01286131

Capstone Exam

April 26, 2013

Part I.

Exhibit One

The path of a Master's in Education has been enlightening and transformative throughout the past two years. The first exhibit chosen to exemplify the path of development is from Jim Parziale's Developmental Theory class. The example is the first assignment from class, which model's one's perspective of developmental theory. Students were advised to write about their thoughts and beliefs with no research done to back their standpoint. This assignment was a true test to comprise everything previously learned. Scholars needed to formulate ideas strictly based on one's own knowledge and notions.

When pondering about this assignment and how it would relate to one's own development, it could be placed within the transformation period of Respect. This assignment represented a time where one could identify with earlier exchanges with others. All the schemas and ideas brought forth throughout one's course work was able to shine through in this exhibit. The writer was presenting viewpoints to a professor of development and a class who was beginning a path of their own development through graduate studies. The fresh ideas and idiosyncratic philosophies of development could be shared with no judgment involved. One could take precedence of times when they were previously listened to and develop a formulation of what one has already heard.

Initial Theory Assignment

In my opinion, a theory is a proposed idea that promotes some kind of belief or notion. From my own development and learning, I have come to the conclusion that a theory has had some kind of empirical evidence to prove its effectiveness. There are many theories of development that I have witnessed thus far in my personal and professional life. All of these experiences have shaped my thoughts about how I believe children develop and learn. Within this proposal I plan to explain how environment affects development, a teaching process that develops learning and possible outcomes due to the teaching.

The environment in which children learn and grow is one of the most influential factors to fostering development and progress. The people within the environment have

the ability to form the availability for learning and motivation. In early developmental stages, parents must contrive learning opportunities to introduce new skills for children to develop. By reading to children and being actively involved in a productive environment will be beneficial for the learner. As children enter school and start interacting with teachers and peers, the environment that has been previously created will show through. The children as product of their environment will be apparent during learning opportunities, social situations and exchanges with educators.

As an educator, I believe the teacher needs to really read the environment to incorporate the best possible teaching strategies. A theory, to which I believe, is that the environment must be manipulated and made into the best possible atmosphere for learning to take place. Let's say I was a private consultant asked to observe a classroom where a child was having some behavior problems that were interfering with his/her learning. In order to maximize learning opportunities, behavior needs to be under control in order for erudition and development to occur.

I would first go through indirect assessments (interviewing parents and teachers) and direct assessments (personal observation of the environment and behaviors). I would take data on what happens before, during and after the behavior occurs. I would take note of all that is happening in the classroom; what staff are present, what subjects are being taught, what time of the day it is, how the other children react to the behavior etc. With this information, I would be able to form a hypothesis of how the behavior functions and come up with a plan to manipulate the environment so it is less likely to transpire.

With this plan in place, the teachers, staff and parents need to be on board to implement it properly. The child will then have a better chance to prosper. In order for the plan to work, treatment integrity will be vital to the child overcoming the behavior issues to focus more on their learning. Treatment integrity involves staff and parents implementing the plan consistently with their delivery, so change is more likely to occur. I would advise the staff that there could be some side effects to the treatment and the behavior could get worse before it gets better. If they continue the procedures correctly, they should see a change over time. The plan would involve manipulating the environment based on the function of the behavior. This theory of manipulation should be

backed by experimental evidence from previous trials of the same behavior change. Trained professionals who can continue effective treatment after I have removed myself from the situation should apply the validity of the behavior change.

In order to track to see if the behavior change is occurring, I would advise the educators to take data so there is evidence of change or stability. I would be able to analyze this data to make any appropriate changes to the program. The other staff would be able to depend on this data to validate the treatment effects. We can work together to make sure the procedure is being properly executed with the child's best interest at hand.

Over time, this behavior change will in some way change the child's life for the better. The behavior that was once interfering with the learning should decrease enough to no longer get in the way. The theory of environmental manipulation has proven in the past to have many great effects on children and learning. I hope to continue to learn about this theory and how I can incorporate other theories to make the best possible learning atmosphere for many children in the years to come.

Exhibit Two

The second exhibit chosen to model one's own process of development was chosen from the fifth class of the Applied Behavior Analysis course sequence. In choosing this exhibit one could relate this assignment to the transformation aspect of Risk. The assignment was one of the last to complete in the ABA program. The goal was to formulate a consultation plan based on data collection, research and knowledge. The consultation plan was developed to change a behavior of a child previously observed in a classroom setting.

The challenge to this assignment was whether or not one had chosen the right intervention based on ethics, empirically based treatments and data collected. The assignment demonstrates risk to the highest degree. There was a question of uncertainty of the desired outcomes while staying within the process. One had to trust their instincts and be confident in their research to display this consultation plan. Connecting to previous research and one's own development was a key component to developing this plan. With the data displayed and research done, one was poised to complete this assignment with ease.

The issue of ethics and staff training are current examples of Risk as well. Working with others to formulate a plan and for all to be on the same page can be a challenge in the workplace. With the completion of coursework, comprehension of ethical guidelines and the importance of staff training, the plan was formulated in the best interest of the child.

Consultation Plan

Part 1

Teddy is a six-year-old first grade student attending Lilja Elementary School in Natick, Massachusetts. Teddy currently holds the diagnosis of Autism. Teddy joined the Primary ACCESS, Assessing Core Curriculum for Everyday Student Success, classroom at Lilja starting in Kindergarten. He was part of the Hand and Hand Preschool at the Bennett- Hemenway School in Natick before entering Kindergarten.

Teddy is a loving and intelligent first grade student. He demonstrates strengths in mathematics, geography, and writing. He continues to experience difficulty in the areas or appropriate vocalizations, daily living skills, and socialization with his peers.

The Primary ACCESS classroom is a subset classroom, which includes 9 children on the spectrum. They participate in inclusion for snack, lunch and recess. In the ACCESS classroom, Teddy's academics are presented through a combination of discrete trials and individualized mini lessons. He receives three hours per day of 1:1 instruction from a Behavior Technician and spends the rest of the day integrated into the ACCESS classroom.

Three primary staff members including an ACCESS teacher, a Student Support Facilitator, and a Behavior Technician throughout his day support Teddy. Additional support is provided from another Behavior Technician and an additional Student Support Facilitator. A Board Certified Behavior Analyst (BCBA) creates and supervises Teddy's discrete trial programming as well as his Positive Behavior Support Plan. The principals of Applied Behavior Analysis (ABA) are used across all activities and settings. Teddy partakes in Speech Language therapy, Occupational Therapy and Physical Therapy, each 2 times per week.

The environment in which Teddy's learning takes place is in the Primary ACCESS classroom at Lilja Elementary. Lilja Elementary School is a public elementary

school within the Natick Public School District. This public school focuses on program development in regards to the learning goals of the children demonstrated in the Individual Education Plan. The public school is similar to a private school because the focus on the individual's programs is a vital part to the education plan delivered to the student and family. Another similarity between public and private schools is that training of staff members is implemented across both settings to provide the best treatment possible for the child with Autism.

Within the public school setting, classroom support is offered through consultation and direct service often from outside providers. Most recently, school districts are hiring in house Board Certified Behavior Analysts to perform the direct consultation. Private schools' direct consultation is implemented from onsite staff that is hired specifically to perform the ABA services. Most of the private schools in the Commonwealth of Massachusetts are requiring Master's Level Clinicians to be educators, depending on funding and/or insurance reimbursable services.

In the public school, the inclusion of children with Autism is required. If the child is not learning or is a danger to themselves, teachers or peers, the child will be removed from the public school. It will be the districts responsibility to fund the child's education at a private school. If the parents are seeking additional treatment on top of the original school day, services are provided by private schools or agencies. This treatment can be paid out of pocket or can be insurance reimbursable services; depending on the agency or state you are living in.

The target behavior is vocal stereotypy. Vocal stereotypy is defined as repetitive vocal responses or utterances. It is any instance of non-contextual or nonfunctional speech, included but not limited to singing or phrases unrelated to a present situation. These vocal responses can include word approximations, noises, and mixtures of repeated words. This vocal stereotypy can also include speaking unintelligibly and are initiated communicative attempts at inopportune times of the day.

The hypothesis of function for vocal stereotypy is automatic reinforcement. Automatic reinforcement is produced independent of the social environment. Prior data suggests that there is an elevated response rate across all assessment conditions, suggesting of automatically maintained responding or undifferentiated responding

(Hanley, Iwata and McCord, 2003). This proves to be true for Teddy based on previous data collection.

The first proactive strategy would be the implementation of a combination of differential reinforcement of other behavior (DRO) and differential reinforcement of alternative behavior (DRA). A DRO is a procedure in which reinforcement is contingent on the absence of the problem behavior for a specific period of time. A DRA is when reinforcement is contingent on a particular alternative response, which will be appropriate speech.

For the DRA procedure, an edible of Teddy's choice identified during a preference assessment will be used to reinforce any instance of appropriate speech. If Teddy is using functional speech with a loud voice, reinforcement will not be delivered. This reinforcement can be in the form of social praise and the edible shall be delivered on a FR 1 schedule at first and then fade to a VR 5 after success is shown in the data for the procedure. Staff will take frequency data of how many instances of appropriate speech occur throughout the school day.

For the DRO procedure, a token system will be used during full instruction time and unstructured time in the classroom. There will be no data taken during specials, lunch and walking in the hallways, as the staff to student ratio is too small for proper data collection. The token system shall be a 5-token board with a visual cue of a quiet voice, with which Teddy is already familiar.

A timer will be set for 2 minutes and a token shall be delivered after that time for the absence of vocal stereotypy/inappropriate speech. If stereotypy/inappropriate speech occurs, the timer will start over. The token will be delivered only if 2 minutes have gone by with no instance of the target behavior. The staff will take frequency data of how many times Teddy earns his reinforcement break throughout the school day. The DRO interval will increase to 5 minutes per token after Teddy has shown progress in the data to try and fade out the procedure. Teddy shall receive 3 minutes of free time to use his chosen reinforcer after earning all 5 tokens.

Teddy has been given a preference assessment in the beginning of the school year to identify potent reinforcers. On his token board he will have 10 choices of those potent reinforcers to choose what he would like to do after he earns all five stars.

The second behavior change strategy recommended in Teddy's case would be the response interruption and redirection (RIRD) approach. This is another option for treatment of vocal stereotypy. Interrupting vocal responses and redirecting behavior towards appropriate vocalizations has been shown to decrease the probability of problem behavior (Ahearn et al, 2007). This form of positive punishment involves implementing response blocking and then redirecting Teddy to use appropriate speech. Positive punishment is when a behavior is followed immediately by the presentation of a stimulus that decreases the future occurrence of the behavior. This procedure will only be implemented if the DRO/DRA combination treatment package is showing no decrease in the vocal stereotypy. A 3-week review of treatment will be done to see if the positive reinforcement approach is working.

In this case, the positive punishment is response blocking. The response blocking is the interruption as soon as Teddy emits vocal stereotypy to prevent the completion of inappropriate speech. Upon interruption, Teddy will be prompted to answer simple questions that are already in his verbal repertoire, (i.e., what's your name? how old are you? what school do you go to?) Upon answering these simple questions, reinforcement will be given on a VR 5 schedule contingent on appropriate speech, including independent and prompted speech. The same token board will be used from the first procedure but the timer will no longer be used. The staff will take data of how many instances reinforcement were earned throughout the school day.

Most-to-least prompting will be used to implement an errorless training procedure for the intervention. The most intrusive prompt would be a full verbal to redirect Teddy to use appropriate speech. When the response block is implemented, a full verbal cue/question would be asked for Teddy to answer. As the intervention proceeds, the next least intrusive prompt would be a partial verbal question would be asked (i.e. what's your____?) Teddy will finish the sentence followed by answering the question. The next step would be a partial prompt, which the therapist with a phrase/question to redirect to appropriate vocalizations would interrupt the inappropriate speech. Last, as the intervention comes to completion, Teddy will independently refrain from his vocal stereotypy and participate in conversations with teachers, family and peers. The use of prompting should be used until stable, correct responding is occurring. The prompt

should fade by only small changes to the dimensions of the prompt. The criteria to decrease the prompt level will be 80% successful across 3 consecutive sessions.

Appropriate speech is the replacement behavior through RIRD. Using simple questions that are already in Teddy's verbal repertoire will be easy to answer, thus redirecting him back to speaking with social pertinence. This is an ethically sound procedure because it involves answering simple questions that are not intrusive or adverse. By implementing the DRO/DRA, positive reinforcement is given with the incorporation of positive punishment, RIRD. The use of positive punishment is recommended with positive reinforcement at all times in regard to best practices.

In addition to the BCBA, the classroom teacher, the behavior technicians, the student support facilitators, the principal and all other specialty staff who work with Teddy on a regular basis, will be informed of the intervention. It is important to notify all members of the team so there is consistency of the implementation of the treatment across all settings. Some staff members may need some extra explaining due to workplace culture issues. They might not agree with the interruption but valid explanation from empirical articles would be given to support the plan. The supervisor would meet with Teddy's team, including his parents, teachers, and principal to get clearance and approval for the treatment. Consent will be needed before any treatment is ever applied. An email to all staff members would then be distributed with explanation for the treatment, rationale and steps to implement. Anyone to whom Teddy comes in contact with will be aware of his intervention.

Staff training is an important step to implementing a positive behavior support plan. All staff must be educated on the child, the operational definitions of the behavior, and how to implement the intervention. To best educate the staff for consistency and change in behavior, all steps of the intervention will be described along with rationale for the plan. A written description will be provided with clear guidelines on how to initiate the procedure. The written description will be in the form of a task analysis, which is a breakdown of each skill to teachable units. Next, the skill will be demonstrated to show purposeful modeling for the staff to pass along to Teddy. After the trainee is allowed to practice, feedback will be given immediately and upon implementation of the intervention. Feedback will be provided during role-plays prior to implementing the

intervention with Teddy. The criterion of competency will be five days of training, demonstration and feedback.

Each day after these five days of training, supervision will be provided daily for a week. Supervision will be provided by the BCBA who is in charge of the implementation of the intervention. Supervision will then be given once every two days after the first week to make sure in intervention is properly implemented. The supervision will then be faded to twice a week for the foreseeable future. Supervision will include direct observation of the procedure by monitoring staff performance and then supporting proficient staff performance. Modeling will be performed if necessary for any question of proper implementation of the intervention. Correction of incorrect procedures will happen in a meeting time set aside away from Teddy. Positive reinforcement will be used during these correction procedures to keep up staff morale and proficiency. All staff members who work directly with Teddy, including parents, teachers, behavior technicians and specialty staff will be educated and trained properly. The supervision system will be described to all staff members so they can be aware of the observation and feedback portion of the training.

Part 2

There is always a chance that problems will arise when implementing an intervention. The first problem that could occur would be incorrect data collection or falsifying data. This problem could show no results or results that are too good to be true. If data is taken incorrectly, there is a chance that the wrong behaviors are being reinforced and the intervention is not being implemented correctly. If there is an instance of falsifying data, the fact of whether or not the treatment is actually working will be masked. These two problems could result from staffs that are not trained correctly or are not competent enough to implement the intervention.

A supervisor could quantify these problems into observable behaviors because the data that is submitted daily could show completely different results than when observed by the supervisor themselves. Treatment integrity would be compromised in this instance because one staff member could be taking data and implementing the procedure differently than another. Staff training and consistent feedback can aid this problem so all staff members are on the same page. Reliability of data would also be at question because

you can see the results on paper. If there is inconsistency across treaters, someone is not doing their job correctly. It is important to stop this problem right away so true results can be shown from an intervention that is working or one that is not.

Work place staff and classroom resources would be used to eliminate these problems. The behavior technician, who has experience in ABA, would be the lead in running the intervention. They would work closely with the supervisor to make sure the procedure would be executed correctly. A data sheet for the procedure would be given to the behavior technician. The data sheet would be explained to the rest of the staff in the classroom so everyone is clear on how and where the data results should go. The Behavior Technician would be in charge of taking the data, recording results in the program book and graphing the data daily. The graphs would show the staff that took the data and the trends the data is taking day by day. The BCBA supervisor would review the data weekly during the supervision hour with the behavior technician to make sure data is being taken accurately. A timer would be provided from the BCBA to record the intervals described in the treatment package.

In order to successfully get the staff on board with implementing these procedures, the supervisor would start with a solid training explaining the rationale for the treatment. The expectations of staff would be made clear before the intervention is started. Therefore, all staff would know they would be held accountable for the reliability of the intervention. The supervisor would let the staff know to always consult with her if questions regarding the treatment arose. The supervisor would then be viewed as available and approachable. Positive reinforcement would be given to all staff members for the great work. They would be shown progress and digression in regards to treatment. They would be able to share ideas on what is working and what is not, in regards to the treatment, staffing issues etc.

As stated prior, everyone on Teddy's team will be notified of the treatment procedure. This team includes parents, teachers, aids, Behavior Technicians, OT's, PT's, and Speech Pathologists etc. A meeting would be set up with his team to explain processes. An email will be sent out to all staff members at the school, so they can be familiarize themselves with the procedures. The team members will be advised with instructions of the treatment, what to reinforce and what not to reinforce.

There are always ethical dilemmas that come up when implementing any kind of treatment that is not seen on a regular basis. The first ethical dilemma that could present in addressing the target behavior within the intervention selected is "Maintaining Confidentiality (2.07)." As a behavior analyst it is expected that confidentiality be always respected of those whom they consult. Clients have a right to confidentiality. This issue could surface because of the number of staff who is notified about the intervention. It is important that staff is aware of the intervention, but information about the client could end up in the wrong hands. A way to avoid this would be cuing all staff to the importance of confidentiality and law sets up that confidentiality. If the information about the ethical dilemma is presented with the original notification of the intervention, confidentiality can be respected for Teddy at all times. Teddy's parents may also have an issue of the number of staff who are given information about his treatment. They then might not give consent to a treatment that has proven to be valid by previous research.

Another ethical dilemma would coincide with "Reinforcement and Punishment (4.05)." This ethical guideline states that a behavior analyst always recommends reinforcement rather than punishment whenever it is possible. If punishment is necessary, using procedures that include reinforcement will be encompassed into the program. In the explanation of treatment to the team, parents and teachers alike might have a problem with the use of RIRD because it is an example of positive punishment. Even though the DRO/DRA procedure is in place first, the fact that RIRD includes interruption and redirection, which is added to decrease the behavior, could become aversive to Teddy. Parents might hear only the word punishment and not want to proceed with the treatment. One way to resolve this issue would be to explain to parents and staff that positive reinforcement is coupled with the RIRD, so punishment is not used alone. The only reason why the term punishment is used is because we are trying to decrease a behavior, not physically or verbally punish the child. Careful explanation in terms everyone can understand, backed by empirical evidence will hopefully change any bad inclinations about the treatment being prescribed.

The third example of an ethical dilemma would include the ethical guideline of "Avoiding harmful reinforcers (4.06)." This guideline states that behavior analysts will minimize the use of any reinforcer that could be a detriment to the client's health. Even

though a preference assessment was given to Teddy in the beginning of the year, the use of edibles for this procedure might not go over well with his parents. If he is given an edible that contains sugar or high fat content, this may cause problems later on in life. Even though edibles can be highly reinforcing, parents have to give consent to allow this reinforcer to be used. Also, the fact that Teddy is given an edible for use of appropriate speech, this could lead to the expectation that the appropriate response warrants an edible, which may not be socially valid when generalized into real life situations. One way to minimize this ethical dilemma is to start off using an edible, with parents' consent, and try to fade to a formal of social praise, which is more socially valid in the long run. Therefore, something may harm Teddy if used in excess will be eliminated if he responds well to social praise.

Part 3

There are many important reasons why this intervention should be implemented. First, it is most important to use empirically validated practices when choosing an intervention. According to Kratochwill, Elliott, and Stoiber (2002), it is most necessary to identify intervention procedures that are supported by research and that will be supported in the current environment. The intervention of RIRD uses positive reinforcement and positive punishment, which is abides by our ethics. It adds an interruption to decrease inappropriate speech and redirects using reinforcement to increase functional conversation. Also, using empirically validated practices are important because the intervention has been tested in a similar environment, to that of the current environment, and results have occurred to decrease inappropriate speech. The more research that backs up the intervention and promotes social validity and treatment integrity, the better off the intervention will be in its rate of success.

Three articles have demonstrated treatment acceptability, treatment adherence and treatment integrity. First, a study was done by Miguel, Clark, Tereshko and Ahern (2009), on the effects of RIRD and Sertraline on Vocal Stereotypy. The purpose of this study was to implement RIRD and see its effects with or without sertraline, selective serotonin reuptake inhibitors (SSRI). SSRI's are commonly used to treat depression, obsessive-compulsive disorder and social anxiety. The study was done on a 4-year-old

boy with Autism whose vocal stereotypy was maintained by automatic reinforcement, proven by the results of a functional analysis.

The first part of the experiment, 10 mg of sertraline was given to the participant. During this phase, every instance of stereotypy was interrupted by the removal of whatever item the participant was engaged. If he manded for the item appropriately, social praise was given along with the delivery of the item. The second portion of the study was the implementation of RIRD plus sertraline. This portion was the same as the sertraline, only but RIRD was done by removing the engaged item and delivering vocal imitation sounds that were already in the learner's repertoire. Appropriate responses resulted in the delivery of social praise and the preferred item. The last part of the experiment used only the implementation of RIRD. The medication was faded out and the RIRD procedure continued. A follow up procedure was done 2 weeks after the medication had been faded and the only treatment that was given was RIRD. The results show that vocal stereotypy was decreased when RIRD was used and the sertraline had no effect in reducing the participant's vocal stereotypy. This study supports my intervention because the results show a replication of a previous study done by Ahern et. al, (2007). The fact that the study's results have been replicated proves this is a valid treatment for the decrease in vocal stereotypy.

The second study, Assessing and Treating Vocal Stereotypy in Children with Autism, is by Ahearn, Clark and Macdonald, (2007) was done previously to the replication above. First, a functional analysis was done to examine the function of the behavior, vocal stereotypy. The intervention was initiated in an ABAB design, starting with baseline, then treatment, then baseline and last treatment again. During baseline, appropriate vocalizations were reinforced by social praise and the request was honored if possible. RIRD occurred in similar situations as baseline but the occurrence of vocal stereotypy resulted in the immediate interruption and redirection to other appropriate speech. Social questions and vocal imitation that were in the learner's repertoire were emitted as prompts for appropriate speech. A session clock was started at the beginning of each session and was stopped each time RIRD was delivered. The session clock started after social praise delivered, following three consecutive instances of compliance. Treatment sessions were scored by subtracting the total session of time from the total five

minutes given for behavior to freely occur. For each student, vocal stereotypy occurred much lower than those results in baseline. Three of the children also displayed increase in the appropriate communication. This study supports my intervention because RIRD is shown for a second time to reduce vocal stereotypy. This study is shows that the interruption could be averse for the child, extinguishing the problem behavior and redirecting to appropriate vocal exchanges to get what they need. This is the goal for Teddy to be able to express himself properly, making the problem behavior less likely to occur.

The third and final study researched was A Replication of the RIRD Strategy to Decrease Vocal Stereotypy in a Student with Autism, by Liu-Gitz and Banda, (2010). This is also a replication of Ahern et al, (2007). The participant was a 10-year-old boy with Autism. He had frequent stereotypic behaviors, tantrums and inappropriate socialization. This experiment was also an ABAB design, which measured stereotypy in baseline and then again with treatment. This was done to measure the effectiveness of RIRD. In baseline, the teacher directed the participant like normal, advising him not to participate in whining or inappropriate vocalizations during class. During RIRD, any instance of the target behavior would be interrupted by a series of questions in the learner's repertoire, related to his interests and favorites. Every time the teacher started RIRD, the timer was stopped and the student was advised to return to the task at hand. The timer was restarted, leaving a time of 5 minutes for the baseline interval to occur, like the previous study, where the target behavior was free to occur. In this replication, the results indicated that the RIRD intervention successfully reduced the target behavior. Appropriate vocalizations also improved when RIRD was introduced and reintroduced after baseline. This study supports my intervention because it shows yet another example of successful replication using RIRD.

In summary, these three articles develop a strong background to demonstrate that RIRD is a successful intervention for children with Autism. The studies are recent and provide a great understanding of the treatment. Two of the studies are replications of Ahern et al. (2007). The fact that they were able to replicate the results shows the strong treatment integrity and social validity. The empirical articles prove that decrease in vocal stereotypy is possible with the correct intervention. The goal of appropriate vocalizations

was apparent across all three studies, which is the goal for Teddy to eventually generalize across all settings in his life.

References

Ahearn, W. H., Clark, K. M., Macdonald, R., & Chung, B. (2007). Assessing and Treating Vocal Stereotypy in Children with Autism. Journal of Applied Behavior Analysis, *40*, 263-275.

Liu-Gitz, L., & Banda, D. (2010). A Replication of the RIRD Strategy to Decrease Vocal Stereotypy in a student with Autism. Behavioral Interventions, *25*, 77-87.

Miguel, C., Clark, K., Tereshko, L., & Ahearn, W. H. (2009). The Effects of Response Interruption and Redirection and Sertraline on Vocal Stereotypy. Journal of Applied Behavior Analysis, *42*, 883-888.

Exhibit Three

The third exhibit chosen to model growth and development through coursework, thinking and learning is a Final Paper from a Cognitive Behavior Theory and Therapy class. This goal of this coursework was to enhance students' theoretical, empirical, and practical understanding of cognitive, behavioral, and cognitive/behavioral approaches to psychological and behavioral change. This course allowed one to reevaluate their learning thus far and reapply it to a brand new approach to bring into the classroom when working with children with disabilities. The learner was able to step out of their comfort zone to bring forth new thoughts and feelings. This revelation allowed them to clarify their learning path and create new identities to prosper upon.

The exhibit displays a revelation where the learner is able to connect their prior accolades and connect them to a new theory to convey in their education of others. This class and final paper allowed the learner to reach far beyond their primary focus of Applied Behavior Analysis and Education to connect a new outlook to their teaching. Cognitive Behavioral Therapy is a theory and practice, which is highly useful in the classroom. Learning how to connect it to oneself and future students is a skill that one will utilize to its utmost potential.

Cognitive Behavior Theory/Therapy Final Paper

Personal exploration has been an important theme throughout this course. With the help of the textbook, "Handbook of Cognitive Behavioral Therapies," edited by Keith S. Dobson, the class lectures and discussions, I have been able to look inside myself as an educator. I was able to find the high level of effectiveness I need to provide to my students. I have learned about new techniques and therapies that will be useful within my practice to be an effective specialist. It has been very interesting to see others perspectives and point of views, which have added to my education. These perspectives have opened my eyes to respect others experiences more than ever. I will take that level of respect and open mind with me always, to make sure my treatment interventions are completely idiosyncratic and meaningful to each student in my repertoire.

In regards to personal qualities that will make me an effective counselor, I believe I hold many that will be helpful to a fulfilling career of educating and helping others. First, my previous education in Psychology has laid a solid foundation for me to develop skills based on this science. Graduate school, with a focus in Applied Behavior Analysis and Education has refined my skills to develop an even bigger, distinguished foundation. This foundation will always be an important part of the educator I am and who I will become.

Second, I believe my previous experiences in many different situations in and outside of the workplace has a major effect on the validity of my practice. I started my career working on a secure assessment unit where I practiced as a Milieu Counselor. This job was where I found a level of patience, compassion and empathy for people in need. I continued to use this patience, compassion and empathy as I started working with children with Autism in two public school districts. My co-workers taught me many necessary skills needed to work well with this population. I found myself learning from others and also from myself, as I was dispersed into situations where I had to act and react quickly, safely and effectively. I always try to remember all that I have learned from the experiences and apply these lessons to everything I do today and will do tomorrow. I am lucky to have worked with many wonderful people who have taught me to think on my toes, trust my instincts and be confident in my decisions. These qualities will surely be utilized everyday as an effective practitioner.

The third quality that I believe will always prove to benefit my practice is my ability to develop solid relationships and rapports with the children and other co-workers. This has always been a strong point for me. The mix of my sense of humor, accepting personality, yet strong work ethic has helped solidify relationships with others. Children have always been very comfortable around me. This quality is one of the most important parts to developing a proper treatment plan with a client. “The effective therapist can both teach in a playful manner and play in a way that teaches. Being able to make skillful use of age appropriate play activities accomplishes three important objectives: 1) It fosters a positive therapeutic relationship; 2) it can create a window for more direct observation of the child’s operating expectations and beliefs; and 3) these activities can be vehicles to introduce and develop more adaptive behavior and more constructive thinking about issues that are troubling the child (Dobson, 2010).” I connected with this quote immediately and know that fostering a relationship is the only true way to a child’s heart and mind.

Moving forward to my own personal issues that could quite possibly hinder me in my career would be the fact that I have a hard time accepting that I cannot help everyone. This is a tough mountain to climb, but I need to always remind myself that I can only do so much. Even as much as I try to help, in some situations it may not work out. I also believe that in certain situations, I am too hard on myself. I tend to blame myself if treatment does not work out. I need to remember that if I have followed all the steps to providing the best possible treatment and it is not successful, to not take it personal. I know this will happen often in times ahead, so being prepared and seeking out advice from others about how they cope will help me.

I found an interesting article online titled, “Therapist Burnout.” This article made fascinating points about therapists and how their self-esteem is dependent on their client success. “Spawned from a desire to help, new therapists often feel compelled to go overtime in session, emotionally invest beyond healthy limits and take their work home by ruminating about clients in their free time. They want to serve their clients and validate their career choice so they work extra hard and become hyper vigilant to any signs of clinical success or failure. Their self-esteem becomes dependent on their client's progress. That's far too much stress on their emerging therapy skills and too much

pressure on the client. Much of my work as supervisor entails teaching (and modeling) patience, lifelong perspective on the client's process and self-care for the clinician. We must meet our own needs first: if we're emotionally spent we're no help to the client (Howes, 2008)."

This article holds a very interesting, yet valid perspective on how treaters can end up putting too much pressure on themselves and clients for self-fulfillment. I believe it is always important to remember to leave work at work. One must learn to only invest the appropriate amount time for creating and implementing treatment for clients. It is unhealthy, as Howes stated above, to spend time dwelling on the success of clients to validate your own achievements. Self-care for the clinician is a very important aspect of treatment to make sure there are boundaries in place and the client is being treated ethically at all times. The well being of the treaters should always be taken into account for the benefit of all involved.

The chapter on CBT for diverse populations was very informative and broadened my perspective on treatment for all cultures. I feel as though I have always related well to people with different backgrounds. Biases have always been intermixed throughout my upbringing, but I have done more than enough to minimize them. I respect everyone for who they are as a person. I have taken a Multiculturalism class in graduate school, which has solidified my level of respect through lectures and writing. That class, along with chapter fourteen in our text has given more information about how I can better represent myself as an open-minded clinician. I am willing to treat anyone no matter where they are from or what culture they may practice. I am prepared to be a "culturally competent therapist who embraces the inherent tension and meet it with informed curiosity and openness (Dobson, 2010)." I plan to not overgeneralize any group of people and to stay away from the rigid category of "like us or not like us" (Dobson, 2010).

When it comes to handling conflicts, I believe it is essential to work as a team and collaborate with co-workers to come up with the best solution. I have learned this from many years of working in a team environment. One may be able to solve problems alone, but I have always found it to be best to seek out others who have a different point of view. This point of view could spark ideas that may have not been thought of alone. I found an interesting article on handling conflict in the work place on www.boston.com.

The article elaborates on eight ways to keep a smooth environment and handle conflict appropriately. I plan to implement these tips as I continue to build relationships at work and formulate best practices. The tips are as follows; approach conflict with an open mind, consider what might have caused the conflict, be respectful of differences, try to cut the conflict off in its early stages, listen carefully, be mindful of your language, ask for help, be sure the conflict is resolved (Lankton-Rivas, 2008).” These strategies break down the conflict into parts, much like CBT, to try and resolve the problem one step at a time. I feel as though I have utilized these strategies before and will continue to do so with co-workers and clients alike.

As this course comes to an end, I feel as though I have learned many new skills to add to my repertoire to become an effective practitioner. The text to which we have covered throughout the winter session has given many great examples and ideas to how to be a better advocate for change. Some of these tactics reviewed, I have already been using, and I just did not know they were an aspect of CBT. In chapter twelve, the use of FEAR is a strategy that I use on a regular basis with children with higher functioning Autism. The FEAR acronym is not the same, but the ideas of breaking down the situation and adjusting your feelings based on that situation is effective for my students. Another example I plan to practice is, the problem solving steps for Adolescents and Parents. This will be particularly affective with the families I work with because of its simple formulation. It will put problems into perspective and solve them using the best-selected solution.

I believe I will also need to continue my education and always be current with best empirically valid treatments. I plan to evaluate the treatments to make sure they are the best option for the client in need. As I continue my education and work on building the best relationships with clients and their families, I feel as though I will be an effective consultant.

I have valued this class in many ways. It has given me the chance to broaden my education to new treatment options for children who are in desperate need of help. I look forward to continuing to try and implement CBT in my workplace. I have already spoken with other practitioners and they are interested in the ideas that I have learned. Thank you

for the opportunity to expand my skill set to continue to help children and families with the best treatment options possible.

References

Dobson, K. S. (2010). Handbook of Cognitive-Behavioral Therapies. (3rd ed.). New York, USA: The Guildford Press.

Howes, R. (2008, 10/13). Therapist Burnout. Retrieved from http://www.psychologytoday.com/blog/in-therapy/200811/therapist-burnout?page=2

Lankton-Rivas , S. (2008, 05/14). Overcoming Conflict in the Workplace. Retrieved from http://www.boston.com/jobs/news/articles/2008/05/14/overcoming_conflict_in_the_work place/

Exhibit Four

The fourth and final exhibit is chosen on behalf of Jeremy Szteitzer's Research and Engagement course. This course demonstrated the truest form of reengagement one has encountered thus far. In order to develop this final piece, a series of steps were taken. The development of ideas and research were created from collaborating with others and finding ones own path. The final exhibit is a testimony of one's aspirations to work with others in supporting communities. The most beneficial aspect one can take from this experience is the way that a skill sequence was formed through the development of this project. This sequence was difficult to formulate at times, but the final product is an example of how the pieces all came together.

The beginning of this project articulates research and interviews of parents and co-workers from the public school and the private setting. With that information, a plan was developed to reach out to families in desperate need of answers. They are seeking out the best ways to educate their children with Autism. The writer makes a valiant effort to connect and educate parents about learning opportunities. This promotes a high level of energy and actively engages with others to make a change for children and families in need.

An Overview and Plan for Parents on Choosing the Best Education Options for their Child with Autism

According to the Center for Disease Control and Prevention, in the surveillance year of 2008, about 1 in every 88 children have been diagnosed with Autism. This is statistic has increased by sixty-two children since the year 2000. There is no clear cause for this disorder, but the statistics are alarming and worthy of further study. A law passed in 2004- the Individuals with Disabilities Education Improvement Act (IDEA 2004). This law guides states and school districts to educate children with disabilities. With all children mandated a Free Appropriate Public Education (FAPE), the public schools are now heavily populated with children with Autism. FAPE rules that children are no longer denied an education because of their special needs or behavioral characteristics. Over the past few years, more and more advances in the science of Applied Behavior Analysis have been implemented into the public school systems. There have been leaps and bounds made in regards to making accommodations for children with Autism, but the question raised is, what are the best options for these children affected by this life altering disorder? How can parents be informed of updated and significant information about placement for children with Autism Spectrum Disorder in regards to an inclusion classroom verses alternative methods? How can we as educators inform parents where and how their child should be educated in order to present the best possible outcomes for their future?

Over the last two years, I have had the pleasure of finding a career that is based on the science of Applied Behavior Analysis. This science is an effective treatment for children with Autism, if and only if qualified and trained personnel implement it properly. “Applied behavior analysis, commonly referred to as "ABA" is a systematic method of supporting and/or altering behavior. It involves studying behavior (via observation), analyzing the steps involved in producing a behavior, and then teaching or modifying these steps one at a time. The principles of behavior therapy have been developed through more than 50 years of scientific research (Chalfant, 2004).”

Last year, I started my journey as a Behavior Technician, in a public school district, in a substantially separate classroom. This is a classroom within the public

schools, which contains children with Autism and other learning disabilities. They are not included in a regular classroom because of the level of support needed and intervention implementation can be intrusive at times. Within that classroom I worked closely with a Special Education Teacher, a Board Certified Behavior Analyst, two other Behavior Technicians and two Paraprofessionals. This was my first experience working one on one with children with Autism, implementing discrete trial training, which is a teaching method used to break steps of an entire skill into simple steps. This is a highly effective method, but is only one small part of all of the science of Applied Behavior Analysis. It is important to note that ABA is not Discrete Trial Training.

I spent my day with 3-4 children, between the ages of 5-11, one on one, implementing these trials. The programs focused mainly on reading, writing, math, receptive identification and phonemic awareness. All of these subjects are important to early learners but I always felt like there was something missing. As I look back on this experience, I believe I needed more guidance professionally and the children could benefit from more extensive treatment. They needed additional services and I knew there was more to offer these children.

I finished up the school year searching for a new opportunity. I found a private clinic based out of Needham, Massachusetts. I started working for them immediately after the school year ended and my perspective of what there is to offer these children with Autism has never been the same. The special expertise of the people at the clinic and the exceptional innovation that they use to help children made this a life changing experience. I started my training with hours of videos based on the science of Verbal Behavior, which is a technique, formulated by BF Skinner and improved over the years by many Behavior Analysts. Verbal Behavior can best be explained by the motivation of the speaker, the preconditions and the consequences that follow speech. My training continued with the explanation of direct instruction, discrete trial training, intensive teaching trials, natural environment training and task analyses. This training was completely different from the lack of training I received in the public schools.

All of the programs aside from discrete trial training were new and exciting. Supportive supervisors, all Board Certified Behavior Analysts and a Director who had

formulated plans to change children's lives, surrounded me. I knew I was in the right place. I started meeting with children, meeting their parents and loving the reaction about the progress their children were making. I began thinking about how their parents found this clinic and why is not every kid in Massachusetts walking through the door to be treated.

I began my research by finding information about inclusion. I found an interesting article on reflections from teachers about educating special needs students. These reflections included the theory of cognitive dissonance. Cognitive dissonance is when people have a drive to reduce the feeling of frustration or anxiety about a particular subject by altering existing thoughts. This feeling of frustration is displayed through the eyes of special education teachers. Basically they are seeking out for their expectations to become a reality, but in some situations, this can be very difficult. The article written by Clayton Ronald Alford provides an interesting perspective on efficacy and the relationship with the feelings of cognitive dissonance that some teachers experience. "According to Gregoire (2003), efficacy suffers when teachers rely on inadequately designed training courses that fail to equip them to instruct students with varying intellectual skills and socio-economic levels in inclusion classes. When teachers believe their teaching certificates validate their teaching ability, but also believe poor test results from their inclusion students cast doubts on their teaching ability, the teachers can experience cognitive dissonance, according to Gregoire, that lessens their efficacy (Alford, 2010). If this cognitive dissonance occurs, this could result in improper education of students who need more help than those mainstream students. "Male (2006), suggested general education teachers' attitudes were important in determining the success or failure of special-needs students in inclusion classes; she suggested general education teachers needed more training in special education to be competent inclusion teachers."

The article is empirically validated to the interest of education options because the competency of the teacher is affecting the way our children are educated in the public schools. There are many stressors within the general education realm, never mind adding those within the group who need special education. The competency of the teacher is a vital part in the foundation of a child's education. If this competency is questioned than it

is the children who are suffering in the long run. Personal beliefs of the teachers along with their own success and failures can result in poor interaction with the students. I have had many conversations with general education teachers who do not have any knowledge on Autism. This is poor validation of the education that the child could be receiving.

Press, Foote and Renaldo write the second article that relates to the success/non-success of inclusion. The paragraph below presents an interesting perspective on what is offered in the inclusive classroom and how teachers' view the level of success.

"Despite federal mandates propelling the inclusion movement in the United States, relatively little has been done to explore the current state of inclusive practice in terms of service models most often employed and other relevant classroom characteristics including number of students with disabilities, training experiences of educators, and other available educational support persons. Based on extant literature (e.g., Ryndak, Jackson, & Billingsley, 2000; Walther-Thomas, 1997), it is not clear what teachers would commonly recognize as sufficient to enhance inclusive practice or even what the norms are for a general education classroom to be considered inclusion. In an era in which investigations of teacher perceptions of inclusion are replete, teachers can no longer be asked why they think inclusion is or isn't working or why they do or do not value it. Instead, it is necessary to identify commonly employed inclusive practices, evaluate their efficacy, and assist teachers in implementing evidence based, effective approaches. How much special education training do general education teachers need? What is the optimal inclusion class size? How many students with severe disabilities can be accommodated within a single class? How much and what kind of personnel support will make the class successful? The answers to these questions may help to improve the quality of inclusive education, but before these questions can be answered it is necessary to obtain a clearer understanding of the operational definition of inclusion in today's general education classes (Press, Foote and Renaldo, 2010)."

The questions about class size, educational training, accommodations and level of support are all important in the success of the students. I find it very interesting that teachers can no longer be asked why they think inclusion is or is not working. Evidence based practices and effective approaches should be what drive the teachers to implement

a successful learning atmosphere. While working in the public schools I felt as though the children were affected by the variables such as class size, educational training, level of support and the idiosyncratic accommodations being made for children with more severe disabilities. It always seemed like there were never enough hands, never enough time and there was always variability of the curriculum being introduced. The children did make progress, but it seemed to me that the more needed to be done to go above and beyond for the children.

With this information, I began the interview process with parents in the private clinic to which I am employed. Christina Metevier is a mother of a 5-year-old boy, Jake who has the diagnosis of Autism. She commutes 2 hours each way from Western, MA to have Jake come to the clinic full time for school. She had a horrible experience in the public schools and needed to seek out other options for her son, but money was always a major setback. She received an email in from the SPED team in her town that informed her of a summer camp that is run at our clinic. She made arrangements to live with her mother for the summer to make the commute less stressful on their life. She has not looked back since. The progress that Jake has made over the last four months in incomparable to the regression he was emitting at the end of the 2011-2012 school year. Jake has an amazing supervisor who works closely with the Director and his family to make sure all of his goals is appropriate to foster the type of learning that Christina has been looking for since Jake was first diagnosed.

We talked about when she knew that alternative placement was the best option for Jake. She realized this when she saw signs of regression. Progress that he was making at home was not being carried over or generalized at school. They had an advocate who went to progress meetings and passed notes under the table to Christina. Christina was very turned off by this whole advocacy portion of the IEP process because she felt as though she did more talking and advocating for her son than the advocate. Jake began to lie on the sidewalk outside of school with hopes of not going inside. Every day was a poor report with Jake having a “tough day,” every day. It was hard for Christina and her husband to be subjected to people who worried more about their personal feelings than the betterment of her son.

Her experience thus far in the alternative placement has been “completely different.” She and her husband are happy and feel as though a huge weight has been lifted off of their shoulders. She now goes to Jake’s monthly meetings with a paper and pencil, when before she used to carry program binders and overwhelming anxiety to how she was going to get his public school team on her side. Christina is happy with the Jake’s team of educators, not only because they want to work with her and her family, but they also allow her to come and observe him in person to witness his progression every Friday. She states, “Friday is my favorite day.” She is thrilled with Jake’s opportunities to learn with the accommodations he needs to be successful.

I asked her, “in your experience and opinion, what can we do as educators to better inform parents of the best options for the child for optimum learning?” She thinks it is very important for the school systems to have the best resources and placements for the surrounding areas. This would be a huge help, rather than the parents having to do all the research and not know where or what they should be trying to identify. The connection from schools to clinic in her opinion would be the best idea to start the process. She advised that the guidance office should have options for parents to seek out therapy, support groups and any other additional resources that could make this journey somewhat easier. Maybe there could be a liaison between the guidance office and the clinic to communicate and link the parents’ treatment options for their children.

My interview with Christina was one of the most moving and motivating conversations with a parent I have had to this day. She is an amazing parent, who is looking for the best options for her child. She is dedicated to her son, his treatment team and his progress so he will be able to have many of the same opportunities as other children his age. She was so thankful to participate in the interview and commended me for my efforts to try and formulate a plan for parents just like her. I will continue to be in contact with Christina and update her with the progress I make in building this plan. In conclusion from the interview, I believe schools need to strengthen and refine the role of the guidance counselors and other SPED staff members. They should spend more efforts connecting with outside sources to pass on recommendations to parents.

My second interview was with the director of the clinic, Eve Weber. She is a Speech/ Language Pathologist and a Board Certified Behavior Analyst. My first question was, “why she created such an amazing place?” Her response, “When I graduated with my MA in Speech and Language Pathology I started working for a collaborative school for children with Autism. A collaborative school assists member public school districts to build capacity at the local level in order that appropriate programs and services may be available to all students in their local communities. Simultaneously I started seeing a couple private speech clients in their homes because I needed the extra money to pay off my student loans. I was really disappointed by the quality of services in the collaborative I was at. In general, the staff there was not well educated on the most effective research based treatments. They were not provided with adequate training and did not have access to resources they could be using for the students. I tried to change things in the public sector over the three years I was there. While I was there I had gone back to school and gotten my BCBA. I introduced data collection and verbal behavior to the school. There were some mild improvements but it was very frustrating. Meanwhile, my private clients were doing amazing and increasing in quantity. So, Jen and I started social groups in 2005. We rented space in churches and libraries on Saturdays for the groups. Little by little I was seeing what good teaching was doing to change our students’ lives. So, in 2007, I made the leap and leased our first space, which is actually right down the street from where the clinic is now. The clinic grew so quickly that we outgrew the original space in 2 years and moved to where we are now in 2009. My objective is to create the BEST quality programming for our students at all costs. While we are a business, quality of services and our student's progress will always come before profits.”

I then asked for her opinion of the education offered to children with Autism within the public schools. Her response, “Many public schools really are trying. The problem has many layers. Money and resources are not available to provide the services many of our students need to be successful. Caseloads are huge. At the clinic, a BCBA has 8-15 students on their caseloads, depending on the number of hours the students are here. In a public school, caseloads can be 40-50 students. There is just not enough time in the day to do what needs to be done. Staff training is often very limited because of resources. Staff turnover can also be very high. By law, schools do not need to provide

what is BEST for the student. They are only responsible for the student making adequate progress and providing appropriate services. Of course, everyone's definition of adequate and appropriate is different."

The next topic was about her role in the transfer from public to private schools. "My role is to determine what has not been working, provide the family with confidence that their student will be successful with us. Provide staff with training, support and resources to do whatever is needed for the student to make the BEST progress possible. Provide families with support. Problem solve with staff when things are not going as planned."

Eve also went on to mention that most of the information about the clinic is passed on through parents by word of mouth. The clinic website has information about treatment and staff. This shows parents the high level of accreditation needed to be an employee of the clinic. She also mentioned that she and another BCBA are starting a parent support group to help with any questions parents have about life at home and how they should advocate for their children if they are attending the public schools. Eve often reaches out to districts to help generalize our students' objectives and make them more successful in the community.

She concluded with the best qualities of the clinic, which included a highly educated and dedicated staff with ample resources and training available. Last, and most importantly- families dedicated to their children's success.

With all of this information from people who are involved with the clinic, there is more to know about the resources and plethora of goodness that is engulfed in this alternative setting. The clinic is equip with a state of the art gym with sensory equipment such as a trampoline, crash pit, ball bit, swing and climbing structures. This gym is amazing for children with Autism because they can take breaks and retrieve the sensory input they need to continue working. There are 10 classrooms all with a computer, which is used during most sessions of treatment. There is a resource room, which holds each child's individual bin and all programming books and curriculum. The amount of hands on material available at the clinic surpasses any other classroom I have seen.

The staff consists of all master's level clinicians, most on their way to becoming Board Certified Behavior Analysts. Workshops and trainings are given to staff on a regular basis to have the most up to date programming and curriculum available for students. Continued supervision on all children in treatment is done daily to assess the success of treatment plans and programs. Feedback is given from supervisor and clinician on how the student is advancing. This level of feedback helps with treatment integrity and overall continued progression of the child.

With all the improvements and succession I have witnessed at the clinic, I have seen some downfalls and setbacks. The children come and see one therapist for one on one treatment. This is great for the implementation of ABA, explained earlier, but it presents little interaction with other peers. Interaction with peers is important because they provide good modeling and can promote generalization of skills in the natural environment. There are social groups where children come to play and interact with peers, but this only consists of four to five peers. There is a small sense of community displayed in this setting as well. It runs itself like a doctor's office. Parents come in and interact with each other, but it is quick and very busy in the waiting room with children who are clients and siblings, all involved in the hustle and bustle. Even though these downfalls do exist, I feel as though Eve is trying to make changes by providing more social group opportunities, plan play dates with children who get along well and offer parent training groups for those families who are interested.

My plan is to reach out to more parents and have the same conversation I did with Christina. In doing so, I will hopefully build up a team of people to approach their school district about what is offered outside of the district. The parents could offer ideas and suggestions to the school to implement more of the procedures that take place in the clinic. This is not hard to do. The school needs new resources, which can replace old curriculum and proper staff training to implement the procedures. With the information from me, they can demand better service objectives for their children because they know it takes place elsewhere. With parent consent, the school districts can see the service objectives we adhere to and show the school the progress their children are making via

our progress notes. These progress notes include baseline data (where they started before the intervention) and their current progress.

Parents, with my help, can also reach out to guidance offices to make sure there are aiding parents in their search for the best treatment. It should not be a do not ask, do not tell process, with the parents in the dark, because the school district does not want to be responsible for paying for transferring the child or extra services outside of school.

The clinic and schools should work together to create the best objectives for the child. I would be happy to participate in IEP meetings to formulate a plan that includes our goals from the clinic along with the goals of the school. With a combined plan, the child is more likely to be successful in generalizing their skills at home, at school and at the clinic. With that, the main priority of socially valid interventions will carry over in all settings.

I plan to build a website where parents can reference our offerings so they can bring appropriate information to the school. This website will explain ABA; will have an open forum for parent questions and a way for parents to communicate with each other. I will be in contact with schools to offer an assistance they need to bring their services up to par. The conjunction of both school and clinic is the only way to make this plan work. Building a good relationship with families and schools will work best when trying to work together towards the common goal of proper and valid education for children with Autism. I plan to offer schools assistance in their staff training and be a resource to any staff if they have questions about the interventions taking place. I have spoken to other staff at the clinic and they are willing to offer their expertise as well.

In conclusion, this plan is just on its way to being a successful project, so it needs time to progress into something great. I will continue to reach out to other parents to get more information about their needs and concerns. I will work closely with my director to be a liaison from the clinic to the schools. I will continue my research on best practices of ABA, staff training and change in the inclusion model within the public schools. The parents will always have free range to contact myself and other advocates for change via the website. My hope is to always keep the child's best interest in mind and to work

together to keep building this plan as time goes on. I appreciate the opportunity to discover this issue. I hope as the years go on, families will be better informed about where their child can participate in optimum learning.

References

Alford, C. R. (2010). Cognitive dissonance experienced by secondary general education teachers when teaching inclusion classes. In A. Ali (Ed.), Dissertation for Ph.D in EducationUniversity of Phoenix.

Kilanowski-Press, L., & Chandra J. Foote, P. (2010). Inclusion classrooms and teachers: A current survey of current processes. International Journal of Special Education, 25(3).

Segal , M. J., & Cambell, J. M. (2012). Factors relating to education professionals' classroom practices for the inclusion of students with autism spectrum disorders. Research in Autism Spectrum Disorders, 6, 1156–1167.

Mutlick, J., & Butter, E. (2002). Educational advocacy for children with autism. Behavioral Interventions, (17), 57–74.

Chalfant, A. (2004). Annie's center, specialists in child health and development. Retrieved from http://www.anniescentre.com/about.html

Process of Development Conclusion

As these final days of one's graduate career come to an end, the writer is in a bittersweet state of mind. Reflecting on one's work, thinking and development has been a fulfilling experience. The capstone assignment has taken one back to places that they have grown so much from without even realizing where they have been. When the writer chose to embark on this journey, never in a million years did they think they would accomplish as much as they have over the past two years. They have learned so many qualities about themselves, similar scholars just like them and children they will educate in the future. The four's R's in the work of Taylor et al. prevailed through the writer's work from class one through class eleven. Respect, Risk, Revelation and Reengagement enhanced the transformation experience to exemplify the qualities of compassion, patience and dedication to learning.

The four exhibits resemble a learning path that could not have been formed without the previous one occurring. Each of the assignments has shown progression, knowledge and maturity through the process of coursework and writing. One has

developed many precise skills as the ones learned in the ABA course sequence. The science of Applied Behavior Analysis has opened so many new doors for the writer. They have traveled on a new career path which they can apply their education and expertise, such as the consultation plan and the plan for parents to educate their children with Autism. The other two examples of writing allowed one to step outside of the ABA realm and engage in other treatment such as CBT with application of other developmental theories. Being able to apply other developmental phenomena to the science of Applied Behavior Analysis will surely make a well-rounded educator.

The writer is eager to step out into the real world of education. As a very gifted and compassionate scholar, one cannot wait to pass on a love for learning that has flourished over their graduate career. The writer was able to find themselves with the help of so many exceptional professors and classmates to exemplify their revelation as student and now as a teacher.

Part IIb.

According to the Individuals with Disabilities Education Improvement Act (IDEA 2004), most children and youth with disabilities are mandated to be educated in public schools in general education classroom with non-disabled peers. Any child in our community is allowed a Free and Appropriate Public Education (FAPE), which may include Individualized Education Plans (IEP) that comprises appropriate services at no extra cost to families. This legislation act also incorporates the concept of the Least Restrictive Environment (LRE), which enables those with disabilities to be educated with typical peers. These pupils should only be removed when curriculum and instruction cannot be adapted for maximum benefit of the child (McLeskey, Rosenberg and Westling, 2013).

The implementation of this law not only increased the percentage of students with disabilities attending their neighborhood public schools, but also further advanced the academic performance of students with disabilities. For instance, research indicates that reading skills for students with severe disabilities in elementary schools in inclusive settings improved by 31.7% and mathematics skills for these students in elementary

schools improved by 23.9%. Additionally, the reading skills of middle school students increased by 13.8 % and mathematics skills improved by 12.5 % (Teigland, 2009). More recent research has shown that students with severe disabilities who are able to access the general curriculum benefit because it promotes communication, motor, and social skills, and helps students build friendships (Copeland et al., 2004; Ryndak & Billingsley, 2004). Furthermore, some studies provide evidence that students with severe disabilities benefit academically from the general curriculum when they receive adequate and appropriate modifications that meet their unique needs (Alquraini and Gut, 2012).

In regards to being the best teacher of all students in a diverse classroom, the ideas presented from McLeskey, Rosenberg and Westling's 2013 edition of "Inclusion" offers an ideal model. The concept of an appropriate disposition would be a vital quality of the best teacher for all students. This disposition would include respect, value of human differences and recognizing every face in the classroom as an individual. Using an unbiased opinion and openness to any child's particular necessity would be a top priority when ensuring an optimal education. Teachers' interactions with students stimulate critical thinking and convey new knowledge, organize attention and student effort, and motivate, engage and support. It is not surprising that measures of teacher-child interactions account for much of teachers' impacts on educational outcomes (Pianta, 2011).

To be highly effective, teachers must seek and use strategies that have been proven effective, including evidence based instructional approaches. These approaches are sustained by scientific research and have been shown to exhibit high rates of success within the terms of learning results (McLeskey, Rosenberg and Westling, 2013). Previous educators have spent countless hours creating curriculum and lesson plans to educate our youth. These methods have been utilized in the classroom and those proven to be efficient should continue to be used to flourish our students' success.

A team at CASTL (Classroom Assessment Scoring System) developed the Teaching Through Interactions, or TTI, frame- work over the past decade to organize and describe the wide range of teacher-student interactions associated with academic and social development. This conceptual framework focuses on teacher behavior and what

students actually experience in three broad domains of teacher-student interaction: emotional support, classroom organization, and instructional support. Within each broad domain are specific dimensions of teacher-child interaction that further specify the forms of teacher behavior that matter. The broad domain of emotional supports is defined in terms of three dimensions: positive classroom climate, teacher sensitivity, and regard for student perspectives. Each of these dimensions is then specifically defined by a set of categories of behavior that yield observable teacher behaviors and interactions (Pianta, 2011). This model is an operative representation of an ideal teaching methodology, which is manageable for a future educator. Using these principals and tactics would surmise cooperation and learning for any teacher and child involved.

Aside from educators, many other professionals provide different services and play different roles in inclusive settings, including special education teachers, general education teachers, related services providers (e.g., occupational therapists, physical therapists, and speech/language pathologists), paraprofessionals and nurses, among others. Therefore, collaboration among professionals is essential for successful inclusion (Carter, Parter, Jackson, & Marchant, 2009). In other words, the major purpose for collaboration among professionals in these settings is to increase the quality and effectiveness of education programs (Westling & Fox, 2009). Collaboration of staff is a way to work together as one to formulate the best plans possible for the children they are educating. Making sure administration, teachers and other staff are all on the same page makes for a better communication system and a more appropriate learning environment.

Integrating families into the learning process for students is essential when collaborating for the best interest for the child. As the literature suggests, there are some useful effective strategies for families of students with and without disabilities to support students with severe disabilities in an inclusive setting. Salend (2005) and Shapiro (1999) outline some of the strategies that include: (a) the student's relatives can describe the child in ways that help and are good for the child, by telling what they are skilled at and what they have accomplished while avoiding any negative or harmful descriptions, and (b) families of typically developing peers can help their students learn different and more effective ways of interacting with students with disabilities. They can be taught how to

use the assistive technology that students with disabilities use to communicate.

The families are advocates for the children in our classrooms and we should always respect their input and involvement. They are an active and vital part to the individuals education plan. Families and teachers should work on relationship building in and out of the classroom to alleviate any exterior stressors both parties may share. Families and the educators must often meet to decide what issues are being addressed and how to work on those that are not (Childre, 2004). There should be a healthy, communicative process between teachers and families to ensure the child's well being and learning path is on the top of everyone's list.

Reflecting on how educating students has evolved over the years is a humble and gratifying experience. The lessons learned from course work and experiences in and out of the classroom has shown drastic changes in a mentality that will be shaped for the rest of the foreseeable future. The leaps and bounds that administrators, teachers, other staff and families have made to ensure the best education options for all, is an evolving process. This process needs the collaboration of all staff involved with our future scholars. The resources and strategies learned over the past two years will be assets in creating a classroom, which accepts all children of diverse backgrounds and cognitive abilities.

References

Alquraini, T., & Gut, D. (2012). Critical components of successful inclusion of students with severe disabilities: Literature review. *International Journal of Special Education* , *27*(1).

Carter, N., Parter, M. A., Jackson, A., & Marchant, M. (2009). Educators' perceptions of collaborative planning processes for students with disabilities. *Preventing School Failure*, *54*(1), 60-70.

Childre, A. L. (2004). Families. In C. H. Kennedy & E. Horn (Eds.), *Including students with severe disabilities* (pp. 78-99). Boston: Allyn & Bacon.

Copeland, S. R., Hughes, C., Carter, E.W., Guth, C., Presley, J.A., Williams, C. R., & Fowler, S.E. (2004). Increasing access to general education: Perspectives of participants in a high school peer support program. *Remedial and Special Education, 25*(6), 342-352.

McLeskey, J., Rosenberg, M. S., & Westling, D. L. (2013). *Inclusion; effective practices for all students*. (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Pianta, R. (2011). Teaching children well new evidence-based approaches to teacher professional development and training. *Center for American Progress*.

Salend, S. J. (2005). *Creating inclusive classrooms for all: Effective and reflective practices* (5th ed.). Columbus, OH: Merrill/Prentice-Hall.

Shapiro, A. (1999). *Everyone belongs: Changing negative attitudes toward classmates with disabilities*. New York: Routledge Falmer.

Teigland, C. (2009). What inclusive education means for overall student achievement. *The Connections of Association of Person with Severe Handicaps*, *35*(3), 12-14

Westling, D. & Fox, L. (2009). *Teaching students with severe disabilities* (4th ed.). Upper Saddle River, New Jersey: Merrill Prentice Hall.

Part IIIc.

The SMART board is a tool that has become one of the most popular devices in classrooms over the past few years. The company, Smart Technologies, produces this interactive whiteboard in Alberta, Canada. One has witnessed this amazing technological advancement in many classrooms over the past few years. The interactive whiteboard reaches far beyond any regular whiteboard or chalkboard to engage students of all ages. SMART board grasps learners with an advanced motivating approach to capture the pupils' interests and include them in all presentations.

The SMART board system comprises the communicating whiteboard, SMART board software, a projector and a computer. The projector takes the images from the connected computer and displays the material on the whiteboard. The Smart Board interactive whiteboard uses DViT (Digital Vision Touch) technology to detect and respond to touch interactions on the interactive whiteboard surface. This camera-based touch technology for interactive whiteboards and interactive displays uses digital cameras and proprietary software and firmware to detect finger or pen contact with the screen. That contact is then interpreted as finger or pen activity ("Smart board", 2012).

The DViT technology allows the teacher to use their hands for quick and easy manipulation of the system to prioritize time and teaching in the classroom. The children can actively participate using their hands and the color pen system to become a part of the

lesson. With use of the system, classroom participation is most likely to be higher. The students are engrossed in the presentation on the screen in ways of pictures, videos and other fun, yet educational demonstrations.

A study done at Queen's University in 2000 researched the Effect of a SMART board on Concept Learning, Generation of Ideas, Group Processes and User Interaction Satisfaction. This study was conducted to determine whether use of a SMART Board would stimulate more interactive and productive exchanges about management concepts and subsequently improve critical thinking of students. Interest in critical thinking processes was based on a view that transfer of knowledge into practice is dependent upon the critical thinking that occurs during the acquisition of concepts (Halpern, 1998).

The results of this study demonstrated a higher generation of ideas and satisfaction with the technology. The results did not show significant increase in the areas of cognitive testing, group discussion processes or self- efficacy for group processing skills. The interesting aspect of this study comes back to the innovation of technology the SMART board exhibits. Students were able to focus attention on key ideas, keep them visible during presentations and return occasionally to previous ideas. Novelty may also be a contributing factor, since the interactive screen, color, sound and animation appeared to stimulate enthusiasm. Some support for this view is found in the high ratings for SMART board playfulness (Howse, Hamilton, Symons, 2000).

Another study conducted by Bobbi F. Adrian in 2004, examines the incorporation of the SMART board into a fourth grade classroom to promote "Smart Teaching." Mr. Adrian stressed the idea of that teachers need to be able to use technology to increase their professional development and to have positive contact with the students on a regular basis. As he incorporated the SMART board model into his classroom, the students took of particular interest right away. He started with Writing and then moved onto Math. As the students became more comfortable with the system, everyone started to benefit from its daily use.

Adrian reflects on McQuin (2002), reporting that the SMART Board is useful in demonstrating new procedures and makes saving lessons for absent students easy. In

addition, The SMART Board enables teachers to emphasize and visualize important concepts. Using the electronic pens and keyboard, students began to eagerly share their editing processes. These same students also were completing seatwork in an efficient manner so they could participate more. The children began to comprise their own thought processes after working in groups by drawing or writing on the SMART board. They were transferring their skill sequence to construct their own learning. As Harvey and Goudvis (2003) state, constructing meaning is the goal to comprehension... using the constructivist method to instruction, students can enhance their understanding, acquire and use their knowledge, and monitor their understanding.

With all the strengths that this SMART board brings to the classroom, there are some limitations. As with any type of electronic, there can be technical difficulties when trying to utilize the product. There can be numerous cords present which can be a safety measure to take into pre-caution in the classroom. Adrian promotes working together with administrators, custodians and district electrician to re-route the cords/outlets so they can hang from the ceiling. Having wireless Internet and a ceiling mounted projector makes for a safer and more convenient environment.

Another limitation to the SMART board is it's expensive price. The systems range from $1,000 to $10,000 depending on the equipment and model type. Purchasing these products each individual classroom would most likely come from grants or tax money depending on the district. Even though they can be costly, the benefit of their presence in the classroom outweighs any amount of money.

One can only hope that when entering the field as an educator, this technology would be present to utilize and grasp students in a different way everyday. This system benefits those children of general education and special education to tend to needs that previously were difficult to reach. Planning lessons is made less time consuming and much more interesting to the eye of a child. The SMART board teaches children that they can reach out to so many resources with the click of a mouse or the touch of their hand. There are endless learning possibilities with this technology. As more of these SMART boards reach our classrooms, we can expect motivation to be high. The rates of learning

will reach new heights with each lesson projected on the screen.

References

Adrian, B. (2004, November 1). *Incorporating the smart board for smart teaching*. Retrieved from http://www.techlearning.com/studies-in-ed-tech/0020/incorporating-the-smart-board-for-smart-teaching/42182

Halpern, D.F. (1998). Teaching critical thinking for transfer across domains. The American Psychologist, 53(4), 449-455.

McQuin, D. (April, 2002). "SMART Board: Electronic Whiteboard."

Harvey, S. and Goudvis, A. Strategies That Work, Portland, Maine: Stenhouse Publishers."

Howse, E., Hamilton, D., & Symons, L. (2000). The effect of a smart board interactive whiteboard on concept learning, generation of ideas, group processes and user interaction satisfaction, Queens University.

Smart board. (2012, July). Retrieved from http://en.wikipedia.org/wiki/Smart_board