

## An Introduction to Verbal Behavior and the VB-MAPP

Presented by  
Marrea Winnega, Ph.D., BCBA  
Licensed Clinical Psychologist  
Board Certified Behavior Analyst

[mwinnega@gmail.com](mailto:mwinnega@gmail.com)

December 11, 2017

## Books

- *The Verbal Behavior Approach* by Mary Lynch Barbera
- *Motivation & Reinforcement* by Robert Schramm
- *Verbal Behavior* by B.F. Skinner

2

## ABC Analysis/Teaching

Operant 3 Term Contingency:

Antecedent → Behavior → Consequence

Use to analyze behavior AND

All teaching interactions

- Antecedent means *before*
- Behavior is *what the person does*
- Consequence means *after the behavior and as a result of the behavior*

3

## Adding Motivation

Ⓐ → B → C

- There is a specific concept called Motivating Operations (MO)
- This creates a Four-term contingency:

Antecedent/MO → Behavior → Consequence



## Motivation

A/MO → Behavior → C

MO's *momentarily* alter the VALUE of the consequence and *momentarily* EVOKE (or abate) behaviors that have been followed by that consequence

## Operant 4 Term Contingency A/MO BC

Antecedents (signals)+Motivating Operations (evokes) → Behavior → Consequence

Antecedent is a discriminative stimulus that signals the availability of a certain consequence

For example: Evokes behaviors to access something (**food, water, sleep, activity\***, etc.) because have not had it for some period of time OR Abates these behavior when satiated. Other examples – becoming too **warm or too cold\***; engaging in behaviors to decrease **pain\***

6

## Motivation

- Motivation for specific items can be altered by:
  - Creating a specific state (making thirsty)
  - Limiting access to the specific item
  - Signaling the availability of the item
- We must understand what motivates our learners
- Items our learners ask for or frequently play with
- Items can be pleasing, but not function as reinforcers

## Reinforcing Consequences

- Student example 1: Student really likes chips. When he does well, he gets 3 or 4 chips at a time. He gets chips for every 3 to 5 responses.
- When he has eaten a bag of chips, he will be full and no longer want the chips.
- And now he will need a drink (being thirsty). Reinforcer shifts to preferred beverage (could be water, milk, juice or pop – whatever student likes) because of motivating operation.

9

## Verbal Behavior

- Teacher: “What is it?” (antecedent)
- Learner: “Juice”  
“Juice” = labeled juice (response)
- Reinforcer/consequence = socially mediated, non-specific reinforcement, the child does not get the juice in this situation (this is a label or “tact”).

Topography/form of verbal behavior is the same “juice,” reinforcer is different

11

## Reinforcing Consequences

- Reinforcers SHIFT! And that is ok.
- What we want or like at one moment will change, especially when we are satisfied with it or satiated
- Adult example: Hard day at work. Don’t want to cook. Go to favorite restaurant (S<sup>D</sup>; driving there and ordering are behaviors to get food). Then I’m full and done eating – satiated. I go home and watch a movie or my favorite television show, read a book, or call a friend. I do not eat dessert because I am full/satiated.

8

## Verbal Operants Analysis of Verbal Behavior

- Basically, this approach takes into account the antecedents (As) and consequences (Cs) that surround different types verbal behavior
- Example:  
Motivation: Students “wants” juice  
Teacher/parent (antecedent): Holds the juice and may say, “What do you want?” (and juice is available)  
“Juice” = request (or mand) Juice (response)  
Reinforcer = getting juice (consequence)

10

## Verbal Behavior

Different functions of verbal behavior do not automatically generalize/transfer:

\*\*\*THIS IS THE KEY \*\*\*

Essential functions:

- to request,
- label,
- answer questions,
- receive or give information.

This means: When children with autism learn a label, it does not transfer to requests

12

## Verbal Behavior - Skinner

- Any oral and non-oral forms of communication
- Mostly maintained by social reinforcement
- Forms include: Speaking, signing, pointing, writing, gesturing, touching, Braille, texting, emailing, beeping your horn at someone to get out of your way, etc.
- Excludes: Typing on a typewriter

13

## Verbal Operants

A: Antecedent	B: Response	C: Consequence	Verbal Operant
Want juice	"Juice"	Receive Juice	Request/Mand
See/feel juice	"Juice"	Praise/light up toy*	Label/Tact
Hear "juice"	"Juice"	Praise	Vocal Imitation/Echoic
"We drink"	"Juice"	Praise *optional/makes praise a reinforcer Why not juice?	Conversation; answering questions about things out of sight/ Intra-verbal

14

## Verbal Operants

A: Antecedent	B: Response	C: Consequence	Verbal Operant
Want ball	"ball"	Receive ball	Request/Mand
See/feel ball	"ball"	Praise/pretzel*	Label/Tact
Hear "ball"	"ball"	Praise	Vocal Imitation/Echoic
"We play with a _____"	"ball"	Praise *optional Why not the ball?	Intra-verbal

15

## Verbal Operants

A: Antecedent	B: Response	C: Consequence	Verbal Operant
Want car	"car"	Receive car	Request/Mand
See/feel car	"car"	Praise/juice or light up toy*	Label/Tact
Hear "car"	"car"	Praise	Echoic (Duplic)
"We ride in a" OR "Name a vehicle" OR "Something with wheels is a"	"car"	Praise *optional	Intra-verbals: Function Class Features

16

## Verbal Behavior - Additional Classifications of Language

Note: Focus on **function** not structure/form

- Receptive Language: Following instructions or the requests/mands of others (When told, "Touch dog," Learner touches the picture of dog)
- Imitation/Mimetic – copying sign language
- Copying Text
- Textual – reading written words
- Writing – write words you hear spoken

17

## Overlapping Terms

BCBA	Speech/Language Pathologists
Mand	Request
Tact	Comment
Motivating Operations	Communicative Temptations
Echoic	Imitation
Intra-verbal	Conversation/Exchanges
Generalization	Carry-over

## An Introduction to the Verbal Behavior Milestones Assessment and Placement Program: The VB-MAPP

Information from  
Mark Sundberg

## The VB-MAPP

- An assessment tool
- Curriculum guide
- Tracking system
- Based on the behavioral analysis of language as described by B. F. Skinner in his book *Verbal Behavior* (1957)

## The VB-MAPP

- Provides criterion referenced information regarding a child's current skills
- Can serve as a basis for the selection of educational objectives
- Provides a skills tracking system:
  - to observe and document a student's progress in the acquisition of critical skills and
  - to identify skill areas that remain in need of further development

## The VB-MAPP

- Has been designed to assess a variety of language skills
- Accounts for a student's motivation
- Accounts for the student to attend to both verbal and nonverbal stimuli
- Emphasizes generalization of skills
- Provides an extensive list of skills\*

## The VB-MAPP

- Based on typical language development milestones
- Identifies milestones for a sharper focus and clearer direction
- Field test data from approximately 75 typically developing children
- Field test data from over 200 children with autism

## 5 Components of the VB-MAPP

- VB-MAPP: Milestones Assessment
  - 170 verbal behavior milestones across 3 developmental levels (0-18 months, 18-30 months, 30-48 months) and 16 different verbal operants and related skills
- VB-MAPP: Barriers Assessment
  - 24 common learning and language barriers faced by children with autism
- VB-MAPP: Transition Assessment
  - Evaluates a child's ability to learn in less restrictive educational environment across 18 different skills

24

## 5 Components of the VB-MAPP

- VB-MAPP: Skills Task Analysis and Tracking
  - Breakdown of the different skill areas
  - Checklist for skills tracking
- VB-MAPP: Placement and IEP Goals
  - Recommendations for program development based on the student's VB-MAPP profile
  - Over 200 IEP objectives directly linked to the skills and barriers assessments

25

## The Milestones Assessment

- Identifies the child's existing language and related skills.
- Contains 170 measurable learning and language milestones that are sequenced and **BALANCED** across 3 developmental levels.
- IEP goals can match the milestones instead of individual skills

26

## Rationale

- Typical verbal milestones help to
  - avoid focusing on only minor steps
  - avoid targeting skills for intervention that are developmentally inappropriate
- By identifying milestones, as opposed to a task analysis of individual skills, the focus can be sharper and the direction clearer.

27

## 16 Milestones Assessment

- The elementary verbal operants (e.g., echoic, mand, tact, intraverbal)
- The listener skills
- Vocal output
- Independent play
- Social skills and social play

28

## 16 Milestones Assessment

- Visual perceptual skills and matching-to-sample
- Grammatical and syntactical skills
- Group and classroom skills
- Beginning academic skills

29

## Milestones Assessment

- The milestones are broken into 3 developmental levels:
  - Level 1: 0 – 18 months (most children with autism are here)
  - Level 2: 18 – 30 months (significant developmental changes in typical children occur during this time)
  - Level 3: 30 – 48 months (Intraverbals and conversation develop)

30

## Additional Information About the Levels

- The goal is for the student to not only make progress upward – but also across areas.
- Level 1 should be filled in before really focusing on Level 2 – Achieve a BALANCE
- This ensures that foundation repertoires are developed prior to moving into higher level more complex areas.

31

## The VB-MAPP Barriers Assessment

- It is important to find out what a child can do (the VB-MAPP Milestones Assessment), but also important to know what they cannot do and analyze why they cannot do it.
- It is designed to identify and score 24 learning and language acquisition barriers that might impede a student's progress.

32

## Rationale

- Absence of skills and the presence of barriers are closely related.
- Intervention program should include both skills that need to be increased and behavior or barriers that need to be decreased.
- For some students the immediate program should focus on removing a particular barrier.

33

## General Categories of Barriers

1. Negative Behavior and Cooperation
2. Absent, Weak or Defective Verbal Operants
3. Social Behavior
4. Fundamental Barriers to Learning
5. Specific Behaviors that Compete with Learning
6. Physical Barriers

34

## Why look at the Barriers?

- For some children the immediate focus of the intervention program is on removing a particular barrier, rather than language instruction
- The most common immediate barriers to remove involve instructional control problems, or other behavior problems
- Focus: Increase manding, cooperation and waiting; decrease problem behavior

35