



POAC-NoVA Verbal Behavior Instructors Academy
presents:

Intensive Teaching Environment (ITT)

Presented by: Justine Chang &
Melissa Modarressi



Set up of the workshop

Hands on workshop

- need to pair up with someone you want to practice with (you will be both the learner and the teacher)



Video Time



What you will be learning today...

- Gaining instructional control
- Discrete Trial
- Errorless Teaching Practices
- The Operants



Instructional Control / Pairing

- Refer to the list of possible reinforcers, please check off any items that your client likes or you have seen them play with.
 - Any Trends?
 - Any possible reinforcers to try?


Pair yourself with reinforcement

- Not only with possible reinforcers, but also do with your voice, eye contact, possibly with touch




Instructional Control

- Pair the therapy area with reinforcement
 - This area should not be just a place where demands are made or reinforcement is removed, instead bring in reinforcers into the therapy area
 - Fade in demands slowly!!!
 - Use extinction as a last resort
 - NOTE: When extinction has to be used it is never the learners fault, it is a teaching error. Also it is important to analyze why extinction was used and what should be done next time this behavior occurs
- ** Pairing is **NEVER** over**



Teaching Procedures




Discrete Trial

Discriminative Stimulus (SD) → Behavior → Response

Examples

T: "What is this?" (pointing to a ball) → C: "Ball" → T: hands child reinforcer and says "Wow! That is a ball"

T: show me sponge bob → C: Touches a picture of sponge bob → T: high fives the kid "You got it buddy that's sponge bob!"



Video Time



Discrete Trial (cont.)

- Number of trials and number of targets will be dependent on your learner
 - Early Learners number of trials may be 3-5 and number of targets may be between 8-10
 - Intermediate learner number of trials may be 15-20 and number of targets may be between 20-25
 - Advanced Learner number of trials may be 30-35 and number of targets may be 5-7
- A run-through is the inter-response time between the first demand and last demand



Errorless Teaching

- Errorless Teaching will help your learner to stay motivated because they will be successful
- The less that the learner is wrong, the more likely that they will be motivated
- The value of escape will decrease while the value of the reinforcers will increase
- No room for error will decrease frustration in your learner



Transfer Trial

- A transfer trial is when you represent the original SD and use a lesser of a prompt than the first

****NOTE**** Transfer trials are VERY important to eliminate prompt dependency



Video Time



Effective Teaching Strategies...

- Prompt Hierarchy/ Prompt Fading
- Variable ratio reinforcement schedule
- Mix and vary instructional demands
- Intersperse easy and hard demands
- Fluency/short latency (short inter-trial intervals)
- Error correction procedure



Prompt Hierarchy

- Full Physical (hand over hand)
- Partial Physical
- Gesture Prompt (Model)
- Echoic Prompt (Verbal)
- Proximity Prompt
- Mimetic prompt (imitation)



Benefits to Prompt Fading

- Use most to least prompts
- There will be less opportunities for your learner to make errors, and therefore they will be more successful
- For any new targets, immediately use a prompt that will grant your learner success
- On your next trial represent the same SD (transfer trial) and use a lesser prompt (prompt fading)
- Then present other demands, and then come back to the original SD and again, fade your prompt (probe)




Variable Ratio Reinforcement Schedule

- Variable Ratio is commonly referred to as VR
- VR is a **average** number of responses before reinforcement is given to the learner
- If your learners VR is 10, reinforce at 7 the first time, reinforce at 11 the next time, reinforce at 14 the last time
- VR is preferred versus FR (fixed ratio) because your learner will never be able to predict when reinforcement is going to be delivered
- VR creates strong and willing learners and maintains a consistent performance




Mix and Vary / Easy vs. Hard

- Vary your types of instruction, and don't represent the same instruction more than a couple of times
- Intermix all of the different types of demands according to the operants
- Use a higher ratio of easy demands versus hard demands
(easy demands are mastered skills that your learner can respond independently to)
- Your easy vs. hard ratio is dependent on your learner and a willing learner with good instructional control should have a ratio of 60% easy to 40% hard


 **Fluency**

- The learner should be expected to respond as quickly as possible (short latency)
- The inter trial intervals (ITI) should be less than 1 second
- ITI is the time between the child's response and your next SD

 **Error Correction**

When an incorrect response occurs.....

- Represent the original SD with enough of a prompt to ensure success
- Do a transfer trial
- Do distracter trials
- Come back to the original SD (probe) and begin to fade your prompt

 **Error Correction Procedure**

"What is it (while holding up a picture of a boat)?"	→	"Airplane"	
"What is it?" (echoic prompt: BOAT)	→	"Boat"	→ "Yes! Boat"
"What is it?" (transfer trial)	→	"Boat"	→ "That's it!"

Distracter trials (Several Responses Later)

"What is it? (echoic: 'B')"	→	Boat	→ "Awesome!"
-----------------------------	---	------	--------------



Video Time




The Operants



Operants


- Verbal operants are the units of analysis for language development and used for language assessment
- As we analyze behaviors through its function, we analyze language by operant (function)
- Skinner explains the importance of the development of all operants in order to understand language and to communicate

 **Mand** (this is not taught in ITT)

Antecedent (A)	Behavior (B)	Consequence (C)
Motivation: deprivation or aversion	Client asks (vocally, signs, pictures or device) for item, activity or person	Client receives specific item, activity or person

Examples:


A	B	C
deprived from a drink for 3 hours	"Juice"	Child receives a glass of juice
Older brother teasing client for 30 minutes	"Go Away"	Older brother leaves the room

 **Echoics**

A	B	C
Therapist says a word that they want their learner to repeat	learner repeats exactly what therapist says/signs	Generalized reinforcement (social or tangible)

Examples:


A	B	C
Say "Juice"	"Juice"	"Wow you're right, it is Juice" learner receives praise and tangible
Say "Bus"	"Bus"	"That's right its Bus" learner receives praise and tangible

 **Imitation**


A	B	C
Therapist does an action that they want their learner to imitate	The learner imitates the therapist	Generalized reinforcement (social or tangible)

Examples:

Therapist does the sign for candy	Learner copies the sign for candy	"Wow! You are looking"
Mom signs chip	Learner copies the sign for chip	"Nice, here's a chip"



Practice!!!!




Receptive


Antecedent (A)	Behavior (B)	Consequence (C)
Therapist lays out a set of 3 or more items and asks the learner to select one of the item	learner selects the correct picture	Generalized reinforcement (social and/or tangible)

Examples:

A	B	C
"Find the boat" (in a field of 3 or more objects)	learner touches the boat	"That's the boat! Excellent"
"Show me the cow" (in a field of 3 or more pictures)	learner points to a picture of a cow	"You're right that's the cow!"




Practice!!!!


 **Tacts**

Antecedent (A)	Behavior (B)	Consequence (C)
Therapist holds up a pictures and asks the learner to label it	The learner labels the picture	Generalized Reinforcer (social and/or tangible)

Examples:

A "What is it? (holding a picture of a spoon)"	B "Spoon"	C "That's right it is a spoon! (handing client a reinforcer)"
"Tell me what this is (holding a ball)"	"Ball"	"Nice work it is a ball"


 **Practice!!!!**

 **Intraverbal**


Having a conversation or answering questions so that what is said is determined by what the other person says

Antecedent (A)	Behavior (B)	Consequence (C)
Therapist asks a question or a fill in (no visual is present)	Student answers the question or fills in the blank	Generalized reinforcement (social and/or tangible)


A "Twinkle, Twinkle little _____"	B "Star"	C "Nice! You were paying attention"
"What do you brush your teeth with?"	"Toothbrush"	"Amazing! You do brush your teeth with your toothbrush"

 PVBA

Practice!!!!

 PVBA

Name that operant!!!!

 PVBA


Receptive: Feature, Function and Class

Receptively labeling an item when given a description of the item

Example of a Receptive Feature of an item
"Touch something that has a tail" → Learner touches a cat → Social Praise and/or tangible

Example of a Receptive Function of an item
"Show me the one that says Meow" → Learner touches a cat → Social Praise and/or tangible

Example of a Receptive Class of an item
"Find an animal" → Learner points to the cat → Social Praise and/or tangible


 **Tact: Feature, Function and Class**

Expressively labeling an item when given a description of the while the item is present

Example of a Tact Feature of an item
"Which one has a Tail?" \Rightarrow "Dog" \Rightarrow "Amazing!"
(picture of dog present)

Example of a Tact Function of an item
"What gives us Milk?" \Rightarrow "Cow" \Rightarrow "You're right!"
(picture of cow present)

Example of a Tact Class of an item
"A cat is a _____" \Rightarrow "Animal" \Rightarrow "Nice"
(picture of a cat present)


 **Intraverbal: Feature, Function and Class**


Labeling an item when given a description of the item
(without the item being present)

Example of an Intraverbal Feature of an item
"Tell me something that has a tail?" \Rightarrow "Cow" \Rightarrow "Yes, a cow has a tail!"

Example of Intraverbal Function of an item
"What do you ride in?" \Rightarrow "Car" \Rightarrow "Beautiful!"

Example of Intraverbal Class of an item
"Name some fruit." \Rightarrow "Apple and Orange" \Rightarrow "Nice, those are fruits."

 **Practice!!!!**


 **Match to Sample**
 Putting materials (objects and/pictures) together by certain characteristics of the item that they share (can be identical, non-identical, features, functions or class)

Antecedent (A)	Behavior (B)	Consequence (C)
Therapist hands the learner a picture or object (and has laid out materials in a messy array)	Learner places the object or picture on top of or near the item that matches	Generalized reinforcement (social and/or tangible)

A B C


"put with same (hands child a picture of a dog)" → Child places the picture of the dog on top of the picture on the table → "Nice! That's looking!"

"match (hands the child a picture of an apple)" → Child places the picture on top of a picture of a banana → "Yes!"

 **Possible Matching to Sample Curriculum**

- Matching identical objects to objects
- Matching identical pictures to pictures
- Matching non-identical objects to objects
- Matching non-identical pictures to picture
- Matching identical objects to pictures, pictures to objects
- Matching non-identical objects to pictures, objects to pictures
- Association matching
- Matching by features, functions and class
- Sorting

*****NOTE: Please keep increasing the field size, and using a messy array*****

 **Conditional Discrimination**

- "A discrimination in which reinforcement of responding during a stimulus depends on (is conditional on) other stimuli" (Catania, 1998, p. 382).
- The verbal SD of "What do you see?" will determine what the learner will say.

Example: a parent asks a child "What do you see?", while looking at a "cat". The child responds with: tail, fur, whiskers, animal, paws etc.

- This tells us that our learner needs better conditional discrimination skills



Early Learner Target Examples

- Imitation of motor movements
- Receptive actions
- Receptive body parts
- Early tacting/receptive skills
 - Receptive commands
 - Tacting of reinforcing items (objects)
 - Receptive identification of reinforcing items (objects)
- Matching to sample
 - Matching identical/non-identical objects and pictures
- Intraverbal
 - Animal sounds
 - Fill in words from songs
 - Fill in fun activities



Intermediate Learner Target Examples

- Receptive Identification
 - Pictures/objects of common items
 - Selection of items by feature, function and class
- Tacting
 - Tacting of common objects/pictures
 - Tacting adjectives
 - Tacting by feature, function and class
 - Tacting parts of objects
 - Tacting prepositions
- Intraverbal
 - Answering feature, function and class questions (and reversals)
 - Personal information
 - Answering questions regarding categories
- Matching to sample
 - Matching by association
 - Matching by feature, function and class
 - Sorting
 - Seriation
 - Sequencing



Advanced Learner Target Examples

- Advanced tacts/receptive skills
 - Tacting of emotions (e.g. excited, happy, bored, etc.)
- Social interaction behaviors
- Same & different
 - How are things same and how are they different
- Negations
 - Which one doesn't belong
- Advanced opposites
 - Example: fair & unfair
- Verb tense
 - irregular verbs
- Advanced intraverbals - re-telling stories
- Academic: Reading Mastery; SRA Reading and Math program; Wilson; Language for learning/writing



Maintenance/ Generalization

What are some ways to ensure that your child is maintaining what they have learned?

- A maintenance schedule
- Continuing to use as part of easy demands
- Probe to novelty
- Teaching targets across different environment and people



Organization

What are some ways that we can organize our teaching materials so that we can be productive in our sessions? (show samples)





Feedback!!!!
