Applied Behavioral Analysis

Using Skinner's Analysis of Verbal Behavior (ABA/VB)

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Over the past 40 years a large body of scientific literature has shown the successful use of Applied Behavioral Analysis (ABA) to reduce problem behavior and increase appropriate skills for individuals with autism. It is the only autism intervention with a strong research-based pedigree.

ABA was born in 1938 when B.F. Skinner published *The Behavior of Organisms*. This book was the first to describe how learning occurs as the result of selection by consequences of behavior. Skinner called this process operant conditioning. As the science matured, and was applied to education and other areas of socially significant behavior, it became known as ABA.

In 1957 Skinner published *Verbal Behavior*. In this book Skinner analyzed the use of language and broke it into a set of functional units. Each of these units serves a distinct communication function and is called a verbal operant.

Parents Of Autistic Children of Northern Virginia (POAC-NoVA) strongly and unreservedly advocates the use of ABA using Skinner's analysis of verbal behavior (ABA/VB) for the teaching of students on the autism spectrum.

Essential Elements of an ABA/VB Program

The following is a summary of what an effective ABA/VB teaching program must include:

Language is taught with a focus on the verbal operants as separate functional units. Rather than merely distinguishing between expressive and receptive language, a verbal behavior program uses the much more useful and sophisticated verbal operant structure identified by Skinner.

Assessments are done within the verbal operants.

Curriculum is based on these assessments of current functioning within each verbal operant.

The initial emphasis for early learners is on mand training. Mands (roughly equivalent to requests) are the only verbal operant that receive reinforcement specific to the request made. Mands allow the student to control the delivery of reinforcers and begin to use language to control their environment, very often reducing problem behavior. Manding is the most natural way to teach spontaneous speech, a common deficit in autism. Mand training can also help to establish the teacher as a conditioned reinforcer, which makes the student a more willing learner.

Mands are taught by contriving and capturing a variety of motivational situations in the natural environment. Simply relying on naturally occurring motivations rarely results in a sufficient variety or number of teaching opportunities for most students with autism.

The mands taught must include items, actions, attention, and information. The reinforcement used should be relevant to the motivation of the student.

Once mands for items and actions are established, the program moves to an emphasis on the teaching of tacts (labeling of non-verbal stimuli) as well as other verbal operants.

As the student progresses within the program the next primary emphasis is on an intraverbal repertoire. Intraverbals are reponses to the language of another person typically through fill in the blank and who/what/when/where/why questions while fading the presence of the answer, or stimulus over time. This prepares the student for more advanced language such as conversation. Research has shown that a student with autism will not necessarily respond under intraverbal control even if he has many mands and tacts. Intraverbal skills must usually be taught.

Teaching is done via discrete trial training (DTT) as well as by natural environment training (NET). The

strength of NET is mand training which uses current motivation and delivers reinforcement specific to that motivation. The strength of DTT is tact and other receptive operant training using both non-verbal stimuli and verbal stimuli as well as non-specific reinforcement. To most effectively teach across the verbal operants, both teaching environments must be used.

Inclusion decisions are largely based on whether the student has the basic verbal repertoires to acquire new language in the general education environment. In addition, the following types of skills and behaviors are usually necessary: readiness to learn (e.g. sitting appropriately), appropriate engagement in task completion activities, toileting, ability to attend (pay attention) at a distance, properly raises hand to answer or solicit help and information, and near zero rates of significant interfering behaviors. If these skills and behaviors are not in place, then they should be the focus of systematic teaching prior to extensive mainstream inclusion. It is also important that the student's needs, including the best setting for the teaching of these skills, are outlined in specific goals and objectives. Inclusion should not be used simply for the sake of inclusion.

Teaching procedures used are consistent with current research reported in *Journal of Applied Behavior Analysis*, http://seab.envmed.rochester.edu/jaba/, and *Analysis of Verbal Behavior*, www.abainternational.org/journals.asp, as well as other refereed and peer-reviewed ABA journals.

Recommended ABA/VB Resources:

✦ *Teaching Language to Children with Autism or Other Developmental Disabilities* – by Dr. Mark Sundberg and Dr. James Partington.

This book is the best single resource for teaching children with autism. It clearly and thoroughly outlines how to establish and maintain an ABA/VB assessment and intervention program. Purchase from:

Behavior Analysts, Inc. • www.behavioranalysts.com
Different Roads to Learning • www.difflearn.com

✦ *Assessment of Basic Language and Learning Skills* – by Dr. Mark Sundberg and Dr. James Partington.

The ABLLS is an assessment instrument, skills tracking tool, and curriculum development guide. It serves each of these functions very well and we find it an essential part of an effective ABA/VB program for early intervention and young children. The ABLLS was revised in 2006 and released as the Updated ABLLS-R by Dr. James Partington. Purchase from:

Behavior Analysts, Inc. • www.behavioranalysts.com
Different Roads to Learning • www.difflearn.com

✦ *The Verbal Behavior Milestones Assessment and Placement Program* – by Dr. Mark Sundberg.

The VB-MAPP is an assessment tool, curriculum guide, and skill tracking system that is designed for children with autism, and other individuals who demonstrate language delays. POAC-NoVA has had wonderful success with trainings and workshops based on the April 2008 pre-release edition and it truly represents a new generation of verbal behavior assessment.

• **www.marksundberg.com/vb-mapp.htm**

✦ *The Verbal Behavior Approach to Teaching Children with Autism* – A set of seminars on CD-ROM by Dr. Vincent Carbone.

This is a comprehensive introduction to ABA/VB. Over seven hours of audio-visual training on seven CDs. Dr. Carbone is an internationally renowned ABA researcher, teacher, and speaker. These seminars are both highly useful and highly entertaining. Available at the ABA Toolchest:

• **www.abatoolchest.com**

✦ *The Benefits of Skinner's Analysis of Verbal Behavior for Children With Autism* – An article by Dr. Mark Sundberg and Dr. Jack Michael.

✦ *Teaching Verbal Behavior: Getting Started* – First in a series of ABA/VB training DVDs by Holly Kibbe and Cherish Twigg.

They are well-known for their top-notch ABA/VB training workshops. Available at Establishing Operations, Inc.

• **http://establishingoperationsinc.com**

✦ The Verbal Behavior Network provides a wealth of free training and teaching materials including resources to assist in teaching Sign Language.

• **www.vbntraining.com/resources**
• **www.thefate.org**
• **www.vbteam.com** - under construction as of this writing, previously located at www.verbalbehaviornetwork.com.

✦ Excellent, and free, downloadable training materials can be obtained from the Mariposa School

• **www.mariposaschool.org/programs**

including their wonderful Training Manual compiled for Verbal Behavior Training Seminars. This manual was compiled from handouts for Verbal Behavior Training Seminars and was recently revised for ABLLS-R.

❖ Free ABA/VB list-servs:
  • http://groups.yahoo.com/group/DTT-NET/
  • http://groups.yahoo.com/group/VerbalBehavior

❖ The Behavior Analyst Certification Board (BACB) has established a recognized international certification program for ABA practitioners. POAC-NoVA strongly endorses the use of credentialed BACB professionals (BCBA or BCABA) for the teaching of students with autism.
  • **www.bacb.com**

❖ The Autism Special Interest Group (SIG) of the Association for Behavior Analysis publishes their *Consumer Guidelines for Identifying, Selecting, and Evaluating Behavior Analysts Working with Individuals with Autism Spectrum Disorder*s to promote effective education and treatment based on the best available scientific evidence.
  • **www.autismsig.org.**

❖ The Association for Science in Autism Treatment (ASAT) provides newly posted reviews of treatment summaries and relevant research that can be most helpful to families looking for alternative therapies.
  • **www.asatonline.org**

❖ *How to Start A Home Based ABA/VB program? A Parents Manual"* – by Geetha Athreya & Chitra Sharathchandra.
  This is POAC-NoVA's guide for parents to establish an intensive in-home ABA/VB program in order to meet their child's unique needs that may include motor, linguistic, social, emotional and other academic skills in order to supplement school programs or to act as a stand-alone program.
  • **www.POAC-NoVA.org/resources**

❖ The POAC-NoVA Verbal Behavior Instructors Academy (PVBIA) is a school for ABA/VB therapists/instructors which trains new therapists in research-based methodologies, teaches parents and therapists best practices in organizing and running home programs, helps parents organize structured training programs for their therapists, and serves as a model for other locally-based schools to train therapists in effective, research-based methodologies for teaching developmentally delayed children.
  • **www.POAC-NoVA.org/PVBIA**

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