

Reinforcement in Suzuki Education

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"What Suzuki Educators and Behavior Analysts Have to Offer Each Other"

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Reinforcement in Suzuki Education is based on the basic premise that behavior which achieves pleasant consequences will be repeated. Dr. Suzuki admonished teachers always to notice what students had done well and to praise them for their successful efforts. He was very concrete in his instructions. After a child has played a piece the first thing the teacher must do is congratulate them for the successful work they have done. This could be very specifically targeted at particular behaviors, " your 4th finger was nicely in tune," or "you made good use of contrasts between loud and soft passages." A well-known anecdote about this requirement is often told at teacher training seminars: "Once at a training session in Matsumoto (the site of Dr. Suzuki's Talent Education Institute in Japan) after teacher trainees had been drilled on the importance of this type of reinforcement, a student was called in for a lesson with Dr. Suzuki and she played particularly badly. The trainees could hardly wait to hear what Dr. Suzuki would say to the student. How could he possibly think of anything to compliment the student on? "Good," he commented enthusiastically, " you played."

The child's triumph was that she stood and played. The piece was Fiocco's Allegro, a rather difficult piece in Book Six of the Suzuki violin repertoire. Suzuki went on to work with the child on the first six notes of the piece for the rest of the lesson. Dr. Suzuki was also very adamant that negative reinforcement not be used. Teachers and parents were told not to use punishment. If a practice session became stressful it was best to stop and return to practicing later. Suzuki parents practice daily with their children and the ban on punishing was an important factor in keeping the sessions pleasant and positive in their impact.

Suzuki started his method of education as an effort to do something to improve the lot of children as well as the outcomes of education. He felt and stated many times in his writings that unfortunate outcomes and failure were the result of poor methods of education, not results of a student's stupidity. He felt that all children had incredible potential and positive reinforcement was the way to realize that potential. He used training on the violin as a way of proving his theory. He wanted to show the world that it was unnecessary to punish and mistreat children to train them. He also wanted to show the world that all children could be trained to reach a very high level of achievement through the use of positive reinforcement.

Music training was the vehicle he used to demonstrate his theory but the Suzuki Method is more about the importance of positive reinforcement in education than it is about music. Parents and teachers were trained to dispense positive reinforcement, lessons were taped and listened to as reinforcement of the teacher's learning points, tapes - and now C.D.'s and videos - were used as models. Suzuki instructed parents to play classical music for a child from the time it was conceived. Tapes of pieces children were learning and of the entire repertoire were available. These were not just a reference but were to be listened to daily until they became a part of the child's unconscious mind. Children regularly attended group lessons where they saw and heard the pieces they were learning being taught and performed as well as observing more advanced students learning. Students participated in and attended concerts where pieces from the entire repertoire were performed.

The results have been impressive. Hundreds of Suzuki students playing difficult pieces beautifully have lent great credibility to Suzuki's theories. To date, according to a Jan. 1999 article in Investors Business Daily 250,000 students have learned to play using the Suzuki Method. More than 50% of current U.S. college music majors were introduced to their instruments through Dr. Suzuki's principles. Preschools and kindergartens have adopted his philosophies to teach reading and math. And 9,000 teachers around the globe have been trained in using the Suzuki approach. Additionally, the quality of achievement is very high. Children learn to play at a much younger age and learn to play to a very high level on their chosen instrument. Youngsters are playing concertos well in grade school that formerly were only attempted when students reached the university level as music majors. All this goes to show just how effective positive reinforcement can be.

As Suzuki teachers go about using positive reinforcement on a daily basis in their studios many issues arise that are relevant to the topic before us today "What Suzuki Educators and Behavior Analysts Have To Offer Each Other." First I would like to discuss what Suzuki Educators might have to offer to Behavior Analysts. The most obvious possibility that I see is a hotbed for possible experiments, studies, and longitudinal studies that could be carried out in a typical Suzuki Studio. Much of the work that goes on on a day to day basis in a Suzuki Studio is the shaping of behaviors and the successive approximation of desired behaviors until a particular outcome is reached. Parents and teachers work together as powerful dispensers of reinforcement to achieve particular outcomes.

The first months of study focus on setting up certain routines in class including the giving out of little rewards, using parents as role models, setting up routines and rewards for practice at home, training parents in the whole process, preparing the sound environment that the children need for successful learning to include the hearing of C.D.'s daily, taping the lesson and listening to that on a regular basis, and listening to other classical music. There is enough right there to spawn many possible studies.

In addition, for the most part, students are fairly normal and are learning in a relatively stress free environment. Solutions for learning dilemmas that occur under more difficult situations such as teaching students with learning disabilities, or learning issues centered around highly stressed or at risk children could be tested out in Suzuki studios. Perhaps solutions could be found that would help the learning of children in these more difficult situations.

I am currently looking for funding for a project that is somewhat different from the usual studio situation yet which I feel could also offer very interesting research possibilities. The project would involve having ten students, five 3-year-olds, and five 4-year-olds, selected from the Stonegate Housing Development in Reston, Virginia. Stonegate, a low-income housing project, was at one time a notorious hotbed of drug-dealing and crime known as "little D.C." Much has been done to improve the situation but much remains to be done. The project would be hosted by the Hunter's Woods Elementary School which is a relatively affluent school close to the Stonegate development. The 4-year-olds would be from the already ongoing Headstart program in Stonegate, and the 3-year-olds would be selected by lottery from the 3-year-olds of residents. These ten children will be given training in Suzuki violin based on and replicating as nearly as possible the training I give to my regular studio population. Funding will come in part from the school's corporate partner Freddie Mac and partly from a grant from Exxon or Texaco. I have grant proposals attached to copies of this presentation if people are interested in seeing them. The Suzuki Association of the Greater Washington Area has already offered free membership to the students families which opens availability of scholarships to various activities to them, a newsletter, and participation in festivals and concerts. It is hoped that this project will increase academic achievement as various Gordon Shaw Mozart Effect studies have documented as well as providing the usual benefits of music education.

Current brain research has determined that the exposure to and participation in music learning at an early age greatly enhances a child's ability to think, reason, and problem solve. This in turn enhances critical thinking skills and results in higher academic achievement. An overview of pertinent studies can be found in my article "New Brain Research and the Suzuki Method" in the Summer 1998 issue of the American Suzuki Journal (SAA, 26/4). An additional benefit of the program is that each student's parents will be mentored by experienced and successful Suzuki parents from my regular studio. This will provide role models for functional parenting and experience with the usefulness of positive reinforcement. Hopefully parents will use the skills acquired to assist in their child's music education in other areas of parenting and education.

One possibility for a study that comes to mind is to set up a control group of children who do not have the music training and begin a longitudinal study on outcomes for the two groups. Turning finally to areas in which Suzuki educators could use help from behavior analysts, there are a myriad of problems that crop up daily in Suzuki studios most having to do with learning occurring which is not the desired learning, that behaviorists could help us to resolve. A passage is learned incorrectly and corrected resulting in a more unfortunate pattern of repeating the mistake and correction in exactly the same manner whenever the passage in question is reached. This can have particularly disastrous consequences for performers when the pattern unexpectedly shows up while the performer is under stress as a result of playing an audition, concert or recital. Another problem that occurs is the learning of a physical behavior that isn't the desired Behavior. In my studio I used to use a bow exercise that included touching the bow to the top of the head while maintaining a correct bow hold. When I taught this exercise I was often standing just beneath a projection from the studio ceiling that encased furnace pipes. In order to avoid hitting my bow on the projection I would bend my knees to avoid reaching too great a height. I was very intent on checking out the correct bow-hold and a few weeks passed by before I realized that the students were also bending their knees (unnecessarily) and were quite uncomfortable as a result. More recently I realized that all the children were exhibiting a behavior that only the child leader had been requested to use. The leader (I accompany my students on the piano, so select a student to act as leader on the violin) had been asked to step back from the group and crouch down slightly as a signal that a passage that was supposed to be played softly was being performed. The leader was doing this very successfully and so were several four and five-year-old members of the group. The result was a rather hilarious session trying to de-program the crouching followers and to teach them to use the behavior only when they were leading.

This is a fairly innocuous example of undesired and unexpected learning occurring. More serious are the mistakes in technique that students arrive at a lesson emitting (apparently spontaneously emitted behavior such as those Skinner talked about in his description of operant conditioning) which have often become quite entrenched though no-one knowingly taught or reinforced those behaviors. Often they seriously detract from a student's ability to play well and much time and effort must be expended to undo the unwanted learning. If behaviorists could help us figure out where these behaviors come from and how they get reinforced so effectively, thereby helping us eliminate them, millions of teachers and students would be benefited enormously. These are just a few ideas on how Suzuki educators and behavior analysts could be helpful to one another. I am sure there are many more possibilities that would be mutually enriching to both fields of endeavor. It is important that we explore those possibilities, particularly when they would enhance our education of future generations.