitation to Mand Transfer

- Learner demonstrates desire for an item/activity
- Trainer provides motor imitation trial that corresponds to the sign of the item/activity
- Learner imitates trainers motor movement
- Trainer provides learner with item/activity
- Remove physical and gestural prompts first

Describe the Echoic to Mand Transfer

Describe the Motor Imitation to Mand Transfer

Describe how to transfer mands to tacts
Transfer a Mand to a Tact

- At the time the learner is manding for an item, present a tact cue (e.g., What is this, What am I holding, etc.)
- The learner will say or sign the item
- The trainer will immediately ask “What do you want?”
- The learner mands for the item
- The trainer provides the item/activity

Transfer a Mand to a Tact

- At a time when the learner’s motivation is low to request a previously desired object (a mastered mand), present a tact.
  - Learner likes cookie, but is not hungry
  - Trainer asks, “What do you see here?” (may echoically prompt response)
  - Learner responds, “A cookie.”
  - Trainer says, “That’s right, it’s a cookie. It’s crunchy and it has chocolate chips.”
  - Trainer “comes back around” in a few trials and represents the tact trial.

Describe how to transfer a mastered tact to an intraverbal

Transferring a Tact to an Intraverbal

- Once a tact is mastered either as a straight TACT, a TFFC or T-FFC, the trainer immediately presents an intraverbal cue
  - Fill in
  - Question
  - Targeting the same response

Additional Recommended Teaching Procedures

Additional Teaching Procedures

- Motivational Operations
  - Noncontingent Reinforcement: “Freebies”
  - Stimulus Fading-In (fade in more effortful response requirements)
- Provide Frequent Opportunities to Mand
  - Begin with manding alone and gradually fade in non-mands
Additional Teaching Procedures

Interspersed Tasks
Mix in types of tasks (operants) and level of difficulty of tasks

Varied Cues
From the beginning of instruction, vary your cues:
- Selection: find, touch, point to
- Multiple Prompts
Do not use the same prompt each time you present the cue

Additional Teaching Procedures

Rapid Prompt Fading
Fade prompts as quickly as possible, provide prompts with the goal of fading them systematically upon the next presentation of the skill.

Differential Reinforcement
Provide higher value praise/reinforcement for better responses.

CRF Thinned to VR
Initially, reinforce every response, gradually fade to lesser and lesser reinforcement (aim for a VR schedule that allows for presentation of several skills without losing the learner’s motivation to remain with you in the instructional setting)

Additional Teaching Procedures

Balance intensive and natural environment teaching
Early learners generally require more natural environment teaching than intensive teaching.

Errorless Teaching, Rapid Pace
Provide the cue with all necessary prompts to gain correct responding, fade as soon as possible.
Provide several cues in a short period of time.

Additional Teaching Procedures

Probe Data Collection
Do not record every response; on the first trial of the day, provide the cue without any prompts, indicate on the data sheet either the prompt necessary to gain correct responding or if the response occurred or did not occur.

Teaching to Fluency
Percent correct is not enough; responding must occur immediately when given the cue.

WHERE DO I START?

- Assess your learner using the Behavioral Language Assessment.

Basic Language Assessment

BLA
- Purpose of the BLA is to provide enough information to design an individualized language intervention for a specific child.
- Designed to reflect the average performance of typical 2-3 year old children most of which would receive a score of 5 on each of the areas (12).
- Areas include: cooperation, requesting, motor im., vocal play, vocal im., match to sample, receptive, labeling, receptive by FFC, conversation, letters & numbers, and social interaction.
ABLLS - walkthrough

**Behavioral Language Assessment Questions (first 3 sections)**

For the following questions, indicate the level of performance that best describes the learner's typical level of performance.

1. **COOPERATION WITH ADULTS**
   - How easy is it to work with the child?
   1. Always uncooperative, avoids work, engages in negative behavior
   2. Will do only one brief and easy response for a powerful reinforcer
   3. Will give 5 responses without disruptive behavior
   4. Will work for 5 minutes without disruptive behavior
   5. Works well for 10 minutes at a table without disruptive behavior

2. **REQUESTS (Mands)**
   - How does the learner let his needs and wants be known?
   1. Cannot ask for reinforcers; or engages in negative behavior
   2. Pulls people, points, or stands by reinforcing items
   3. Uses 1-5 words, signs, or pictures to ask for reinforcers
   4. Uses 5-10 words, signs or pictures to ask for reinforcers
   5. Frequently requests using 10 or more words, signs, or pictures

3. **MOTOR IMITATION**
   - Does the learner copy actions?
   1. Cannot imitate anybody's motor movements
   2. Imitates a few gross motor movements modeled by others
   3. Imitates several gross motor movements on request
   4. Imitates several fine and gross motor movements on request
   5. Easily imitates any fine or gross movements, often spontaneously

**ABLLS**

The Assessment of Basic Language and Learning Skills

- An assessment, curriculum guide and skills tracking system for children with autism or other developmental disabilities covering all areas
- The purpose of the ABLLS is to help identify those language and other critical skills that are in need of intervention in order for a child to become more capable of learning from his/her everyday experiences

**What it is**
- Criterion-referenced skills assessment
- Sequential for the most part
- Informal assessment
- Skill identifier
- Skill tracker
- Curriculum guide
- Typical skills for children ages 2 - 6.5

**What it is not**
- Formal assessment
- Designed to provide age norms
- Standardized
- Exhaustive list of skills

**Information to complete the ABLLS**

- The majority of the information will come from parents, educators, and others who REGULARLY interact with the child
- Direct observation of the child in particular situations
- Formal presentation of tasks to the child
- The ABLLS is designed to track data 4 separate times (example: spring 04, fall 04, spring 05, fall 05)
ABLLS - walkthrough

Developing the Program

- Using the results from the BLA/ABLLS, select objectives, targets and cues (see manual)
- Develop Program CUE CARDS to assist with instruction
- Select Data Sheets to ensure effective implementation and program evaluation

Mission Statement

Our mission is to promote communication skills and independence to a functional level by using strategies consistently among staff.

Effective Procedure Reminders
Effective Procedure Reminders

Mand - Requesting/asking for something. A pure mand occurs purely as a result of the person's desire to have the item rather than having to be asked. "What do you want?" Examples: Can I have a cookie? Where's mommy?

Fact - Labeling/naming an item, action or property of an item that is present or something with which the individual comes into contact. Uses hands and/or senses. Examples: "What's this called?" (Child names item) "How does the dog feel?" (Child says soft). "Which one says choo choo?" (Child says train) "What do you see?" (Child says a bird flying in the sky)

Receptive - Following directions or complying with requests of others. Examples: Find Cookie Monster. (Child touches) "Please put your plate in the trash." (Child complies). Find the one that says Choo Choo? (Child touches train)

FFCs - These letters refer to "Features, Functions, and Classes." Create a child's life task for identity and label them in their environment. FFCs are taught as the child can learn associations or inferential connections between the words. Features are parts of items or descriptions of items. Functions are the actions that typically go with the items or which one does with the item and classes are the groups the item belongs to. Receptive, first and inferential responses are taught so the child can learn answers to common questions and talk about things when they are not present.

Examples: Banana
Features: yellow, peel, long
Function: eat it, peel it
Class: food things we eat fruit
Selecting a Response Form

Topography-based Verbal Behavior

* Vocals...the preferred form...when the learner exhibits an understandable echoic repertoire which includes most phonemes (sounds) in initial, middle, and final positions...hence, the importance of the echoic repertoire.
Topography-based Verbal Behavior

- Signs - an alternative form when the learner does not exhibit an understandable echoic repertoire. Formal sign language and pidgin signing... Idiosyncratic signs
- Writing - another alternative form. Can be used to supplement signing for secondary audiences of non-signers

Selection-based Verbal Behavior

- Items - Items or item boards
- Pictures or Printed Words - pictures, printed boards, PECs, or electronic devices (with or without voice output). An alternative form when the learner does not exhibit and echoic repertoire and exhibits very limited fine motor skills

Selection-based Verbal Behavior

- Typing - computer, electronic speller. An alternative form when the learner does not exhibit an echoic repertoire, but does exhibit significant fine motor skills...

Advantages and Disadvantages

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<tr>
<th>Advantages and Disadvantages of Specific Response Forms with Respect to Specific Issues</th>
<th>Alternative Topography-based Response Forms</th>
<th>Selection-based Response Forms</th>
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<tbody>
<tr>
<td>SIGNS</td>
<td>WRITING</td>
<td>ITEMS</td>
</tr>
<tr>
<td>Motor Skills</td>
<td>X</td>
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<td>Portability</td>
<td>X</td>
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<tr>
<td>Continuity</td>
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<tr>
<td>Linguistic X</td>
<td>X</td>
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<td>Vocalizations</td>
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<td>Difficulty</td>
<td>X</td>
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Improving and Maintaining Compliance
Completing a Non-Preferred Task When Directed to Do So

- If the learner exhibits non-compliance frequently, followed by problem mands... **DO NOT** begin by providing non-preferred tasks and cues to complete the same.
- Instead, provide the learner with frequent access to preferred items and events (as long as he is not exhibiting problem behavior)... If the learner does not exhibit mands, gradually provide opportunities to mand for these same items and events...then, when the learner is approaching you frequently, looking for preferred items or manding for them, gradually begin to insert "easy" tasks that require very little effort for the learner to complete and cues for completing the same...provide a cue for completing the task ONLY ONCE

If the learner has completed the task at least several times in the past without prompts...

- Wait two seconds...if the learner complies within 2 seconds, provide praise and an opportunity to mand...if the learner does not comply within 2 seconds and/or exhibits problem mands, remain with the learner and, as soon as possible, provide the same cue again with prompts that virtually insure compliance... **DO NOT** repeat the cue several times

- If the learner complies with the prompts without exhibiting problem mands, tell the learner he is finished, **DO NOT** provide praise or an opportunity to mand...instead, provide additional tasks and cues for completing the same then, provide the original task and cues for completing... **DO NOT** repeat the cue several times

- **Begin** with brief waiting periods and gradually increase... **When** the learner mands, say "wait"... **If** the learner waits without problem behavior, honor the mand... **If** the learner engages in inappropriate behaviors, wait until the behaviors have not occurred for 5-10 seconds and return to the initial waiting period

Waiting for a Preferred Item or Event
Accepting NO for an answer

- Begin with less preferred items and when the learner mands, say “no”
- If the learner does not complains or exhibits other problem behavior, provide praise
- If the learner complains, simply go on to other activities
- If not effective, remove a preferred item contingent on inappropriate behavior

Refraining from what someone directs you not to do

- If the learner does not perform the task, provide praise and an opportunity to mand
- If the learner performs the task, remove access to specific, preferred items or events that are available or that the learner is currently accessing for a designated period of time
- Gradually provide praise and opportunities to mand more and more intermittently

Discontinue doing what someone directs you to stop doing

- If the learner ceases performing the task for within two seconds, provide praise and an opportunity to mand
- If the learner does not cease within two seconds, remove access to specific, preferred items or events that are available to the learner or that the learner is currently accessing for a designated period of time
- Gradually provide praise and opportunities to mand more and more intermittently

Giving Up a Preferred Item or Event

- If the learner relinquishes access to the item within two seconds, provide praise and an opportunity to mand
- If the learner does not relinquish access, secure the item and then remove access to specific, preferred items or events that are available or that the learner is currently accessing for a designated period of time
- Gradually provide praise and opportunities to mand more and more intermittently

Managing Problem Behaviors

- Excess
- Deficit
- Location

Inappropriate Mands

too soft, too loud, added or deleted words or signs, after a cue for an intraverbal

- Use Echoic prompts to prompt the correct response
- Use Differential Reinforcement
  - Place incorrect responses on extinction
  - Provide higher quality reinforcer for higher quality responses
Inconsistent Responses to Echoic Prompts
✦ Use differential reinforcement

Repetitive Phrases or Themes
✦ Use response interruption or escape extinction when prompting to complete the task
✦ Avoid discussions

Monotone Responses
✦ Prompt “pauses” and later prompt “inflection” during autoclitic mands with strong motivation
✦ Use differential reinforcement
✦ Later, extend these procedures to tacts and intraverbals

Transitions
✦ Stimulus Fading: temporarily reduce or eliminate difficult transitions and replace them with transitions from aversive events to events which produce positive reinforcers
✦ Then, proceed to transitions from events which produce few or no positive reinforcers to events which produce positive reinforcers

Transitions
✦ Then, proceed to transitions to aversive events to events which produce few or no positive reinforcers
✦ Then, list and prioritize problem transitions from difficult-to-easy...begin with easy transitions first

Transitions
✦ Use differential reinforcement with gestural or physical prompting and escape extinction or possibly response cost or timeout procedures
✦ Possibly, provide a schedule or a notice of upcoming transition, gradually intersperse the types of notices and gradually fade these notices...gradually add and teach “transitions without warnings”

Rituals
✦ Make a list of problem rituals (leaving a few harmless ones rituals off the list)...prioritize the list from difficult to easy...begin with easy rituals first and gradually proceed to more difficult ones
✦ Expose the learner to the situation that “evokes” the ritual - do not distract the learner
✦ Use differential reinforcement and response interruption
Stereotypic Behavior

- Make a list of problem behaviors that do not appear to be mands and that often occur when the learner is asked to respond to a mand
- Prioritize the list from difficult-to-easy, begin with easy behaviors first
- Gradually proceed to more difficult ones
- Use differential reinforcement and brisk response interruption

Increasing Attention to Tasks

- Reduce the length, difficulty or number of tasks required for accessing reinforcers
- Then, use a rapid pace of instruction, gestural prompting (from behind the learner), prompt-fading and differential reinforcement
- E.g. Positive and negative reinforcement for attending to and completing an increasing number of tasks and extinction or "looking away" for exhibiting other problem behaviors

Receptive ID’s or Multiple-Step Receptive Commands

- Teach sign or vocal tacts for each item or step
- Teach to fluency
- Teach many examples of vocal or motor imitation
- Teach to fluency
- Use joint control procedure so that the vocal or motor imitation "runs into" the tact

Seeking Attention with Disruptive Behavior

- Teach mands for preferred items and events and then mands for the attention of specific people
- Use differential reinforcement (e.g., provide reinforcers specific to the mands and place the disruptive behavior on extinction)

Seeking Attention with Disruptive Behaviors

- Remember to ignore all instances of disruptive behavior
- Don’t provide reinforcers if disruptive behavior is quickly followed by an appropriate mand

Accepting Corrective Feedback

- Use errorless teaching and very gradually fade prompts
- Occasionally, fade a prompt “too quickly” and provide corrective feedback (“that’s not correct”) then use rapid prompting and differential reinforcement (e.g., immediate, positive reinforcement for accepting feedback and extinction for “complaining” or any other problem behavior
Teaching Discriminations

- Identify the dimensions along which the discrimination must be made
- Eliminate all other possible dimensions along which a discrimination could be made
- Gradually reintroduce these dimensions
- Use errorless procedures and differential reinforcement
- Provide many opportunities for practice