

Andy's Behaviour Answer: ABA

by

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Andy's Mother

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Introduction

ABA, *Andy's Behaviour Answer*, also stands for *Applied Behavioural Analysis*. So, you ask, what the heck is that? Good question! In this article, I give a parent's view of ABA: what it is and how we use it in our family. I particularly hope to offer the knowledge of the ABA approach for behaviour management to parents of strong-willed children around the age of 3 or 4 because I wish we had known about the program when Andy was a pre-schooler. I think it would have helped us to avoid distress in elementary school.

How ABA Came Into Our Life

In the fall of 2002, Andy, our son with Down syndrome, was nine years old and had started Grade 4. Andy's lack of cooperation had always been an issue to one degree or another. It got very serious because he was getting bigger, and physical acting out was not safe. In October 2002, our only options to settle his behaviour were prescription drugs or ABA. The thought of having to feed Andy prescription drugs was sickening at best, traumatic at worst.

We (teacher, educational assistant, and parents) all believed that Andy was so very capable of being included and learning alongside his same-age peers without drugs. We learned of ABA through community connections to an autistic child who was also working on behaviour issues, especially cooperation. After only two weeks in the program, success for Andy was obvious. After only two months, Andy was happy in a full-day, integrated school program. ABA combined with the skills of a teacher experienced in special education created a Grade 4 year that was the inclusion experience we hoped school would be for Andy.

What is Applied Behavioural Analysis?

Definitions for ABA are plentiful. I like the one at the web site <http://rsaffran.tripod.com/whatisaba.html#top>:

"Applied" means practice, rather than research or philosophy. "Behaviour analysis" may be read as "learning theory," that is, understanding what leads to (or doesn't lead to) new skills. (This is a simplification: ABA is just as much about maintaining and using skills as about learning.)

ABA is part of a psychologist's field of study. Two journals regularly publish information on the subject, the *Applied Behavioral Science Review* (Elsevier Science) and *The Journal of Applied Behavioral Science* (Sage Publications). When I was searching around, ABA references kept coming up with "for example, autism and Down syndrome." With references such as these, I do wonder why parents of children with Down syndrome are not notified about ABA as a matter of course. The particular ABA program we chose was developed in California by Dr. Ivar Lovaas and has been used in

British Columbia by many families with an autistic child for early intervention therapy. Throughout this article, I refer to our ABA program as simply “ABA.”

For us, ABA is (1) a way to define an individualized, successful learning framework for acquiring skills, (2) a behaviour management approach that makes sense for a cognitively delayed child, and (3) if necessary, to put (1) and (2) together to create programs that teach a child how to behave.

Part 1.

Defining an Individualized, Successful Learning Framework

ABA helped us to understand exactly what makes learning successful for Andy. By designing programs tailored to his needs for skill acquisition, understanding different types of prompts, using reinforcement that appeals to Andy, and collecting data on our work, we are able to keep him moving ahead in his learning.

Programs

The work we do with Andy consists of a series of programs that address academic learning needs, like printing, reading and math; that teach social skills, such as making conversation; and, that teach appropriate behaviour (discussed more in Part 3). The most important aspect in designing the programs is that they be set up to succeed by breaking down the desired learning into steps or “targets” that Andy can easily accomplish. To achieve each target, an activity is performed with just enough repetition so that Andy acquires the skill and doesn't get bored. It is very important to take plenty of time to plan the details of each program.

As a simple example of a program, consider learning colours. The target might be red. To teach red for the first time, we might hold up a red flashcard, point to it, and ask “What colour? Say red.” By giving the answer needed, success is assured. We might repeat the activity with the directive three or four times before switching to the next target, which might be to fade out the pointing. Next, we would fade out the “Say red,” asking only “What colour?” We would use the same procedure to teach other colours.

A session consists of a series of programs that are repeated by each person doing the teaching (referred to in this article as a “helper”). Programs are organized into a session in an order that considers Andy's energy levels, his ability to perform target activities, and his need for movement. Longer sessions include play break(s).

The section “Recording Data and Discrete Trial” gives more information about the types of things to consider when designing a program.

Prompts

Seven different types of prompts can be used to support success. Listed in a general order of increasing invasiveness, the prompts are:

1. **Verbal** Voice only, and the most difficult prompt to fade out.
2. **Visual** Something to look at; e.g., flashcard or photograph.
3. **Gestural** Gesturing; e.g., pointing with a finger.
4. **Positional** Moving an item to draw attention to it. A helper may choose to move an item closer to Andy to indicate the desired selection.
5. **Modelling** Performing an activity for Andy to copy.
6. **Partial Physical** Moving Andy into position by guiding part of his body, often behind a joint.
7. **Full Physical** Also called “hand over hand.” Moving Andy into position by assisting him to operate his whole body or part of his body (e.g., holding his hand to guide a pencil).

Prompts are always faded out as quickly as possible so that they do not become entrenched as part of the activity. By removing prompts quickly, Andy does not become dependent on them.

Reinforcement: Encouragement

It's a wonderful experience to work with someone who is motivated to learn just because of loving to learn. It can be an exhausting experience, on the other hand, to have to teach someone who is not motivated and cannot understand the end benefit. When Andy was little, we soon learned that if he had a bad experience learning something, he would not do it again, no way, no how! We had to wait several weeks or months before trying again. If he had a good experience learning something, he was always “up for it” again.

ABA uses encouragement to the point of it seeming as if we're having a party to celebrate a tournament win. We respond to Andy's efforts with phrases such as “Yahoo,” “Way to go,” and “Yippee, you did it!” in excited, happy voices—and Andy loves it! When we practice his sight words, for example, he will often say, “Mommy, you say *Yahoo*” to remind me to get excited in response to his reading the word on each card. I think this speaks to his need to have fun—if the helper looks like she's having fun, then Andy “catches that wave,” too.

We have observed a rule with verbal reinforcement that I think is important. In our messages back to Andy, we judge the task as done or not done. Our words do not judge Andy. That is, we do not use praise for reinforcement. For example, we do not say “good boy.” “Good boy” does not express our happiness or excitement. It judges Andy

by the helper's personal standard. This is not useful to Andy. He has different helpers with different standards, and he cannot play a slippery slope game of keeping up with everyone's standards. What he needs to know is, are we enjoying his completing the task as much as he is? In the combined enjoyment of the experience, Andy finds fun. And fun is very motivating for him.

Careful planning helps to define what success looks like for a particular target activity, so helpers are less likely to fall into the common trap of reinforcing with praise instead of encouragement. For example, if Andy is to use a pencil, careful planning would define how he would hold it. If he was just beginning to use a pencil, we could accept him holding it any way he wanted to—as long as he made a mark with it. On the other hand, if we wanted him to refine his pencil grip, we would be looking for a more specific result. In either case, by careful planning, all helpers understand what qualifies as success; differing standards of performance (which could be unrealistically closer to typical ability or even perfection) are not haphazardly applied. With everyone having the same expectations of Andy's performance, he has the best chance of success.

Reinforcement: Rewards

We had to accept that Andy needed rewards to be motivated to participate. This isn't so hard when we remember that as adults, we work for the reward of the pay cheque! After much ruminating, we came to believe that three complications of Andy's cognitive delay make learning particularly difficult for him: (1) a lack of ability to reason, (2) a lack of understanding of the concept of time, and (3) an inability to communicate in the abstract. Difficult learning is not fun.

It is the reward program that has helped us define what "fun" learning is for Andy. Shared laughter, encouragement and, sometimes, toys for games are absolutely mandatory for his learning program to be optimally successful. This may seem so obvious, yet it can be unacceptably disruptive to encourage regular hoots of laughter between two individuals in a school classroom. Also, Andy's classroom teacher must find the time to provide him with individual encouragement as well as being accepting of games and toys as rewards.

Timely delivery of the reward is important and is affected by Andy's ability to understand the concept of time. Andy's lack of understanding of time shows in that he doesn't seem to hold grudges. He effortlessly sheds grumpiness when the right motivator is presented. He's "in the moment," enjoying the present to the fullest. This means he doesn't waste time like the rest of us dwelling on the past and worrying about the future. It also meant that at 3 or 4 years old, he didn't understand explanations that involved time. For example, it was useless to explain cleaning up by saying in the morning that we needed a tidy house for guests coming for dinner. What he did understand was that picking up his toys meant he got the reward of watching a favourite TV program ("first pick up toys, then TV"). At 10 years old, Andy is coming to understand some elements of the concept of time, and that is making life and learning much easier. The right reward for Andy is very motivating when it is available to him within an understandable timeframe.

One of the most entertaining parts of ABA programming for me is finding the rewards. Rewards can be anything. We chose to stay away from food, but food can be a very effective reward. Andy's favourites are the Whoopee Cushion/Whoopee Putty and Sticky Starfish (a toy that sticks to things when tossed at them). It is the shared laughter than comes from playing with these toys with his helper that is the true reward for Andy.

Interestingly, as we progress through the programs, Andy occasionally chooses tasks that he has mastered as a reward. For example, one program we had was to teach building with blocks. Now, he sometimes chooses to build a tower with blocks as a surprise for the helper. Of course, to his delight, the tower then gets knocked down. I believe his choosing these types of rewards clearly shows the powerful learning tool that ABA can be.

Some key usage rules for rewards are:

- It is important to keep the rewards for ABA work only. Andy doesn't get to play with the reward items at any other time.
- Before working on a target, Andy gets to choose the reward from a stash of a few favourites. The toy is then put aside but can be seen. It is important that Andy choose the reward before the target activity begins. This way, when he gets off task, the reward can be used to re-focus him with the reminder, "What are you working for?" (And, yes, he very quickly learned that the toy had to be relinquished after he selected it. Please see Part 3 for information about how we helped Andy learn to set the reward aside.)
- The amount of work Andy does to receive a reward is small at first and quickly becomes larger. Now, he just enjoys working so much that sometimes it's not even important to him to get the reward.

Using encouragement and rewards for reinforcement is further discussed in Part 2.

Recording Data and Discrete Trial

One of the most enduring aspects of using ABA is that we now have a framework for Andy's learning that we know to be successful. Onto that frame, we can hang any learning plan. Since the framework is consistent, we can easily record data that measures progress.

Each time the activities for a target are performed, it is referred to as a "trial." Going back to our example of learning colours, a trial would be each time Andy is asked to identify the colour. His response to the activity (identifying the colour) can be recorded in one of four ways: correct, incorrect, prompted, or unclear. The "unclear" response is useful when the helper cannot categorize Andy's response as either correct or incorrect. Unexpected distractions, for example, can confound the response. After we have done the required number of trials, the number of responses by type is totalled and the percentage of correct responses is calculated. If the level achieved is high enough (80%

to 100% usually, across all helpers), then we know it is time to move on to the next target.

Another thing to record is the type of trial. There are three types: mass, expanded and random. In our example of learning colours, teaching one colour would be referred to as a “mass” trial, where a single item is repeated. Once the single item is learned, it needs to be tested against previously learned items, termed “known distracters.” So, back to our colour program for an example, assume blue was already known. Blue then becomes the “known distracter.” Once red is learned in a mass trial, the next trial, “expanded,” can begin. It incorporates both blue and red. The expanded trial includes the known distracter (blue) in an organized way where each occurrence of the new item (red) is separated by a regularly increasing number of occurrences of the known distracter (blue). That is, red followed by one blue, then red followed by two blues, then red followed by three blues etc., up to four or five blues. Then, you would progress to the third type of trial, called “random.” As the name suggests, the occurrence of the known distracter is randomly mixed with occurrences of the newly acquired item.

Other items to collect data on are date, time, behaviour, helper, and comments. To make the required changes clear for the next helper, we also recorded the last prompt level used and next target to be worked on. (Targets are listed and numbered for easy reference.)

Since targets and trials are carefully planned, components can be distinguished from each other or made “discrete.” Hence, the term “discrete trial” which is the backbone of gathering data in ABA. For example, depending on the child, all helpers may need to use exactly the same words to deliver the instruction. This eliminates the chance that different words will confuse the child. Some of the components to consider in planning a program are:

1. Start Date; Date Mastered (acquisition rate may be useful).
2. Goal/Purpose.
3. Instruction (exact words).
4. Stimuli (props; e.g., blocks for block structures).
5. Frequency.
6. Status (on acquisition, emerging, mastered, etc.).
7. Response desired.
8. Prompts (type, when started and stopped).
9. Consequence/Reinforcement, correct.
10. Consequence/Reinforcement, incorrect.
11. Environment.
12. Targets (steps; numbered for reference).
13. Teaching Procedures (# of repetitions, how to use stimuli; type of trial).
14. Mastery Criteria (% correct across all tutors/environments).

By being aware of each component during program planning, the steps to change targets are much clearer and easier to identify. For example, consider changes in the learning environment. Skills can first be acquired in the home in the designated work area, then applied in other rooms in the house, and then generalized to the community. When Andy

learns skills first in a familiar environment, he is more successful at using those skills in a less familiar environment. Another example might be found in teaching phonics: when time is taken at the planning stage to list all of the sounds in the order that they will be taught, steps in progression are crystal clear to every helper. The helper does not have to search for the next step, which could interrupt the momentum of Andy's learning session. Maintaining the momentum is critical for Andy because he doesn't like to wait too long with nothing to do. He will think of something to do to fill his time, and that something is usually not related to the target activity! In the beginning, it was sometimes challenging to get him focussed again on the target activity.

The importance of designing discrete trials is most obvious when success is not being achieved. With programs designed to consider all components, each component stands out for evaluation. When problems arise, our detailed program designs and the data we have collected provide clues that quickly lead to solutions.

People may see data recording as tedious and unnecessary. Demonstrating success over time, however, can be just the ticket to keep helpers motivated. When we recall where we've come from, we can see the progress. That progress keeps us going when learning seems slow.

People

For an autistic child in British Columbia (BC), funding is available to pay helpers to come into the home and carry out the programs. We understand that, ideally, ABA for an autistic child involves two to three sessions (6 to 8 hours) per day for early intervention. Intensity is important for results, and it helps the child to generalize to other helpers as well as distributing the teaching workload. We didn't have the money for such an intensive program, but we are still getting success.

In the fall of 2002, with our situation being critical and by demonstrating support from the school for our initiative, we were granted some funding from the BC Ministry for Children & Family Development (MCFD). This funding paid for an additional helper for three months. Subsequently, MCFD reimbursed us for the costs we incurred for training.

ABA helpers (also called "therapists" and "tutors") are not regulated. As such, defining a qualified person is discretionary. If you choose to begin ABA with your child, I strongly recommend training with a person who has at least five years of experience in the Lovaas method.

The full-blown team that supports an autistic child includes the services of a psychologist. Depending on the intensity of and success experienced in your program, a psychologist experienced in Lovaas' style of ABA could very well be an important part of your team.

We tried to do as much as we could on our own to keep costs down and, importantly, to keep the expertise about our son in our family. We did not seem to need a psychologist on Andy's team for the programs we did, though we did have a report on a recent

assessment done by the school psychologist. With Andy's educational assistant knowing him as well as his parents, a teacher with a special education background, and an ABA therapist with six years of experience, we were able to work through any problems we had. Also, Andy is able to represent himself with speech quite well which helps to find out what is going on for him when something isn't working. His speech was not as well developed when he was 3 or 4 years old, and that would have complicated finding solutions to problems.

I think it is a fair generalization to say that children with Down syndrome are more motivated than children with autism to connect with people. I think this makes children with Down syndrome less complicated to teach; therefore, an ABA team for a children with Down syndrome could be less needy of regular involvement by a psychologist.

It is important that every helper be part of the program planning so that everyone understands the nuances of carrying out the target activities and managing behaviour. An important part of the solution for us was regular meeting time with school staff. We were fortunate to have a supportive principal who organized meeting time for two hours every two weeks.

Looking back to Andy's pre-school years, we may not have needed an intensive ABA program though there's no doubt it would have made his academic school life more productive. The minimum we needed to do then was to adopt the behaviour management strategies used in the ABA program.

Part 2.

The Behaviour Management Approach

I think the approach to behaviour management that we learned through ABA training is so successful because it helps Andy figure out "how to be." In trying to help Andy overcome his cognitive delay and function in as typical a way as possible, I did not understand just how fast and frightening our "normal" world could be for him. As he was bombarded by things he could not quickly understand, Andy used behaviour to tell us how unsafe he was feeling. Many things just could not be explained to him in the way that a typical pre-schooler could receive information. For his own comfort, he needed to have his world framed in simple terms. This means that behaviour management at times needed to be limited to very black & white options. It was hard to accept that such restrictions were necessary, particularly as I worked hard to train myself to be more expansive for my first-born son!

You may have read that children with Down syndrome are masters at getting helpers off track with cute avoidance behaviour. Andy also employed negative behaviour to communicate his feelings. As a pre-schooler, his most frequently employed strategy was yelling "no." He has continued to use this strategy, I think, because it is so simple. We are working to help him use other words to express what he really wants.

We have found the following five strategies to be key to effectively managing Andy's behaviour whether or not we were working in an ABA program:

1. Teaching Andy that his job is to "follow the words" of his helpers. I had to play around with other words until I accepted that this phrase does the job of describing our simple desire for cooperation. We do not want unquestioning, robotic compliance.
2. Type and amount of reinforcement. The use of rewards is discussed in Part 1. Positive feedback and encouragement whenever Andy "follows the words" is very effective. It was often hard to remember to heap on the positive feedback when we had to use an exhausting, full-physical prompt to get Andy to cooperate. We learned, however, that the harder it was for Andy to cooperate, i.e., the more intense the negative behaviour he exhibited, the more important it was for us to be lavishly exuberant.
3. Ignoring behaviour that aims to distract the helper from the activity. This means we continue with our target activity regardless of Andy's behaviour.
4. "Do This." When we started, Andy already knew that "Do this" meant copy someone's actions. For this strategy, the helper and Andy face each other seated in chairs. With Andy seated in a chair, it is easier to prompt him to cooperate if necessary. The helper says, "Do this" as she claps her hands, slaps her thighs, taps her head, touches her nose, etc. The things she chooses have to be easy to prompt Andy to do. He had to be prompted (full physical) through this exercise for the first few times, sometimes by an additional person. It was gruelling, and worth every minute. When Andy's refusal to cooperate interferes seriously with accomplishing target activities for any program, we detour to *Do This* to practice "following the words."
5. Time out on a mat. The child is removed to the mat for a count of 10 seconds. The child receives positive feedback for their ability to sit for 10 seconds, and he/she is returned to the work area to complete the program. Due to Andy's size at age 9, we could not use *Time out on a mat* because lifting him was too difficult to do as a regular event. Increasing the time spent on the mat may be an important part of this strategy.

Time and again we hear that people with Down syndrome do well in routine, yet in our struggle to help them be as "normal" as possible, we regularly challenge them to function outside their comfort zones. Finding the balance that works can be difficult. ABA has three areas that help.

1. Pre-teaching which is very helpful in preparing a child for new, and therefore stressful, situations.
2. Use of the instructional loop and the instructional "no."
3. Programs that focus on learning appropriate behaviour (see Part 3).

I believe that had we been absolutely consistent with pre-teaching and using the instructional loop in Andy's pre-school years, he would have been much more able to cope in elementary school.

Pre-teaching

The familiarity that comes from pre-teaching an experience in the home helps Andy feel safe in the predictability of each step when it is time to do the real thing. When Andy feels safe, he is less likely to feel discomfort which he might express as negative behaviour. ABA uses sequencing to pre-teach experiences.

ABA breaks the teaching down into two programs: first, the sequencing as a task itself using visual prompts (cue cards) and which includes an introduction that is an exploration of each part. The second program, called *What Should You Do?*, teaches recall of the sequence through re-telling. It relies on the cue cards from the sequencing program as a visual prompt, and encourages the prompt to fade as quickly as possible. Soon you have, for example, a child that can communicate step-by-step what will happen to him when he visits the dentist. When these two programs are included in a session, it is important to separate them so that *What Should You Do?* doesn't immediately follow the sequencing task. That way, the ability to recall is better tested.

Pre-teaching was particularly useful for getting Andy to feel comfortable in transitions from desirable activities (e.g., eating lunch at school) to less desirable activities (e.g., stopping eating to move on with the school day).

Our digital camera has been a fabulous tool for ABA programming, particularly pre-teaching. Andy loves to take photos, and we don't have to pay for developing film with the digital camera. Also, the instant gratification of being able to view the photos on the computer screen is very rewarding.

While Andy responds best to sequences that use photos of himself, we cannot take photos if doing something for the first time will be too stressful. Picture symbols or purchased photographic sequence cards work for pre-teaching. We can then replace them if necessary with a photographic sequence featuring Andy. And, having his photo taken can be part of the reward for completing each step in the sequence for the first time!

Sequencing is so important for Andy to feel safe, comfortable and in control. Recently, our family wanted to try cross-country skiing. Our older son and Andy's father went first for a day and took a lot of pictures about what happens when we go cross-country skiing—parking the vehicle, going into the lodge, getting equipment, etc. I used the photos to print a sequence. We showed the sequence to Andy beforehand and talked about it with him. When we went skiing, he carried the sequence on a clipboard. (Andy loves to be the one with the clipboard!) Andy checked off each step as we did it. This way, he was able to cope with a busy lodge and rental area and trying on strange equipment. Best of all, we had a happy time as a family.

Social stories are a very successful tool for Andy. Social stories often are sequences, but a social story is particularly successful for Andy when the “why” is explained. For example, here is the text from our social story for what Andy is to do when he feels angry:

When I am angry, I want to yell and growl; but, then no one understands what I need. When I am angry, I need to take a breath in and get calm. When I am calm, I need to use my polite voice and my words to talk it over.

The text is supported by picture symbols, and we have taught Andy that when he feels angry he needs to (1) taken a breath in, (2) get calm, and (3) use his polite voice and words to talk it over.

The phrase “then no one understands what I need” explains to Andy the importance of the social story to him. I think that explanatory piece is critical for a social story to be successful. As another example, in a social story about the steps in seeing the dentist, we would include that Andy needs to see a dentist because the dentist helps him take care of his teeth so they don't hurt when he eats.

Instructional Loop/Instructional No

In delivering the instructions for each target, the helper uses a technique called the “instructional loop.” This loop is so effective that everybody who learns it when helping Andy has begun to use it with their own children (and even spouses!). The components of the loop are simple: issue an instruction, assess the response, and deliver reinforcement (encouragement and rewards). Using the colour card again as an example, the instructional loop would look like this:

Instruction: What colour? Say “Red.” (Hold up the card.)

Response: Red.

Reinforcement: Yippee! You said “Red!” (Give the child the reward.)

The next step in the loop is to go back to the instruction. We repeat the loop until we complete the desired number of repetitions.

One of the most important qualities of a successful ABA helper is the ability to be animated and silly when delivering reinforcement. The more excited and thrilled a helper, the more she projects fun. The more fun Andy experiences, the more he is drawn into carrying out the instruction. Also, with Andy, we've found that he is an emotional mirror. What we display to him, he gives right back to us. Enough said!

It is very important that the instructional loop always be completed. If we ask something of Andy, we make sure he carries it through. We use full-physical prompts if necessary. We are careful how we frame our requests and instructions to be sure we can follow through with them. When we're too tired to carry it through, we simply don't ask it. In other words, just as parents are cautioned not to make empty threats, we don't make

“empty” requests. Empty requests teach only that the child doesn't have to follow the words of his/her caregivers and helpers!

It is also very important that the instruction in the loop be issued only once. Andy learned to listen and respond promptly when we didn't repeat ourselves ad nauseam. Just stick to the loop!

By keeping the steps of the instructional loop clearly in mind, the helper has a process to focus on. That process—the mechanics of the steps in the loop—gives something to think through, which helps to avoid an emotional response to Andy's negative behaviour. With no energy wasted on my own emotional response, I can stay calmer and I don't get so tired. Most importantly, I can be a lot more effective at helping Andy learn to manage his behaviour.

But what about when Andy's response is incorrect? We give reinforcement that is a simple “no.” Using the word “no” for reinforcement is another area where people have trouble accepting the ABA approach. It's true that the word “no” can be delivered with negative inflection. It can become to a child as cruel as a physical beating. The inflection encouraged for ABA, however, delivers the “instructional no” with a neutral, non-judgemental tone. It becomes a simple indicator of an incorrect response. Its simplicity is a thing of beauty for a young child because the message is not swathed in a lot of language.

With the “instructional no,” the loop using the colour example would look like this.

Instruction: What colour? Say “Red.” (Hold up the card.)

Response: (Doesn't speak. Just looks at the card.)

Reinforcement: No. (No reward.)

If the child didn't seem to understand the instruction after two or three tries, we would examine whether his/her acquiring the skills was a realistic expectation. Perhaps we would need to create a program that practised verbal turn-taking to increase the child's ability to be successful.

If the incorrect response was defiant, we would take a detour from the colour program to the “Do this” sequence previously described to practice cooperation. In addition to *Do This*, we use specific programs that are designed to teach appropriate behaviour (see Part 3). These programs teach cooperation by using actions that can be prompted. Through these programs, Andy learned that cooperation can be fun.

Part 3.

Programs to Teach Appropriate Behaviour

Picture this: your baby toddles to a busy doorway and sits down right in the middle. He/she is now not safe. You might say, “Come here” and gesture for the child to come to you. Likely the child will look at you, gurgle a happy noise and not move an inch. So,

you do what comes naturally to protect your baby. You walk over, pick him/her up, and move him/her to a safer place. And you would repeat a learning program until your baby does not sit in busy doorways any more. The programs to teach behaviour are based on such normal parent responses.

It has become very clear to us that in addition to the incidental, in-the-teachable-moment sort of learning, children with cognitive delays may need to be taught how to behave by practising in structured programs, just like they learn their numbers and letters. I think that in the predictability of the repetitive framework with reinforcement that is fun, Andy felt safe and learned to trust. The trust for his helpers has grown to the point where he, as a strong-willed child, can accept guidance.

Before each activity, Andy selects what he gets as a reward for cooperating, and the reward is put aside until he completes the activity. In the beginning, of course, he didn't want to put the reward (toy) down. We just focussed on the instructional loop, and the conversation went something like this:

Instruction: Put the toy down.

Response: No.

Reinforcement: No (calm, instructional).

Instruction: First work, then play. You can put the toy here or here (pointing).

Response: No (yell).

Reinforcement: No (calm, instructional).

Instruction: Hmm...If you can't choose, then I'll choose for you. You can put the toy here or here (pointing).

Response: No (yell).

Reinforcement: No (calm, instructional).

Instruction: Hmm...You will not choose, so I choose to put it here.

Response: No (yell). (Assisted to put toy in the chosen spot by full-physical prompt.)

Reinforcement: Super! You put the toy where I chose. You followed my words!

Andy: Wah! I wanted the toy to go over here!

Helper: Next time, you can choose. (Proceed with target activity.)

Note that Andy gets only one chance to choose after the helper said she would choose. After only a few times of losing out on his chance to choose, he quickly began to make choices.

As Andy was enjoying each reward, we asked him once, "Andy, why did you get the reward?" The answer we coached him for was, "because you *followed the words.*" Soon he was able to say, "because I *followed the words.*" Then, he came to understand the meaning of *following the words.*

Programs

The beauty of these programs to teach appropriate behaviour is that a child can be physically prompted through them, just as a mother might move her baby from a busy doorway to a safer place. Bearing in mind that Andy was 9 years old when we started ABA, we used the following programs to teach him to cooperate.

1. "Look at Me." It is fundamental to learning to be able to make and hold eye contact. Andy needed to learn to respond appropriately to the instruction of "Look at me." By turning his head, we could prompt him to follow through with the instruction. This program progressed until he could hold eye contact for a couple of seconds, and he responded in other settings to the instruction in a typical way.
2. "Come Sit." This started with chairs side by side and progressed in small steps to a "Go to" program with 2 to 3 instructions (for example, "Go to the pink chair, put your hand on your head, and say your name."). At the beginning Andy refused to move to the other chair. We had to pick him up and move him, at which point we gave such positive feedback for *following the words* that we appeared to be throwing a party to celebrate. Despite himself, Andy was lured by positive feedback into cooperating.
3. "Give Me." This program began with three blocks (red, blue, and yellow) and an instruction to "give me the yellow block." In the beginning, Andy refused. We had to use full-physical prompts, manipulating his hand to get him to pick up the desired block. Again, our response to his completing the task, even with a full-physical prompt, was heaps of positive feedback and, of course, the reward. The program progressed in small steps to "Bring me" two or three items from other rooms.
4. "Directed Colouring." Andy and the helper had identical pages from a colouring book and identical crayons. The helper requested that Andy colour part of the picture a specific colour (e.g., eyes blue), and modelled the desired action. At the start, Andy refused, and he needed a second person to prompt his participation. As well as wiggling and yelling, he threw a crayon across the room. This action gave us a good example of "ignoring" as a behaviour management tool. The crayon was not retrieved. Andy was told, non-judgementally, "Oh, now you don't have the blue crayon. Let's keep colouring." We requested that Andy retrieve the crayon after the program was completed, and prompted him to follow through.
5. "Directed Drawing." This was done on a white board. Andy was asked, "Do this," which was to draw what the helper drew. Again, for the first few sessions, a second person had to hold the pen in his hand and prompt him through it. His attempts to gain control of the task were comical at times, exhausting at others.

Had we started ABA in the pre-school years, it would have been important for success at school to teach Andy how to wait for his turn, to wait with a group, and to respond appropriately when his name was called.

While the goal is to have Andy respond immediately to our requests, we got stuck by Andy typically needing 3 to 5 silent seconds to work through his negative feelings about

the task and come of his own accord to expressing his cooperation. I am a wholehearted believer in creating a platform for discussion of feelings. So many times Andy has just needed to express that he doesn't want to do, and then he would cooperate.

This was an area where I had trouble accepting the ABA approach. With a goal to have immediate cooperation, it felt at times like we wanted to turn Andy into a robot that responded unquestioning to our bidding, that he had no right to express his emotions and opinions. Once I understood that we initially needed to push Andy right to his limit for him to accept that he could relinquish enough control that he could learn to follow our words, I understood the goal of ABA. We were not attempting to make him a robot, not at all. We were attempting to show him that he needed to follow people's words so that he could enjoy learning!

Feelings get in the way of cooperation, and Andy has a right to be heard, yet the real world often demands immediate cooperation. At school, when the teacher says "sit down," students are expected to do it promptly, without fuss. There's no time for acknowledging that the child doesn't want to and spending time talking it over. At home, when it's time for bed, a worn-out parent needs a child who doesn't baulk at every request in a bedtime routine. In times of medical emergency or disaster, Andy will need to cooperate quickly for his own safety. We believe ABA has made it more possible for him to do so.

It is still very important, however, to say that the helper has a responsibility to help Andy to learn to express his feelings appropriately and to set up his day for success, thus minimizing his frustration and possible negative behaviour. That takes us back to the importance of taking the time to plan!

While the programs and prompts described above may seem strong, Andy's behaviour was so uncooperative that he was facing removal from school. He needed to learn that he must "follow the words" of his helpers. He's come a long way, and he still struggles with it. I firmly believe that had we started ABA when he was 3 or 4 years old and his standard response to any request was "no," he would not be struggling as much as he does now.

To Thank or Not to Thank

In the programs such as "Come sit," it felt at the beginning that we needed to thank Andy for following our words. Yet, Andy didn't do anything for our benefit. In teaching Andy to follow the words of his helpers, we are teaching him to obey the instructions of those in charge. Typical children already do this (for the most part!) without being thanked. So, it would be wrong of us to teach Andy to be different, to expect to be thanked each time he obeyed an instruction. It would likely even be detrimental to our goal of cooperation to do so as a misplaced "thank you" might be interpreted by Andy as a sign that he has more power than is appropriate for a child to have. In seeking cooperation, we need to help Andy let go of some of his power, not bolster it!

Requests and acts of assistance, however, are a different matter. Where good manners apply, Andy gets thanked. For example, when we are working, if we ask Andy to pass us something that we need or if he picks up something we dropped on the floor and returns it, he is entitled to be thanked.

More on Our Results and Experience

For a family with an autistic child in an early intervention program, ABA can be invasive (programs begin in the home), expensive and of a long duration, but it wasn't for us. It depends on the goals for the child and how much one is willing to learn and carry out by oneself. Our initial focus was only cooperation, and the results we received were well worth the inconvenience of storing supplies and having other people regularly in our home for a few months. Once we learned how to do ABA, we began to apply it on our own to other things Andy needed to learn.

Since Andy has been back in school, we continue to do the behaviour programs periodically, especially after school breaks, to reinforce his cooperation because we all feel that his old behaviours are "just under the surface." While we continue to expect appropriate behaviour from Andy, we know that we will always need to modify our behaviour to some degree to accommodate him. He will always (adamantly!) advocate for what he wants. His way of advocating may sometimes seem demanding, but it is understandable given his cognitive and communication challenges. His demanding way is now more manageable because of the ABA skills we have acquired. The results of our ABA work come clear when we remember that the serious, unpleasant and often physical non-cooperative episodes of the past are now infrequent to non-existent.

We believe we will rely on what we have learned from ABA for the foreseeable future. Since we have used ABA, there's much less stress when we're living with Andy. People are coming up to us and saying, *Andy's doing so well!* Perhaps the best testimonial to the success of this ABA program comes from Andy, himself. As well as behaving much better, he regularly asks to do "work"—and it doesn't get any better than that!

Resources

A Work in Progress: Behaviour Management Strategies and a Curriculum for Intensive Behavioural Treatment of Autism. 1999. Ron Leaf and John McEachin, editors. DRL Books, L.L.C., 12 West 18 Street, New York, New York 10011. Phone: 212-604-9637, ISBN 0-9665266-0-0.

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Lovaas Institute for Early Intervention. <http://www.lovaas.com/>