

TRI-STATE WEBINAR SERIES

Connecting Verbal Behavior Programs with Natural Environment Training

Presented by:
Deb Rauner



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Tri-State Autism Spectrum Disorder Webinar Series



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Polling Questions

- Questions will be asked throughout the webinar
- When the poll opens on your screen respond by clicking on or filling in your answer

What is your role?

What is your role?

Administrator

Parent/Family Member

Related Service Professional

Teacher

Other

What state are you from?

What state are you from?

Colorado

Kansas

Nebraska

Other

No Vote

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Presenter Information

- Deb Rauner, M.Ed, Currently an Autism Consultant and Verbal Behavior Trainer. Formerly a Special Education Teacher & Behavior Specialist



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Learner Objectives

- Participants will review the operant skills used in a verbal behavior program.
- Participants will learn how to teach new skills in the natural environment by utilizing the Errorless Teaching Procedure.
- Participants will learn specific strategies to generalize skills through use of Natural Environment Training activities.



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Presentation Summary

This webinar will focus on teaching and generalizing verbal behavior skills in the natural environment. Easy to use strategies to help students connect their verbal behavior skills to activities in the natural environment will be shared. Generalization of skills in the natural environment leads to more independence and successful participation in a variety of activities.



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Ready, Set, Go!

- Let's get started on learning how to use Natural Environment Training (NET) strategies as an extension to a verbal behavior program.
- All forms discussed will be available to you electronically.



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Verbal Behavior Review

- Verbal behavior is any behavior that communicates our needs/wants to someone else. This includes using vocal speech, using pictures, sign language or an augmentative device.
- Verbal behavior is also a program of instruction for involved learners that is based on and growing from continuing research using BF Skinner's work. Interventions are based on the principles of Applied Behavior Analysis.



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Verbal Behavior Review

- Applied Behavior Analysis (ABA) is one of the most evidence based conceptual frameworks for autism intervention
- ABA is driven by operant analysis (how antecedents and consequences function to alter the frequency of responding)



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Why Use Verbal Behavior Instruction?

- Uses “Effective Teaching Methods” that makes learning more fun for the child as well as enabling the child to learn more efficiently
- Effective teaching reduces or naturally eliminates many problem behaviors in most students in both general education and special education environments
- Teaches the skills necessary to be successful in the general education classroom/real life settings



Components of Language (Verbal Behavior Operants)

- **Tacts:** Label pictures/objects or actions (verbal or sign language)
- **Imitation:** Copying another's movements
- **Receptive Discrimination:** Choosing a picture/object from an array
- **Receptive Listener Responding:** Following directions for actions or touching body parts/clothing etc.



Components of Language (Verbal Behavior Operants)

- **FFC:** Questions that deal with the function, feature or class of an item
- **Intraverbals:** Fill in the blank, answering questions or conversation without visual cues
- **Vocal Imitation:** Repeats sounds, words & phrases
- **Match to Sample/Visual Performance:** Matching pictures, objects, sorting, sequencing, puzzles, etc.
- **Manding:** Requesting items, actions or information



Polling Question #1:

Which statement is most correct:

- A. Verbal behavior instruction is only done by speech therapists.
- B. Verbal behavior instruction requires a student to be vocal.
- C. Verbal behavior is a program based on the principles of Applied Behavior Analysis.
- D. Verbal behavior is **not** made up of building blocks of language called operants.



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Answer:

C.

Verbal Behavior Instruction was developed by BF Skinner using his principles of Applied Behavior Analysis.



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Verbal Behavior Instruction in the Natural Environment

- Teaching the specific target skill in the natural environment using The Errorless Teaching Procedure.
- Generalizing the task in the Natural Environment.



Two Types of Skill Items in Errorless Teaching

- “Known Items” means previously mastered items. Known items can be found on assessments.
- “Target Items” are those items that are targeted for mastery. Use Errorless Teaching with Target Skills.
- 80% of all trials in Intensive Teaching (IT) should usually be easy or known skills.
- 20% of all trials are usually target skills and/or correction of errors.



Errorless Teaching Sequence

PROMPT TRANSFER DISTRACT CHECK

1. Prompt Trial: We ask the question and then quickly prompt the correct response.
1. Transfer Trial: Ask the same question again, this time without a prompt. The purpose of the transfer trial is to fade the prompt.
1. Distract Trial: Ask one or two known items. These are used to place easy responses in the sequence.
1. Check Trial: Ask the original question. This serves to assess (“check”) whether the student remains able to demonstrate the skill after some easy, known skills.



Video Example

- Errorless Teaching in the Natural Environment.

The target skill is following a Receptive Direction to “Put In” cups in the dishwasher. Look for the “Prompt, Transfer, Distract and Check” Trials.



Video



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Polling Question #2

True or False:

You can use Errorless Teaching both in Intensive Teaching Sessions and in the Natural Environment.



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Answer:

True.

You can use the technique of Errorless Teaching both when working with a student during Intensive Teaching Sessions as well as when teaching a new target skill in the Natural Environment.



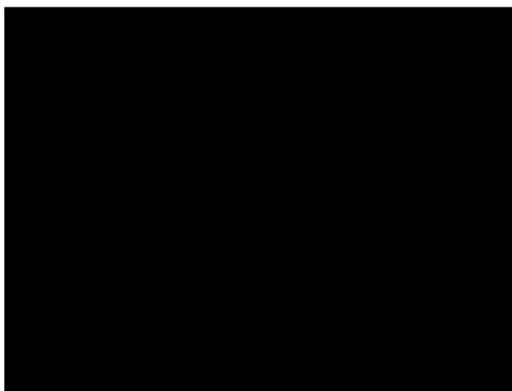
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Introduction to Natural Environment Training



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Introduction to Natural Environment Training



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How Do I Generalize Verbal Behavior Skills for My Students?

Teaching children with Autism should never
happen within a vacuum.

The skills learned should be intentionally
applied across settings and individuals, to
help the child interact meaningfully with
their environment.



Generalizing Verbal Behavior Skills

There are many ways to generalize,
including **across time, across settings,
across staff and across stimuli.**



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Strategies for Generalizing Known Skills in the Natural Environment

- NET Plans
- Small Groups
- Books/Magazines
- Job Boxes (Structured Teaching)
- Working Walks



Natural Environment (NET) Instructional Plans

- NET Lesson Plan for Variety of Learners
- NET Plan for Secondary Students
- Verbal Module Example
- Small Group Lesson Plan Template
- NET Data Sheet



NET Lesson Plan Examples

<u>Teaching Verbal Behavior in the Natural Environment</u>	
NET Lesson Plan "Baby Play"	
MANDS	
<i>Early Learner:</i>	Child will mand (request) for desired items that are present (bottle, bed, diaper, shoes, brush, pajamas, dress)
<i>Intermediate Learner:</i>	Child will request others to perform specific action (take off, put on, drink, eat, sleep)
<i>Advanced Learner:</i>	Child will use sentences to obtain desired actions/objects ("I need the bottle, high chair, bed." "Where are baby's socks?")
FACTS	
<i>Early Learner:</i>	Child will tact (label) items present during baby play (baby, hair, eyes, mouth, feet, bottle, etc.)
	Child will label common actions: eat, sleep, cry, and drink
<i>Intermediate Learner:</i>	Child will use a variety of carrier phrases when labeling ("I see pink shoes", "There is baby's bottle", "Look, baby's dress")
	Child will tact parts or features (hair, eyes, feet)
	Child will tact function, feature and class: "What does baby do with her bottle?", "What does baby wear on her feet?"
<i>Advanced Learner:</i>	Child will label parts, which are missing (baby with only one shoe, baby will arm or leg missing)
	Child will tact using prepositions and pronouns (Where are shoes? Who is sleeping?)
	Label and describe on-going events. Tell me about baby: ("Baby is sad. Baby is crying.")
RECEPTIVE	
<i>Early Learner:</i>	Child will look at/touch/give baby and related objects
<i>Intermediate Learner:</i>	Child will touch baby's body parts, _____ shoe and the bottle.")
	Child will select 2 objects from an array of 4 ("Give me the shoe and the bottle.")
	Child will perform an action with baby (give baby a hug)
	Child selects item based on feature, function and class: ("Find the orange food")
<i>Advanced Learner:</i>	Child will make a selection based on characteristics (Baby needs the bottle with orange juice. Baby wants the blue shoes.)
INTRAVERBALS	
<i>Early Learner:</i>	Child will fill in word or phrase describing on-going activity: Baby is drinking her _____. "Night night, time for _____"
<i>Intermediate Learner:</i>	Child will fill in the blank by function, feature and class: Pajamas are things baby _____. Milk is inside the _____. Baby sleeps in a _____, if baby is hungry, she needs some _____.
<i>Advanced Learner:</i>	Child will answer wh questions: What does baby wear? Where is baby sleeping? Who is feeding baby?



Verbal Modules

- Verbal modules help you understand language acquisition by showing you how one vocabulary word can be used in numerous verbal operants.



Verbal Module Example

"DOG" VERBAL MODULE	
Sd/Antecedent Question	Operant
"Touch the dog" (from an array of pics)	Receptive Discrimination
"Give me the dog"	Receptive: Listener Respond
"Do this" (pet the dog)	Imitation
"Say woof"	Echoic
"What's this?"	Tact
"What do you want?"	Mand
"Touch the one that says woof" (array of pics)	RFFC
"Say dog" (or beginning sound)	Echoic
"Touch the one that wags its tail" (array of pictures)	RFFC
"Put the dog in the box"	Receptive: Listener Respond
"What color is this dog?"	Tact
"A dog is an ____"	Intraverbal
"Do this" (put leash on)	Imitation



Books and Magazines

- Books and Magazines provide a visual field in which to have students practice “Known Skills”
- Can use them with groups of students by adapting the questions to Early, Intermediate and Advanced Learners.



Example of Generalizing Verbal Behavior Skills Using a Story

- Look at the different examples of questions that were used for Early, Intermediate and Advanced Learners for a specific story.
- Questions are based on the verbal behavior operants.
- When first using this strategy, you may want to list the questions on notecards to help guide you in your instruction. After awhile, you will become adept at knowing which types of questions are appropriate for your individual students.



Example of Story Questions

Interactive Story Ideas	
Clap Your Hands By Lorinda Casley	
Early Learner:	
Mand	"What do you want? (open book)
Initiation	"Do this" (Shake arms)
Receptive Commands	"Clap your hands"
Echols	"Say hands"
Receptive Discrimination	"Touch frog"
Tact	"What is it? (Name animal)
Intraverbal	(88-88) "I shake my ____"
Intermediate Learner:	
Mand	"I can't see, show me..."
Intraverbal	"Tell me an animal in the story"
Receptive Command	"Clap your hands and stomp your feet"
Initiation	Model last clips & stomps "Four turn"
Echols	"Say / shake my arms"
Tact	"What color is her scarf?" "Which one has a beard?"
Receptive Discrimination	"Point to the ones with hats"
Advanced Learner	
Mand	"Do you know who has a baby: ask ____"
Intraverbal	"Tell me the first thing they did"
Receptive Commands	(Give all 4 commands)
Initiation	"Give this a try" (Use actions, make one with assistance)
Echols	"Say / shake my arm and then take a seat"
Tact	"Tell me the one with a long, thick tail"
Receptive Discrimination	"Find the one with feathers"
RFFC	"Show me the one with whiskers"



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"Job Box" Activities

- Once a student has mastered a skill item, adults can have the student practice the skill through independent activities, sometimes known as "job box activities" or "structured teach activities".
- Job box activities allow the student to generalize a known skill to new materials and settings.
- Job box activities encourage student independence.



Working Walks

- Providing opportunities for students to practice “Known Skills” in natural environments and during everyday activities.
- Staff can use items that are already in the environment (bulletin boards, signs, etc.).
- Staff can place their own materials on walls, lockers, doors, etc.



Working Walk Examples

Matching Activities “Match”

- Colors on any item
- Pictures of map, water fountain
- Frogs, mittens, snowflakes
- Schedule pics (bathroom, playground)
- Vacuum, broom
- Letters

Facts (Labeling) “What’s that?”

- Light switch, door, window
- Fire alarm
- Shapes, colors, sizes
- Animals (items on bulletin brds)
- Coat hook/backpack/coat/boots
- Actions of others
- Maps/States
- Water fountain
- Bathroom signs (boys/girls)
- Apple sticker on mailbox
- Name cards and room numbers
- Books, chairs, tables, door knobs
- Pictures of feelings by nurse’s door

Motor Imitation “Do this”

- Bunny ears
- Shake head yes/no
- Knock on door
- Hop on one foot, jump
- Clap hands
- Getting a drink
- Opening door handle
- Stick out arm
- Raise one foot
- Touch wall
- Walk backwards
- Self-hug
- Dance like a monkey
- Spin around
- Walk tip toe

Echoics “Say...”

- Name on tags - Thank you
- Excuse me - Hi
- It’s lunchtime - Any item
- Time to go home - How are you
- Any shape, color, size
- Good morning
- I need a drink

Receptive “Touch or Point to ...”

- Any color, shape, size item
- Any item on bulletin board
- Ocean/items on maps
- Letters/names/numbers
- Door knob, door, window
- Clock, light switch, fire alarm
- Bathroom pictures
- Ceiling, floor
- Where we live
- Body parts on items on boards

RFCC: “Show me the one that...”

- Is any color, shape, size
- Is an animal
- You write with
- We drink water from
- You wear in the winter
- Waves
- Shows feelings
- Is cold
- Is where you go potty, wash hands
- Has a whistle

Intraverbals (Fill ins or questions)

- The tree is _____
- We _____ in the hallway
- We hang our _____ on the hook
- We have _____ feet
- After lunch we _____
- What do you do on the bathroom door?
- We _____ down the hallway
- You build a snowman with _____
- Where is your classroom?
- Where do we drink from?
- Who is your teacher?
- We close the _____
- “I’ve been working on the _____”
- We are walking on _____
- After lunch we _____
- I live in _____



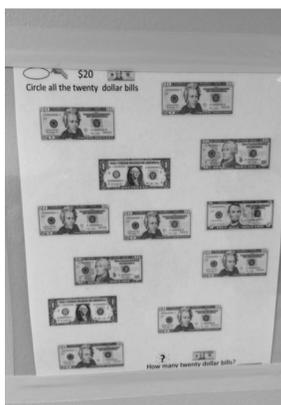
Working Walk Planning Template

Working Walk for _____		Place: _____
Receptive		
Tact		
Function, Feature, Class		
Mand		
Motor Imitation		
Intraverbal		
Vocal Imitation		
Working Walk for _____		Place: _____
Receptive		
Tact		
Function, Feature, Class		
Mand		
Motor Imitation		
Intraverbal		
Vocal Imitation		



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Examples of Working Walk Items Placed in Hallways of School



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Examples of Working Walk Items Placed in Hallways of School



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Polling Question #3:

Which of the following is NOT a Generalization Activity discussed for Verbal Behavior Programs:

- A. Working Walks
- B. Touch Math
- C. Books
- D. Job Boxes



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Answer:

B:

Touch Math is NOT one of the Generalization Activities discussed to help students use their acquired verbal behavior skills.



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Putting It All Together

Good Programming For Your Students Should Have Components Of:

- Intensive Teaching of Language Skills and Academics with Verbal Behavior Instruction
- Intensive Teaching of Functional Living Skills including Social Skills
- Generalization of Skills through Natural Environment Training



Example of Student Plan

- Incorporates Verbal Behavior Skills that focus on Language from the Assessment of Basic Language and Learning Skills- Revised (ABLLS-R)
- Incorporates Academic Skills
- Incorporates Functional Living Skills from the Assessment of Functional Living Skills (AFLS)
- Incorporates Job Boxes as well as some Natural Environment Training (NET) activities for Generalization



Example of Individual Student Plan: Page One (Highlights are Priorities)

Student:

AFLS Skills taught in NET	AFLS Skills taught in VB Format at Table
Basic Living: Toileting • TL15-Ask to go to the bathroom Home Skills: Dishes • DS1- Retrieves dishes from the cupboard • DS6- Put dishes in the dishwasher • DS8- Unloads the dishwasher • DS11- Washes dishes • DS18- Puts away glasses and dishes Clothing and Laundry Housekeeping and chores • HC1- Packs and unpacks backpack Leisure Games • LS12- Plays board games School Skills: Routines and Expectations • RE20- Lines up on request • RE45- Transitions between classes • RE47- Places all personal belongings in an appropriate place	Prereq- Identify body parts Basic Living: • BC1- Following instructions • BC5- Request missing items needed • BC5- Using communication device • GR15- Shows route • HS13- Close bleeding • HS14- Puts on bandage (use stuffed animal) • HG21- Verbally reports pain (use stuffed animal) Home Skills: Dishes • DS3- Select appropriate dishes for food items (pictures) • DS16- Dishes (could be NET also) • DS17- Sorts silverware Clothing and Laundry • CL3- Identifies clean and dirty (pictures) • CL3- Sorts laundry by color (pictures) • CL18- Matches and fold socks • CL17- Folds towel- then put away Housekeeping and Chores Leisure Games • LS10- Plays board games • LS1- Choose a book he wants to look at it Kitchen • KT13- Sorts and puts away food purchases School Skills: Meets at School • MS11- Uses a fork (stab marshmallow, play-doh) • MS12- Uses a napkin • MS13- Eats from his own plate Routines and Expectations • RE47- Places all personal belongings in an appropriate place



Example of Individual Student Plan: Page Two

Student:		
Job Boxes	NET for All Skills	
<ul style="list-style-type: none"> Puzzles Match socks Sort silverware 	<ul style="list-style-type: none"> Using books and magazines Working walks (knows) 	
Language Program	Reading/Writing Program	Math Program
<ul style="list-style-type: none"> Weather (after identifying, associations) Calendar Label objects 	<ul style="list-style-type: none"> Visual recipes Survival words Match words to pictures Match words to words 	<ul style="list-style-type: none"> Money Time (digital) Basic number identification (known, receptively identify numbers) Basic counting
Schedule Type		
<ul style="list-style-type: none"> Identical picture match to location 		
Resources to Aid in Programming		
<ul style="list-style-type: none"> Do2Learn.com- Activities for sequencing/pictures Life Skills Centers Year Long Life Skills Bundle (Teachers Pay Teachers) 		
Student Schedule:		
Half hour chunks		
Work 10 minutes, 3 minute break, work 10 minutes, 5 minute break		
10:00-10:15- unpack backpack- cold probe- breakfast		
10:15-10:45- VB language program		
<ul style="list-style-type: none"> Bathroom 		
10:45-11:15- VB Reading/Math (cards and skills)		
<ul style="list-style-type: none"> Bathroom 		
11:15-11:45- AFLS (Daily Living Skills)		
<ul style="list-style-type: none"> Bathroom 		
11:45-12:15- AFLS (Leisure Skills)		
<ul style="list-style-type: none"> Bathroom 		
12:20-12:30- Lunch (Lifts at a time, mind for what he wants, use silverware appropriately)		
12:30-1:00- Grooming and Jobs (wipe face, brush teeth, wipe table, rinse dishes)		
1:00-1:30- NET (structured teach, working walk, stories, play time)		
<ul style="list-style-type: none"> Bathroom 		
1:30-1:40- Packing backpack		



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Template of Student Plan

- Includes locations to list :
 - Verbal Behavior Language/ AFLS skills taught at “the table”
 - AFLS skills taught in the Natural Environment
 - Social Skills Instruction
 - Academic Instruction
 - Job Boxes and Natural Environment Activities for Generalization
 - Boxes for Schedules, Communication and Other Items



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Individual Student Plan Template: Page One

Student:

AFLS Skills taught in NET	AFLS Skills taught in VB Format at Table
Social Skills Instruction	



Individual Student Plan Template: Page Two

Student:

Job Boxes		NET for All Skills
Language Program	Reading/Writing Program	Math Program
Schedule Type		
Resources to Aid in Programming		
Student Schedule:		



Conclusion

- ◆ We know that many of our students with language and learning disorders, like autism, do not automatically generalize previously learned skills to a variety of environments, with new materials or with new staff.
- ◆ Therefore, the need to purposefully plan for generalization activities within the student's day is imperative.



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Generalization activities are fun to plan and fun for the students! Have a good time programming this important piece for your students.



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Electronic Forms Available

- NET Lesson Plan Template
- Small Group NET Lesson Plan Template
- Verbal Module Template
- NET Data Collection Template
- Working Walk Planning Template
- Working Walk Student Plan Template
- Individual Student Plan Template



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References

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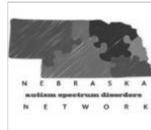
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THANK YOU!

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