Applied Behavior Analysis

What is ABA?

Applied Behavior Analysis (ABA) is a science in which procedures are systematically applied to improve socially significant behavior to a meaningful degree. An ABA program is a systematic teaching approach that involves breaking skills down into small, easy-to-learn steps. Praise or other rewards are used to motivate the child, and progress is continuously measured so the teaching program can be adjusted as needed. ABA is widely recognized as the single most effective treatment for children with autism spectrum disorder and the only treatment shown to lead to substantial, lasting improvements in the lives of individuals with autism. ABA-based treatment strategies maximize the learning potential of persons with ASD, and are flexible, individualized and dynamic.

How ABA Works:

- Skills are broken down into a series of manageable steps that are easier to learn
- Students are provided multiple opportunities to practice and perfect each step of the skill
- Success is rewarded with positive reinforcement, maintaining high motivation for improvement
- Goals are targeted to meet the needs of the individual learner
- Teachers track progress through systematic collection and evaluation of data
- Skills are taught with an eye toward their use and integration into a learner's daily life

Why ABA and Autism?

ABA is the only treatment for autism whose benefits have been consistently validated by independent scientific research. In fact, ABA has been endorsed as an effective intervention for autism by the American Academy of Pediatrics and the United States Surgeon General.

How Can It Help?

Studies have shown that some children with autism who participated in intensive ABA programs showed significant improvements in IQ, language skills, and academic performance. Some children in these studies were able to move successfully to mainstream public school classes, where they can learn alongside typically developing peers.* More importantly, every child can benefit from ABA interventions by learning new skills and reducing problem behaviors.

The Core Elements of ABA

- 1. **Simplifies learning.** All tasks–from simple ones such as learning to wave or clap hands, to complex skills such as having a conversation–are broken down into a series of small steps that are easier to learn. Each step is taught by giving children the opportunity to practice over and over again (discrete trials) until the child masters the skill and can use it in everyday life.
- 2. Motivates the child. Therapists identify activities that the child really likes and uses these activities to motivate the child during the teaching interactions (positive reinforcement). Situations are set up to encourage the child to want to participate in learning. For example, favorite toys are available and when the child shows an interest in the toy, the therapist presents a learning opportunity by asking the child to point to the item or to use words to ask for it. Rewards are also known as "reinforcers," and can include everything from snacks, to hugs, to spins in the air, to playing with a preferred toy. Parents are actively involved in choosing the reinforcers that are just right for their child. When a child first learns something new, the therapist provides rewards, praise, and encouragement simply for trying. This motivates the child and makes learning fun.
- 3. **Maximizes success.** Learning something new can be difficult, and that's why the child is given a lot of help and guidance when first learning a new skill. This often involves the therapist using her hands to guide the child, or giving examples of what the child should do or say (prompting). Gradually, as the child begins to learn the skill, the therapist reduces her help, until ultimately the child can do it successfully all by himself.
- 4. **Practices to mastery.** Children with an autism spectrum disorder often need much more practice to learn a new skill. ABA therapy focuses on creating many practice opportunities during teaching sessions and throughout the child's day so that he can become a "pro" at the new skill.
- 5. **Measures progress.** A cornerstone of ABA is that all interventions are assessed and recorded to be sure it's working. Behavior analysts believe there isn't a minute to waste and they want to be sure an intervention is effective. If not, it's modified or changed to encourage success.

This record-keeping is extremely helpful if you have different therapists working with your child. By recording a child's progress, the therapists have a road map that tells them what to continue working on and where to go next. It's also a great road map for you. You can see just how far your child has progressed. With ABA there's no need to wonder if it's working — the data are your proof.

6. **Extends skills to the real world.** Skills are taught in such a way that the child can use them in everyday life (generalization). This is the most important step to making sure the skill is really learned. ABA focuses on a generalization of skills

at every phase of the learning process. Skills are taught using a variety of materials, different teachers, and in different settings. This generalization strengthens and expands on learning so it is useful in the real world.

- 7. **Teaches parents to apply interventions.** Parents are an essential part of an ABA treatment program. You are taught how to teach important skills and how to manage behavior both at home and in the community. With an ABA program you will be empowered to teach your child and to address his challenging behavior.
- 8. Focuses on reducing and replacing challenging behavior. ABA methods can also reduce those behaviors that interfere with learning (e.g. self-injury or repetitive stimulatory behavior). In ABA-based therapy, therapists, caregivers and parents work together to identify challenging behaviors, assess them to determine why a child is behaving that way and develop structured plans to reduce the behavior. Often, a problem behavior is caused by a lack of a specific skill such as communication. ABA works toward identifying ways to replace challenging behavior with more adaptive skills such as using language to communicate.

* Management of Children with Autism Spectrum Disorders, Myers, Scott M., MD, (October 2007), American Academy of Pediatrics.