Teaching Communication Skills Using ABA

Mary F. Knowles-Cervantes, MS, BCBA
Miami, Fl.
Applied Behavior Analysis

• Applied behavior analysis (ABA) is devoted to understanding and improving behavior

• B.F. Skinner founded ABA in the 1930s

• Basic assumptions
  • Causes of behavior lie in the environment
  • Behavior can be improved by systematic environmental manipulations
Applied Behavior Analysis

• Since 1960s ABA has been widely applied and researched with persons who have autism
  • Many negative behaviors reduced
  • Many functional behaviors taught
  • Language and communication increased

• ABA has improved lives of tens of thousands of children and adults with autism and developmental disabilities
Verbal Behavior Approach

• Uses methods of ABA
• Based on Skinner’s book *Verbal Behavior*
• Incorporates over 20 years of research from the journal *The Analysis of Verbal Behavior*
• Has been highly effective with thousands of children with autism and developmental disabilities
Primary Features

- Classifies language according to its “functions”
- Teaches requesting as 1st skill
- Does not directly teach eye contact/ sitting
- Manipulates child’s motivation to reduce avoidance and escape behavior
- Errorless teaching methods used
- Teaches most skills through mixing trials
Behavioral Classification of Language

- Receptive
  - Following instructions or complying with the requests of others
    - Touching picture of ball when asked to “Touch the ball”
- Echoic (Vocal Imitation)
  - Repeating what is heard
    - Saying “Ball” after someone else says “Ball”
Behavioral Classification of Language

Receptive:
Behavioral Classification of Language

Echoic (vocal imitation):
Behavioral Classification of Language

- Motor imitation
  - Copying someone’s motor movement
    - Clapping because someone else claps
- Tact (Labeling)
  - Naming or identifying objects, actions, & events
    - Saying “Ball” because you see a ball
Behavioral Classification of Language

Motor imitation:
Behavioral Classification of Language

Tact (labeling):
Behavioral Classification of Language

• Mand (Request)
  • Asking for reinforcers that you want
    • Asking for “ball” because the child is motivated to play

• Receptive by function, feature, or class
  • Identifying specific items when given a description of the function, the features, or the class of the item
    • Touching picture of a ball when someone asks, “Which one bounces?”
Behavioral Classification of Language

Mand (request):
Behavioral Classification of Language

Receptive by function, feature, class:
Behavioral Classification of Language

• Intraverbal
  • Answering questions or conversations when your words are controlled by other words
    • Saying “Ball” when someone else says “Toy”

• Textual
  • Reading written words
    • Saying “Ball” because you see the written word Ball

• Transcription
  • Writing and spelling words when spoken to you
    • Writing “Ball” because someone said “Ball”
Behavioral Classification of Language

Intraverbal:
The Different Meanings of “Juice”

• It is crucial to teach the various meanings of “Juice”
  • As a label (or tact)- “That’s juice!”
  • As a request (or mand)- “I want juice!”
  • In response to a “Wh” question or fill-in (intraverbal/conversational skills)- “What do you drink?” Child says “Juice!”
  • As a receptive language skill- Child selects a picture of juice when asked.
Importance of Considering Functions of Language

• Many children with language delays will not use words across all categories without explicit teaching

• Some children may have a large receptive repertoire but very few requests or conversational skills

• Often, others blame the child’s “cognitive abilities” (not teaching procedures) for the failure of developing many language skills

• These can frequently be overcome with appropriate teaching methods
Teaching Requests: Rationale

- Establishes therapist and learning environment as rewarding and fun
- Child quickly learns to control own environment
- Motivates child to *want* to learn
- Reduces escape/avoidance behaviors
Teaching Requests: Rationale

• Many collateral behaviors develop naturally as a result of teaching mands
  • Eye contact, sitting, attending
• Allows time to be spent teaching other important skills
• Reduces frustration and negative behavior on the part of the child
Teaching Requests: How to Begin

• Identify various fun preferred items
• At first keep items out of reach but visible
• Set aside at least 15-30 minutes daily
• Begin to “pair” the work environment with these fun items
  • This is a very important step that can make or break the success of any language program
  • At first items should be given for “free”
• Fade in demands only after the child is eagerly approaching you or the teacher
Teaching Requests: How to Begin

• Assess current vocal/verbal capability
  • Vocal imitation skills, Labels, etc.
  • No vocal imitation- begin with sign language
• Start with 2-3 requests for specific items/activities
  • Cookie, water, ball, car, movie, etc.
  • Don’t begin by teaching “more”
• Should also be done throughout the day whenever your child wants access to the items/activities
• Stay consistent and provide a lot of learning opportunities
Teaching Requests: Using Errorless Teaching Methods

• Teaching procedures are used to minimize or eliminate child’s errors
• Increases child’s successes
• Reduces “failures”
• Reduces avoidance and escape behaviors
• Prompts are quickly faded to minimize prompt dependency

• Let’s practice!
Moving Forward: Block and Mand procedure

- Begin once the child can reliably request for items when the item is present
- Allow access to a preferred item while engaging with your child
- Slowly block access to the item
  - Pause the iPad
  - Turn off the toy
  - Cover the cookie
- Use a time-delay procedure (wait 5 seconds) and then prompt the request
- Repeat until an independent response occurs and then provide more of the preferred item/activity.
Moving Forward: Advanced Requests

• Once your child is reliably requesting items using the block and mand procedure begin to teach these requests when the items is out of sight and motivated.

• Should be able to request for a variety of items/activities out of sight before moving on to other concepts.
  • Advanced requesting skills include:
    • Requesting for attention (e.g. “Watch this!”)
    • Requesting for information (e.g. “Where is my iPad?”)
Integrating Other Skills: Mixing it in!

- Begin incorporating other language skills (receptive language, labeling, etc.) once the child can reliably ask for 2-3 items/activities
- Teaching trials for a particular skill are frequently interspersed with other skills
- Maintenance is incorporated in each session
- Provides greater variety and novelty
- Increases interest in learning sessions
Integrating Other Skills: Mixing it in!

• Requesting should always be a priority
• Skills should be taught across behavioral classifications (receptive, tacts (labeling), intraverbals (conversational skills), etc.)
• Maintenance of skills should be assessed (and addressed) regularly
• Generalization should be incorporated from the outset
  • Different materials, settings, people, instructions
Critical Components of an Effective VB Program

- Assessment of the child’s repertoire
- Functional curriculum
- Appropriate teaching methods
- Appropriate data collection methods
- Competency-based staff training

- Monitoring child’s progress
- Monitoring staff performance
- Adjusting the program
- Integrated with reduction needs
- Working closely with a Behavior Analyst
Sample VB Session
Summary

• Must pay careful attention to program to ensure continued success
• Effective treatment is not easy – requires highly trained person to supervise program

• VB is an approach based on ABA
• Has been very effective in improving autistic children’s language and communication
• With VB approach children *want* to learn
How to Contact Us

• Mailing Address
  • 9220 Sunset Drive, Suite 101
    Miami, Fl., 33173
• Phone
  • 954-577-7790
• Internet
  • www.behavior-analysis.org