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Therapies

ABA Therapies

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> - Karen Chung, Founder and CEO, Special Learning, Inc.

Table of Contents

Introduction		
Incidental Teaching 1		
What is Incidental Teaching? 1		
Developing Skills Using Incidental Teaching 1		
Incidental Teaching Set Up 2		
8 Incidental Teaching Steps 2		
Benefits of Incidental Teaching 3		
Discrete Trial Training (DTT)		
What is Discrete Trial Training?4		
Discrete Trial Training Techniques4		
Discrete Trial Teaching Setting6		
Motivation and Reinforcement of DTT6		
Getting Started6		
Floortime		
Floortime and Developmental Milestones		

Table of Contents

Fluency Building
What is Fluency Building?
Developing Skills Using Fluency Building11
Steps to Fluency Building12
Benefits of Fluency Building13
Pivotal Response Treatment
What is Pivotal Response Treatment (PRT)?
Pivotal Behavioral Skills 14
PRT and Creating Motivation 15
PRT and Natural Learning 15
PRT vs. Other Therapies
TEACCH
What is TEACCH?
Summary 21
Verbal Behavior
What is Verbal Behavior?



	Developing Communication Skills Using Verbal Behavior	22
	VB vs. ABA	23
	Teaching Verbal Behavior	24
	Benefits of Verbal Behavior	.25
Re	eferences	26

Introduction

Applied Behavior Analysis (ABA) is a science of behavior focused on increasing desirable behavior and decreasing problematic behavior. ABA can be applied to any behavior of any living organism. The term "ABA" in relation to autism treatment took a stronghold in the autism community after the impressive success of the Lovaas method, which was defined in the iconic article written by Ivar Lovaas in 1987, "Behavioral treatment and normal educational and intellectual functioning in young autistic Children." Dr. Lovaas found that nearly 90% of the participants in his study made significant gains and over half attained normal IQ scores following ABA intervention (Lovaas, 1987). Since this study, hundreds of other research studies have explored methods of applying ABA on individuals with autism.

Various types of ABA therapies are widely in use today to support social, communication, and emotional development in individuals with autism. While some focus on broader foundational developmental capacities, others hone in on discrete skills and behaviors. In the behavioral school, a popular ABA technique is the basic three-step contingency of an Antecedent, a Behavior, and a Consequence. Also known as ABC, this form of voluntary behavior modification using positive (delivers the toy) or negative (withholds the toy) reinforcements as a consequence is strongly identified with ABA. And it is one of many proven ABA techniques and therapies that we will discuss in this ebook.

Within the broader science of ABA, various approaches have been identified as ABA treatments that serve the varying needs of individuals with autism. What they all have in common is a primary focus on how the individual behaves in relation to his or her environment.



A major strength of ABA is that it is an evidence-based practice. Data can be collected and progress easily measured, providing valuable information for the development of targeted lessons that meet a child's individual needs. This evidence has helped identify the ABA therapies addressed in the following chapters as some of the most effective approaches applying ABA principles.



Incidental Teaching

What is Incidental Teaching?

Incidental Teaching is a naturalistic, child-directed teaching approach. By drawing on the child's natural motivation and interests, the therapist or instructor utilizes events that naturally take place and are initiated by the child to teach communication and social skills. The instructor may also contrive events to encourage the desired behavior, for example, by placing a bag of cookies nearby at snack time or enthusiastically playing with a new toy. Incidental Teaching can be a creative and spontaneous process for an imaginative instructor who takes advantage of the many opportunities in a day to make learning relevant and engaging.



Developing Skills Using Incidental Teaching

Incidental Teaching is most often used to advance communication skills. Applying ABA techniques such as reinforcement, the child is encouraged to utilize functional and effective forms of communication, including verbal and non-verbal. While a broad range of communication skills



are successfully targeted, Incidental Teaching is primarily concerned with language acquisition. The natural setting utilized with this approach has proven particularly effective in encouraging the use of spontaneous speech (Charlop-Christy & Carpenter, 2000). Language development may include a single utterance or compound sentences, depending on the current skill level of the learner.

Incidental Teaching Set Up

Incidental Teaching typically takes place in a natural and familiar environment. The instructor first establishes prearranged goals for learning and then develops a setting enriched with learning opportunities. The child's personal interests are taken into consideration during the planning process. As the child reveals certain preferences and interests, the instructor will reinforce these interests in a variety of ways. Some ways the therapist may support the child's interests is by asking questions or hinting at certain desired responses. Through these methods, the trainer is able to set up the environment for natural opportunities for learning to take place.

8 Incidental Teaching Steps

Following are the eight key elements of incidental teaching, according to Research Autism:

- 1. The teacher or parent chooses an educational objective, such as asking for a green car.
- 2. The adult arranges the natural environment to promote student motivation and interest in the materials related to teaching the objective. For example, the teacher puts the green car on a shelf where the child can see it.
- 3. The child shows interest in the materials through verbalization or gestures, thus initiating the teaching session. For example, the child points to the car and says, "Car."
- 4. The adult encourages the child to elaborate on his or her initiation, based on the student's developmental level. For example, the teacher says, "What color is the car?"
- 5. If the child responds correctly to the prompt, the adult provides specific praise and gives the child brief access to the desired materials (i.e., the car).



- 6. If the child does not respond or responds incorrectly, the adult provides up to three more prompts, such as providing the necessary words. Once the child responds correctly, he or she receives specific praise and brief access to the materials.
- 7. The adult "takes a turn" with the materials (i.e., replaces them on the shelf or plays with them, or, says, "I want the green car" and picks up the green car). The steps begin again.
- The Incidental Teaching session should end with success (i.e., the child responds correctly and receives access to the materials). The session should be brief and end once the child loses interest.

Benefits of Incidental Teaching

Empirical research showing the effectiveness of Incidental Teaching on increasing communication has been accumulating since the 1960s (Hart & Risley, 1975). It has proven to be effective in improving communication with children with and without disabilities (Hart & Risley, 1975; McGee & Daly, 2007), and in both verbal and non-verbal individuals. To increase its effectiveness with your child, be observant of, and responsive to, your child's natural behavior; use delayed responses to encourage your child to speak; and provide prompts and hints to help him or her elaborate on his or her responses.

It is important to note that Incidental Teaching is not manding nor is it Discrete Trial Training (DTT); however, ABA therapies are often complementary. A spontaneous and flexible instructor may find opportunities to apply Incidental Teaching in the course of using these and other ABA therapies. Planning for Incidental Teaching as part of daily activities naturally provides more opportunities for generalization across different settings and to use it with other therapies.





Discrete Trial Training (DTT)

What is Discrete Trial Training?

Discrete Trial Training (DTT), also known as Discrete Trial Teaching and Discrete Trial Instruction, breaks down skills into short, simplified lessons to expand the learning experience of children diagnosed with autism. DTT uses an instructional method that supports children who have short attention spans and can benefit from recurring trials. Typically taught in a one-on-one setting, it is the preferred approach to teach children who need reinforcement of a certain behavior in order for it to be learned and become a way of living for them.

Discrete Trial Training is used to help children gain a variety of developmental skills. Some of these skills include social, cognitive, play, communication and self-help. Since DTT is a highly individualized form of teaching, professional assessments and evaluations are usually conducted to help determine the specific skills the child needs to learn at his or her skill level. Family members and those close to the child should be involved in this process as well.

Discrete Trial Training Techniques

Discrete Trial Training divides specific skills into smaller units or levels so a skill is taught one step at a time in-depth until the child becomes proficient in it. The style of teaching is repetitive with lots of reiteration. The ABA three-step contingency of an Antecedent, a Behavior, and a Consequence (ABC) is an integral part of a DTT lesson. The instructor may start out by giving the child suggestions and hints called prompts, but the objective is to fade these out as soon as the opportunity arises.



An appropriate award or reinforcement system is used to reinforce desired responses.

Each discrete trial has five distinct parts (Smith, 2001, p. 86):

- 1. Cue (A clear, brief instruction is provided, "What is it?")
- 2. Prompt (Prompts should be gradually faded so that a child learns to independently emit the response.)
- 3. Response (The child gives a correct or incorrect response.)
- 4. Consequence (If the child answers correctly, the teacher immediately reinforces the behavior with praise, tickles, edibles, toys, etc. If the response is incorrect, the teacher may respond with "No," look away, or otherwise signal that the answer was not correct.)
- 5. Intertrial interval (There is a brief 1 to 5 second pause before the cue (step 1) for the next discrete trial.)

Data should be collected at every discrete trial for a minimum of 5 trials, preferably 10 trials.

Take, for example, Jason who is learning to mand, or request, for his apple juice box. DTT would break this request down into two discrete behaviors to be learned separately: getting mom's attention (establishing joint attention) and asking for the apple juice. Mom would first teach Jason how to get her attention. He might learn to say, "Excuse me" and then point to the apple juice box when mom is looking. Then, he will learn to vocally mand by saying, "apple juice." Jason can then practice combining these two skills to obtain the apple juice. To teach each discrete behavior, the teacher would use the three-step contingency, ABC.



Discrete Trial Teaching Setting

Generally, the person providing the direct care does not necessarily need to have specific credentials or even experience, but should be trained by a supervisor/professional who is trained in this method. Research sug-

Time and workspace are crucial elements when trying to teach new skills. gests that between 30 and 40 hours per week of DTT provide the best outcomes (Green, 1996; Sallows & Graupner, 2005).

Workspace is very important when trying to implement Discrete Trial Training. It is vital to have a specific area prepared with minimal distractions. Although the goal of DTT is to teach a child in his or her natural environment (whether it be home or school), you may want to start out in a more contrived workspace away from busy environments to minimize distractions.

Motivation and Reinforcement of DTT

The behavior of the child should be carefully monitored during Discrete Trial Training. It involves highly structured training that can be intense and tiring for a child with autism. The proper use of rewards, reinforcements and motivational techniques can help keep the child engaged through all the steps of DTT. Before choosing motivation techniques, it is important to find out what works for your child. Reinforcement will not be effective if it involves something the child has no interest in. Reinforcers may include food, toys (with a specified time limit) and adult-directed activities.

Getting Started

A growing volume of empirical research supports the DTT method. Nearly all children with autism learn new skills with this method, although children with IQs below 44 and an absence of language may experience a lower rate of learning (Sallows & Graupner, 2005). The best place to start is with an evaluation to identify your child's level and the initial skills and behaviors to be targeted. An abundance of resources are available to help you develop a DTT program. Training someone to provide DTT is relatively easy, although finding someone qualified to do this training should involve referrals, references and trial lessons to assess the child-instructor rapport.





Floortime

Floortime consists of taking the time to interact with the child in an activity setting for increments of 20 or more minutes at a time. During Floortime, parents or caregivers engage in activities that help to stimulate the child's mind. This is accomplished by following the child's lead, which means that the parent acts on the child's natural interests and emotions to encourage him or her to improve his or her social, intellectual, and emotional capabilities. The objective is to draw the child with autism into a shared world where he or she is naturally motivated to engage in meaningful interactions critical to his or her developmental progress.

Floortime is used to help children who have been diagnosed with autism with speech, mental health, occupational therapy, education, and when necessary, biomedical and augmentative interventions. Different from ABA therapies that focus on developing skills and behaviors, Floortime has a broader focus of building foundational developmental capacities through emotional development.

Floortime and Developmental Milestones

Floortime is based on DIR, or the DIR[®]/Floortime[™] model developed by Dr. Stanley Greenspan. DIR is an acronym for the Developmental, Individual Difference, and Relationship-based Model. When combined together, a special program is developed specifically for the child based on his or her unique challenges and strengths. During the developmental phase of this model, the child is required to master six milestones that lead to healthy intellectual and emotional growth (ICDL). The Interdisciplinary Council on



Developmental and Learning Disorders enumerated these milestones as:

- Learning how to remain calm and regulated;
- Connecting and relating to others;
- Initiating and responding to various forms of communication;
- Engaging in communal social problem-solving and creating a string of deliberate behaviors using an unbroken flow of interactions;
- Encouraging creative playing and thoughts, and communicating ideas to meet needs; and

• Logically building bridges between ideas, and bringing about higher capacity levels of thinking reflectively. A Floortime Teaching Session Playing with your child seems like an easy enough and fun job. To ensure it is also a rewarding learning experience, the following guidelines will help to create an engaging and productive Floortime session.



• Foremost, let your child take the

lead. If he or she decides to color, let him or her choose the coloring book, crayon and location. He or she may be more comfortable at the play table than on the floor but imposing your ideas on him or her may create friction. In response to an interruption in his or her spontaneous play, he or she may be less open to you joining in. • Enter your child's play space on his or her terms; in this case, by sitting on the floor with him or her. Ensure he or she remains in charge of his or her playtime. Ask if you can hand the crayons to him or her. Discuss what colors and pictures he or she likes.

• Once you are working well together, you can introduce a learning opportunity. For example, put a crayon in either hand and ask him or her, "Do you want the red crayon? Or do you want the blue crayon?" If he or she tries to grab the crayon, pull back slightly. Prompt him or her again until he or she asks for the crayon he or she wants, "Red."

• Use emotions to create meaningful interactions. If your child is enthusiastic about an aspect of the coloring activity—the picture, the color—capture the moment. If he or she is excited about color-ing the red apple, match his or her excitement. Praise him or her for choosing the perfect red crayon for the apple.

• Use emotional expression to show encouragement—pride, happiness, delight, love and warmth. Avoid coming across as too detached or overly emotional.

• Remember to pace your Floortime in accordance with the natural flow of the play activity. If your interaction is not natural, your child may exhibit signs of maladaptive behavior.

Above all else, Floortime and the DIR Model showcase the importance for parents and other members of the family to interact with a child with autism to play a role in supporting his or her emotional development.



Fluency Building

What is Fluency Building?

Fluency Building is the act of teaching complex behaviors until a level of efficiency is reached. On the instructor's part, it involves providing prompts and reinforcements, and responding precisely and promptly when a level of skill development is reached. Fluency Building is a teaching technique that can be applied with a variety of teaching methods and other ABA therapies. A step is learned and considered to be fluent when the child is able to perform the skill effortlessly and automatically (Fabrizio, 2003). Other names for Fluency Building include Precision Teaching and Behavioral Fluency.

Developing Skills Using Fluency Building

Fluency Building's objective is to reach mastery, not only in accuracy but also in retention, endurance, application, and stability. These common goals can be applied to any skill set. Common skill areas include imitation skills (physical and vocal), receptive language, expressive language, math, reading, and writing, as well as daily living skills. Following is the recommended frequency at which fluency is considered to be reached for communication skills (Fabrizio, 2003):

Imitation Skills o 30 to 35 correct responses per minute o 0 – 1 error per minute

- Receptive Language Skills
 o 30 to 35 correct responses per minute
 o 0 1 error per minute
- Expressive Language Skills
 o 50 to 55 correct responses per minute
 o 0 1 error per minute



Steps to Fluency Building

1. The first step in building fluency is to develop accuracy. A child must first develop the skill to a certain level of accuracy. Typically, either 80%, 90%, or 100% accuracy is desired. Any teaching approach using the basic three-step contingency in ABA (such as Discrete Trial Training) can be utilized to help the child reach the desired accuracy for the targeted response.

2. Once a child has learned a skill to accuracy, the next step is daily practice under timed conditions (Fabrizio, 2003). Using a timer, the child will practice completing multiple responses of the skill in a predetermined amount of time.

3. Charting is a very important step in the Fluency Building process. While the child is working on increasing the rate of accurate responding, his or her best performance is charted each day (Fabrizio, 2003). Fluency Building utilizes the Standard Celeration Chart (SCC) to graph the responses. Reviewing the SCC is an important component to Fluency Building as this is how the effectiveness of the teaching is monitored and decisions are made on learning development.

4. The fourth component of Fluency Building is to continue teaching until the child reaches the frequency goals (Fabrizio, 2003). As the child reaches the set frequency benchmarks, he or she is more likely to retain the information, perform the behavior/response for longer periods of time (endurance), and generalize the skill across environments and stimuli (application).

5. The final component is testing. After a child has mastered the frequency goals, instruction on that target or skill will cease for one month. After one month off, the skill is assessed for retention. If the child has maintained the same levels or greater in accuracy and rate, he or she has demonstrated retention of that skill. Endurance, stability, and application should also be evaluated.



Benefits of Fluency Building

Focusing on Fluency Building supports overall learning objectives. Research suggests that reaching fluency, as described above, may result in increases in attention and retention of information, and a decrease in fatigue. There is also evidence demonstrating that fluency may support a greater ability to progress from basic skills to more advanced skills (Kubina & Yurich, 2009).







Pivotal Response Treatment

What is Pivotal Response Treatment (PRT)?

Pivotal Response Treatment (PRT) focuses on the development of key, or pivotal, behavioral skills that, in turn, positively affect related skills. The focus is on targeting the primary symptoms of autism spectrum disorder with a goal of inducing positive global change while moving the child toward a typical developmental trajectory followed by his or her peers. Pivotal Response Treatment is also known as Pivotal Response Training, Pivotal Response Therapy, Pivotal Response Intervention, and Natural Language Paradigm.

Pivotal Behavioral Skills

Pivotal Response Training focuses on what is considered to be the pivotal behaviors, or foundational areas of need. Pivotal behaviors are specific behaviors focused on treatment that have a direct and positive impact on other areas of functioning. As an example, if a child learns the ability to initiate, then it will allow him or her to perform other behaviors without being taught, such as asking an adult for what he or she wants. PRT shows that this approach to treatment planning and implementation is more efficient and successful for the student (the child) and teacher (parent and/or therapist).

Five pivotal areas have been studied (Koegel & Koegel, 2006):

- 1. Motivation
- 2. Response to multiple cues
- 3. Self-management



Self-initiations
 Empathy

By paying closer attention to how behaviors and the environment interact, PRT has produced successes in these areas. To improve the functioning of persons with autism, Koegel, Koegel and colleagues considered what behaviors to target first, why these behaviors should be considered for treatment, and how to teach in a more natural environment that considers the child's motivations in the moment.

The original PRT methods were applied with children who were non-vocal. Over the years, researchers tested the same procedures with higher functioning children with ASD. In both cases, they found an increase in the child's vocabulary and a decrease in problem behavior.

PRT and Creating Motivation

In beginning therapy, one of the first areas to work on is motivation. Like Discrete Trial Training, PRT teaching opportunities include the basic threestep contingency in ABA: an Antecedent, a Behavior, and a Consequence; otherwise known as ABC. For example, first, the instructor presents an antecedent such as a direction, a question, a prompt, and/or one of your child's favorite items. Following the presentation of the antecedent, your child will respond. This is the B, or Behavior step of the contingency. And finally, a Consequence is provided to reinforce your child's behavior.

Different from DTT, instead of breaking down the skills and behaviors into discrete teaching units, PRT places more focus on the context in which the behavior is taught and builds on the learning. Take the example of Mary who has just practiced identifying numbers with her mother while changing TV channels. Later at the park, her mother decides it is a good time to call Dad at home. Mary is given the telephone number and asked



to dial the number. Mom then prompts Mary to learn the home telephone number by asking her to read out the numbers one by one.

Your child will naturally respond more effectively when his or her motivation for the item or task is high. Thus, your goal is to create the right motivational conditions. PRT motivational procedures may include teaching a child communicative intent, for example, to vocalize first words as a request for an item her or she is interested in, and to discriminate labels of items in his or her environment.

PRT also heavily emphasizes that learning should be fun and follow the child's interests. Unlike DTT, drills, or repetitions are avoided in this approach. This naturalistic approach requires a strong commitment from the family and well-trained providers, as consistency is of upmost importance.

Along with following the three-step contingency (ABC) teaching procedure, there are many additional steps you can take to increase motivation and learning retention, including:

Learning should be fun and supportinve of the child's interest.

- Identifying and using toys, food, and activities the child is motivated by;
- Using clear, simple language that is appropriate based upon the child's current level of need;
- Teaching in the child's natural environment;
- Using natural reinforcers as much as possible;
- Interspersing maintenance tasks within acquisition teaching opportunities to keep success and motivation high; and
- Allowing the child to choose the activity and follow his or her motivations and interests; otherwise termed shared control.

PRT and Natural Learning

16

In Pivotal Response Training, the family system plays an important role in

optimizing treatment outcomes (Koegel). As espoused by other famous ABA autism pioneers such as Dr. Ivar Lovaas, parents are trained to be change agents or therapists, who provide behavioral intervention. Pivotal behaviors are taught within already existing family routines in the child's natural environment. Therefore, the PRT approach requires parental participation in both creating the treatment design and in implementing the procedures within the child's daily life. When the family is actively involved, research indicates an increase in the quality of family life and a reduction in family stress.

PRT vs. Other Therapies

Pivotal Response Treatment (PRT) is based in both the developmental approach and applied behavior analysis (ABA) principles and procedures. Since pivotal behaviors relate directly to the broad symptoms of autism spectrum disorder, PRT is considered different from a more traditional approach of targeting specific behaviors by breaking down complex skills into its components, teaching the components individually, and then bringing the components together again to perform the more complex skill in part or as a whole. Though this more traditional approach has been proven successful, it can take a long time to meet the ultimate objective, that is, the ability to complete the final, more complex behavior. According to some in the ABA field, PRT is considered a variation of the traditional discrete trial training method. Its similarities include the use of the three-step contingency procedure and reinforcement strategies; speaking with clear, simple language and/or language that is appropriate to the learner; and teaching the parent to be a behavior change agent. Also similar to Discrete Trial Training, PRT recommends using language appropriate to the child's current level of need. For example, you may need to start with modeling single words, first teaching nouns instead of more complex sentence structure, and sticking with the same language models so your child can hear these prompts repeated many times. Differences from initial DTT methods, or what some term rigid DTT, may include working within the child's natural environment, interspersing mastered skills with new, introducing harder tasks, and using natural reinforcers.

As the research shows, intensive behavioral treatments utilizing the principles of ABA are the most effective in treating autism. Current case studies published by PRT authors indicate that this thorough ABA therapy produces successful outcomes.







TEACCH

What is TEACCH?

TEACCH takes a comprehensive 'whole life' approach to addressing autism by applying the best available autism treatment methods. Standing for Treatment and Education of Autistic and Communication-related Handicapped Children, TEACCH, is technically not a specific method but more of a best practices program developed by the University of North Carolina at Chapel Hill (UNC) in 1972. When someone refers to utilizing TEACCH as an autism therapy, they are likely referring to the TEACCH visual teaching method "Structured Teaching." The remainder of this chapter refers to Structured Teaching.

This program assists individuals with comprehending their surroundings, gaining the ability to make decisions relating specifically to their lives, and obtaining social skills to make it easier to connect with others. The ultimate goal for each student utilizing the TEACCH approach to structured teaching is to gain maximum independence.

"In the same way that a plant needs sun, water and soil to grow, a child who has easy access to the tools that facilitate learning can develop faster and more fully."

What is TEACCH?

TEACCH Structured Teaching uses a highly visual approach to instruction, often a strength for children with autism. With the goal of increasing independence, it involves arranging the environment in a way that facilitates learning and supplying visual guidance that provides direction



about the expectations of the activities. Because children with autism often face oral communication challenges, TEACCH sets a strong emphasis on educating and training through visual avenues. In the same way that a plant needs sun, water, and soil to grow, a child who has easy access to the tools that facilitate learning can develop faster and more fully.

Visual structure is presented in a variety of ways, including (Bright Tots, 2011) :

- organizing areas of the classroom to support visual learning;
- providing a daily schedule using pictures or written words; and
- visual instructions and visual organization signalling the beginning and end of tasks.

The TEACCH approach includes methods that aim to modify undesirable behaviors while improving the level of proficiency of an individual with autism. The environment is organized in a way that best supports the learning needs of the individual (Bright Tots, 2011). By doing so, the teacher can reduce incidents of maladaptive behavior and errors while increasing the number of learning opportunities. Four elements are generally required for a structured teaching environment.

According to Mesibov & Shea (2010), these include:

1. Physical Structure. Arrange the environment in such a way that there is a clear order in which activities or expectations occur, and distractions are eliminated.

2. Sequence of Events. Create a meaningful, individualized, and easy-toread schedule to help the student successfully transition to new tasks throughout the day. It could include written words, pictures, or even meaningful objects (e.g., a real toothbrush signifying time to brush teeth and an actual crayon when it is time to color).

3. Tasks. Organize individual tasks so that the expectations of when to begin, what to do, and when to complete the task are clearly identified.

Work/Activity System. Organize multiple tasks into meaningful systems to help, the student can independently engage in increasing intervals of time working toward multiple tasks.



Summary

Research has demonstrated that TEACCH is a successful evidence-based intervention for the treatment of autism. Educating parents, teachers, care providers, and other professionals about the various levels of autism is an important component of providing a complete 'whole life' program. By utilizing a variety of methods that consider the abilities and needs of the individual, it aims to assist individuals who have been diagnosed with autism to not only gain skills but also maintain them once they reach adulthood. The TEACCH program at UNC continues to conduct research and provide clinical services and professional training (Mesibov & Shea, 2010).





Verbal Behavior

What is Verbal Behavior?

Verbal Behavior, also known as VB, is a method of teaching language that focuses on the idea that word meanings can be more easily understood by their functions. B.F. Skinner developed the term, and it is also the name of his 1957 book on the analysis of language. To teach a child with language delays the meaning of words, you must first teach their function. In other words, instead of just teaching a word, we must teach him or her how to functionally apply the word. For example, a child with autism might say the word 'toilet' when he or she sees one, but he or she may not be able to say toilet when he or she needs to use the bathroom or answer correctly when asked what a toilet is used for. Verbal Behavior is also known as Verbal Behavior Intervention (VBI).

Developing Communication Skills Using Verbal Behavior

Verbal Behavior Intervention focuses on communication skills, including receptive and expressive language across the verbal operants of mands (requesting), tacts (labeling), echoics (vocal imitation), and intraverbals (conversational skills). These verbal operants are controlled by different environmental antecedents (Bondy, Esch, Esch, & Sundberg, 2010). Learning across the operants also includes working on gross and fine motor imitation, and textual (writing) and listening (following instructions) skills.



VB vs. ABA

Although Verbal Behavior and Applied Behavioral Analysis (ABA) are both derived from philosophies established by Skinner, they use different approaches to teaching language. According to Skinner, language is broken down into parts that have different objectives. Significantly, both ABA and VB apply the basic verbal parts of language defined by Skinner as echoics, mands, tacts, and intraverbals. In fact, today, Verbal Behavior Intervention techniques are often found in ABA techniques, such as manding. The term 'mand' refers to the child demanding or acquiring what is desired. For example, the child says apple when he or she wants an apple. When he or she is given an apple, his or her language is reinforced and he or she is likely to repeat this action. The child is taught to use language in a functional way by verbally requesting what he or she wants.

With ABA, the child is not necessarily taught to verbally request what he or she wants but to communicate it in some way. In the ABA method of teaching language, children are taught to label or name things. For example, they will learn to say the word 'phone' when they see a phone. Since they are not necessarily taught the function of the phone, they may not be able to use this word in a sentence. Since the focus of VB is to teach functional language, it is often used to compliment the ABA approach.



Teaching Verbal Behavior

To encourage the development of Verbal Behavior, the therapist rewards and reinforces correct uses of language. The therapist also takes notice and records what works and does not work for the child. Also note that Verbal Behavior is not limited to vocal language. Verbal Behavior can be utilized with all forms of communication, including sign language, picture exchange, and augmentative communication, as well as vocal language.

Let us look at an example using intraverbals, which often involve responses to 'WH' questions. Verbal Behavior would teach the word 'toothpaste,' for example, within a functional setting. The child is handed his or her toothbrush. The parent holds up the toothpaste and asks, "What is this?" The child responds, "Toothpaste." Alternatively, if the child does not speak, he or she could point at the toothpaste, a form of gestural requesting.



The Verbal Behavior Intervention approach is not limited to a specified type of environment, although the child should be in as natural of an environment as the child can effectively learn in. Verbal Behavior has been effectively utilized as a basis for developing goals and interventions by speech and language pathologists, and therefore can be used effectively in the classroom.

The Verbal Behavior Intervention does not require the direct care person to be certified or credentialed or even

have higher education to provide the direct service. However, the person would need to be thoroughly trained in this approach to be an effective provider. Once a child acquires a new Verbal Behavior target, all care providers including parents and teachers should attempt to require the child to use this skill as often as possible. Data collection should be taken minimally, at least once per target at each sitting, noting the overall prompt required until mastery.

Benefits of Verbal Behavior

Verbal Behavior is a proven ABA approach that can be effectively combined with other teaching methods, such as Discrete Trial Training (DTT) or Natural Environment Training (NET). In fact, combining the total operants of Verbal Behavior across both DTT and NET may contribute to acquiring a more complete language repertoire (Sundberg & Michael, 2001). Children need functional skills across verbal operants to increase Verbal Behavior, particularly in environments with their peers (Sundberg & Michael, 2001). A child without strong intraverbal skills may not interact appropriately in response to his or her peers' verbal behavior, which may weaken further interactions.

Verbal Behavior also capitalizes on the child's own motivation, teaching the child to communicate for what he or she desires. This ability to mand appropriately may reduce problematic behavior that formerly functioned as a means of obtaining the desired item.



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