



Teaching Beginning Language and Establishing Vocalizations in Autistic Children: A Tutorial for Parents

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Skinner's Verbal Behavior



- **Skinner (1957) proposed an analysis of language that is based primarily on its controlling variables**
 - A comprehensive approach to language derived from learning principles
 - Function, instead of form or content
- **The primary unit of analysis is the *verbal operant***
 - controlling antecedent
 - maintaining consequence





So, what is language anyway?



- Language occurs under **certain conditions** and not others
- A vocabulary is something you **use**, not something you **have**
- A word's definition and meaning **depends on the context** in which you say it
- Language is **learned behavior** like all other behavior





“Meaning”

Echoic

Listener

Tact



Mand

Intraverbal




Motivation!





The Mand

Antecedent	Behavior	Consequence
<p>Motivation to obtain a guitar.</p>	<p><i>Guitar</i></p>	



Antecedent

Behavior

Consequence

“Guitar”


Guitar

“You’re right!”





Using a Prerequisite Skills Assessment to Identify Optimal Modalities for Mand Training

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Abstract

This study examined the utility of a brief prerequisite assessment in predicting the subsequent effectiveness and rate of acquisition of mand training in each of three response modalities (sign, picture exchange, and vocalizations). Overall, the picture exchange was the most effective and efficient modality for acquiring the targeted mand. The vocal modality was the least effective except when the prerequisite assessment indicated that two-syllable vocal imitation was intact. The implications for selection of response modality for early mand training are discussed.



Pairing as a Pre-requisite

- **Motivating Operations!**
- **Spend time giving things for free**
- **Establishing yourself as a giver**
- **Look for your child to approach you willingly**



Capture and Contrive

- Capture motivation when it naturally occurs
- Set up situations to “contrive motivation”
 - Really wanting something
 - Set up specific environmental events
- Numerical goals for manding:
 - Once per minute
 - 400-1,000 per day



Ideal Teaching Situation

- Parent has an item or activity that currently has high reinforcing value
- Access to that item or activity is only available through you
- Child approaches to receive the item
- Provide enough of the item but not too much



Ideal Teaching Situation **TRUMPET** BEHAVIORAL HEALTH

- **Sanitize the environment**
 - Limit free access to preferred items and activities
 - Make you and what you have the most valuable in the room
 - If you can't compete with other items, remove them or become a part of them



Ideal Teaching Situation

- Be a “giver” and not a “taker”
- Ask yourself the following questions
 - Is there a way for me to have my child continue coming back to me to get more of this item?
 - Can I prepare ahead of time to ensure they can only access this item through me?
 - Can I change the activity in such a way that it is more fun with me than without me?
 - Can I make myself a critical component of engagement in this activity?



Beginning Mand Training

- **Items that....**
 - are consumable (food, drinks)
 - easily allow for a short duration of contact (e.g., bubbles, tickles)
 - are relatively easy to remove (e.g., music, video)
 - are easy to deliver (e.g., books, cars, blocks)
 - that can be delivered on multiple occasions (e.g., small sips of juice, small pieces of candy)



Mand Development

- Requests through nonverbal indication
- One-word mands for items, activities, and actions (item present)
- Spontaneous requests (item not present)
- Actions
- Yes/No
- Carrier phrases
- To stop an activity
- Attention
- Requests info
- Future events
- Using adjectives prepositions, adverbs, pronouns



Teaching in Sequence

- Often, time is spent developing an advanced manding repertoire before a basic one has developed
- **Examples:**
 - Teaching “I want” before your child has acquired basic one-word mands
 - Teaching requests using colors before a basic one-word mand repertoire has developed
 - Teaching “yes” and “no” as a first response
- **Start with 1-word mands**
 - (and stay there for awhile!)



First Signs

- Teach specific, tangible items and activities first
- Teach across categories (activities, food items, toys, etc.)
- **Avoid:** more, all done, bye, thank you, eat, please, potty
- Do not choose signs that “rhyme”



First Signs

- Plan to teach between 3 and 5 first
- Unless other characteristics lead you to teach more at once
 - Specifically, strong motor imitation repertoire



MO present & Targets

- Say the name of the item upon delivery
- Do not include extra “verbiage” during this interaction
- It is important that the name of the item be paired clearly with its delivery
 - James and his first vocalization “wa, wa”



Scrolling

- **Definition:** child over generalizes one sign to other signs
- **Common occurrence**
- **What you do will determine whether scrolling will decrease or not**
 - Never child's fault, always something the teacher can do to fix





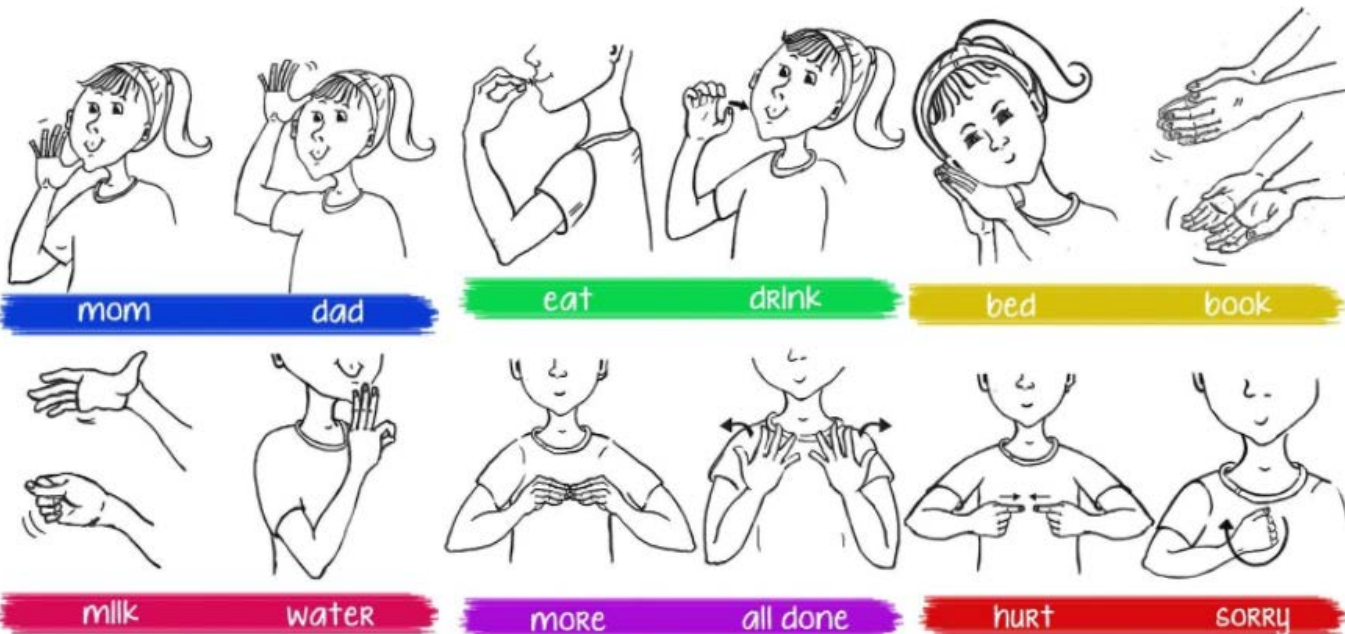
Teaching the echoic

- Do not begin until signs are very strong
- Choose a target sound approximation
 - Should be child's best vocal approximation for that word
- Reinforce one time when child signs immediately
- On the next presentation, do not reinforce when child signs immediately
- Model target sound 3-4 times
- Do not give the item until they makes at least the sound that you set as the target vocal approximation, or immediately following the **THIRD** presentation of the word



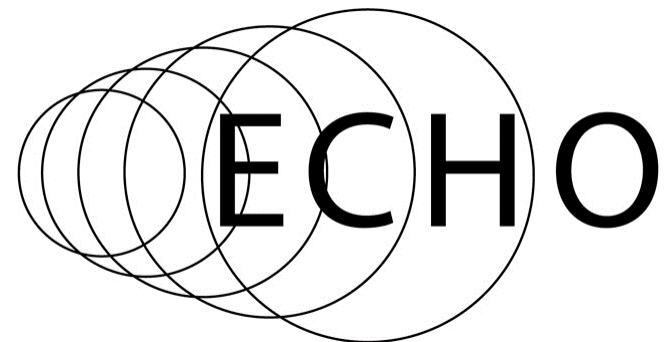
Discrimination Training

- Teach across motivational categories
- Switch between items many times during your teaching session
- Never stay on one sign too long!



Teaching the Echoic

- You may choose to give your child the item after the third or fourth trial if no vocalization occurs (unless the vocal occurs before that)
 - If you withhold, may lose EO
- Once approximation is consistent, change target sound to better approximation
- Do not drop signs until vocal sounds and words are **VERY** clear



Other interventions

- Stimulus-Stimulus Pairing
- Extinction-induced vocals
- Behavioral Momentum



Enhanced Stimulus Stimulus Pairing

