Spring 2008

The Affects of Choice Making During Preferred and Non-Preferred Academic Activities in a Grade 3-5 12:1:1 Classroom

Mercy Caparco
The College at Brockport, Mercy.Caparco@bcs1.org

Follow this and additional works at: http://digitalcommons.brockport.edu/ehd_theses
Part of the Elementary Education and Teaching Commons

To learn more about our programs visit: http://www.brockport.edu/ehd/

Repository Citation
http://digitalcommons.brockport.edu/ehd_theses/226

This Thesis is brought to you for free and open access by the Education and Human Development at Digital Commons @Brockport. It has been accepted for inclusion in Education and Human Development Master's Theses by an authorized administrator of Digital Commons @Brockport. For more information, please contact kmyers@brockport.edu.
The Affects of Choice Making During Preferred and Non-preferred Academic Activities in a Grade 3-5 12:1:1 Classroom

by

Mercy (Zambito) Caparco

Spring 2008

A thesis submitted to the Department of Education and Human Development of the State University of New York College at Brockport In partial fulfillment of the requirements for the degree of Master of Science in Education
The Affects of Choice Making During Preferred and Non-preferred Academic Activities
in a Grade 3-5 12:1:1 Classroom.

By

Mercy (Zambito) Caparco

APPROVED BY:

[Signature]
Advisor

[Signature]
Director, Graduate Programs

Date
5/7/08

Date
5/8/08
Table of Contents

Chapter One: Introduction .................................................................................................................. 5
  Problem Statement ............................................................................................................................... 5
  Significance of the Problem .................................................................................................................. 7
  Purpose ................................................................................................................................................ 8
  Rationale ............................................................................................................................................ 9
  Definition of Terms ............................................................................................................................... 9
  Summary ............................................................................................................................................. 10

Chapter Two: Literature Review ............................................................................................................. 12
  Understanding Student Misbehavior .................................................................................................. 12
  Improving Instruction ......................................................................................................................... 15
  Students with Disabilities as Learners ................................................................................................. 17
  The Power of Choice Making ............................................................................................................. 19
  Summary ............................................................................................................................................ 27

Chapter Three: Applications an Evaluation ............................................................................................ 28
  Introduction ........................................................................................................................................ 28
  Participants ......................................................................................................................................... 28
  Procedures of Study ............................................................................................................................. 31
  Instruments for Study ........................................................................................................................... 32

Chapter Four: Results .............................................................................................................................. 33

Chapter Five: Conclusions and Recommendations ................................................................................ 47
  Discussion .......................................................................................................................................... 47
  Action Plan ......................................................................................................................................... 48
  Recommendations for Future Research .............................................................................................. 49
  Conclusions ....................................................................................................................................... 50

References ............................................................................................................................................. 53

Appendix
  Appendix A: Observational Rubric ........................................................................................................ 56
Abstract

Maintaining student involvement and enthusiasm continues to be a struggle in my 12:1:1 grade 3-5 self-contained classroom. Teaching effective lessons is a challenging feat in a self-contained setting because the students have multiple learning problems with the addition of behavioral difficulties. A common thread between successful lessons is the incorporation of choice making.

The four-week study consisted of four students who were provided a choice during the guided practice and independent practice portion of their math, ELA, lifeskills and OT/PT lessons. Students were provided choices throughout instruction during one subject area per week. The results were compared to the three weeks where they were not provided choices. An observational rubric, student work, and classroom observations were all used to gauge engagement throughout lesson, student ability to demonstrate knowledge/skills and generalization of knowledge.

The results of the study show that offering choices is a positive teaching strategy to use with students who have disabilities. Both the lengths of time engaged during guided and independent practice increased along with students’ ability to generalize skill and content knowledge. Offering students choices throughout instruction also decreases problem behaviors.
Chapter One: Introduction

As a self-contained special education teacher I am continually adapting classroom instruction by creating inventive lessons and providing my students with an individualized education. Teaching students who are developmentally disabled and autistic should be considered an art form. Constant multi-tasking and differentiation throughout each lesson while managing a variety of behaviors are daily tasks faced by the teacher. Through trial and error the teacher in a self-contained classroom has to adapt his/her teaching style for each student.

Dealing with student behavior during instruction as well as differentiating activities is both intense and time consuming. In education today the trend is to differentiate lessons to meet the needs of each student. Within a 12:1:1 self-contained setting the educational as well as emotional needs of the class is typically broad at the third through fifth grade level. Students need more than differentiation in a lesson, they need a sense of ownership of their learning which only comes through offering them choices. It is through experience that I have learned that students who feel empowered during instruction demonstrate active participation and then are able to generalize and learn the lesson content.

Problem Statement

Prior to the study being conducted in the self-contained third through fifth grade 12:1:1 classroom most of the students were making very little academic gains. The self-contained classroom was newly formed and many of the teachers, parents and therapists
thought that the lack of growth was because of the student transitions from BOCES back to the district. However, as the school year continued the self-contained team felt that the current instructional approaches had to change so that students were rightfully given the opportunity to learn and meet their goals.

The classroom consists of ten students all of whom are classified as having either developmental disabilities such as traumatic brain injury (TBI) mental retardation (MR) or autism. Most of the lessons presented to students are life skills that they must learn in order to become more independent. Because of the severity of student disabilities the school district contracts with BOCES to hire autism consultants that come into the classroom to observe and then train the teachers, therapists and staff on what techniques are most beneficial for the students.

One method of teaching commonly used to teach students with severe disabilities is called Discrete Trial Teaching (DTT). The DTT method of teaching students with autism and developmental disorders incorporates immediate positive feedback in the 1:1 setting following a correct response. The DTT strategy is commonly used within classrooms that have adopted the Treatment and Education of Autistic and related Communication-handicapped Children (TEACCH) approach and in the self-contained settings. In each trial teaching lesson the student has a choice of rewards they are working toward. The students in the study are acclimated to this way of teaching and appear to enjoy making choices regarding their rewards. Their choice becomes motivation for them to participate. The DTT method of teaching is extremely successful for most students.
because they are given choices and rewards. They ultimately are in control of their learning.

Significance of the Problem

My students interact with several adults in the classroom and school building as they receive a variety of daily services. As a team of therapists and teachers we have explored several teaching strategies to engage each student. Certain teaching strategies are effective, however most of them fail. The team has had consultants join weekly team meetings to assist us in creating a positive learning environment for all students. As the classroom teacher I have observed the positive role that choice can play during a lesson. When the students who are already challenged begin to feel powerless in their learning they appear to shutdown and revert to learned negative behaviors. Students who are already faced with learning difficulties and a non-preferred activity often become a behavioral challenge. This negative cycle of learning not only occurs in the classroom but during specials, lunch, on the playground and at home. When students are not provided with a choice in their learning and activities they have a significant negative change in their mood. Students who feel powerless will then make behavioral choices because that is something they are able to control. Ultimately this presents a problem throughout they day and creates a learned negative cycle of behavior.

Offering students a choice during academic preferred and non-preferred activities could possibly eliminate non-compliance during instruction and encourage participation. When students are actively engaged they then are able to learn and generalize the content of the lesson.
Purpose

As a special education teacher I would like to research a variety of ways that choice is implemented within educational activities at the elementary age. In my research I intend to discover how the implementation of choice throughout the day during academic preferred and non-preferred activities affects the educational growth and classroom participation of students with developmental disabilities such as mental retardation, traumatic brain injury and autism. Students with MR, TBI and autism demand continuity and consistent positive approaches to education, usually these students find the exact opposite in their educational career as young learners. I intend to explore whether or not providing choices will change student participation and learning of preferred and non-preferred activities.

One management system that maintains student participation is to create an environment of student control by offering choices throughout academic activities. When choices are given to students they feel in control of the situation at hand and appear to be actively engaged for the duration of the lesson. The approach that I have taken to modify behavior is a proactive and collaborative one that models social constructivism which is similar to Pike, Millsbaugh, and DeSalvatore’s (2005) approach. Pike et. al. focus on creating belonging, mastery, independence and generosity in the classroom as a management strategy. My interest in discovering a positive and effective approach to manage and engage my students who are developmentally disabled and autistic drove me to further explore the power of offering choices throughout non-preferred learning activities.
Rationale

I feel that teaching is about connecting with students in a way that makes them feel empowered and special. Each student has such specific physical, academic and emotional strengths and weaknesses that at times it can be extremely difficult to meet each of their needs. In my experience, students participate in lessons that offer choice and this often results in generalization of content information and skills.

As a learner myself, I become actively engaged when given a choice. The workshops that I have attended that are most influential to my teaching and learning have incorporated choice. I enjoy the learning experience when I feel a sense of control. This forum of learning for me is beneficial and it is this type of approach I would like to incorporate into my own classroom to study if my students too would feel the benefits of choice.

Definition of terms

According to the Council for Exceptional Children (CEC), Mental Retardation (MR) is about an individual’s present level of functioning. This includes their limitations in intelligence and adaptive behavior. Children with MR have certain limitations in mental functioning and skills such as communicating, taking care of him or herself and social skills. Children with MR may take longer to learn to speak, walk, dress and eat independently.

The CEC defines autism as a developmental disability that affects verbal and non-verbal communication. Children with autism may exhibit repeated body movements such as hand flapping. They exhibit unusual responses to people or attachments to objects.
Typically, children with autism are resistant to change in routines and experience sensitivities in their five senses.

TBI according to CEC is an injury to the brain caused by the head being hit by something or shaken violently. The injury can change how a child acts, moves and thinks. TBI can also change how a child learns and acts as it changes one or more areas such as thinking, reasoning, understanding words, remembering things, paying attention, solving problems, thinking abstractly, talking, behaving, walking, seeing, hearing and/or learning.

**Summary**

Teachers in the self-contained setting often face the problem of how to effectively educate and meet the needs of each student, all while maintaining a positive learning environment. Making significant academic strides in a third through fifth grade self-contained classroom is difficult because of the various needs of each student. One approach observed to be successful is offering student choice in rewards during the DTT lessons. As a result of this success I am going to focus my study on the influence of choice making during preferred and non-preferred academic activities. My research is going to be centered on the following questions: How does choice making during preferred and non-preferred activities affect participation? How does choice making affect generalization of knowledge and skills?

This research study will offer students choice during their instructional work activities and independent practice portion of the lesson. Students will be offered two sets of activities or manipulatives during the guided practice activity to choose from and when that is complete they will be offered two different independent practice activities. It is
anticipated that students will put forth a higher level of participation and generalization of
information while given instructional choices.

Students at random will be selected daily and their participation time will be
recorded during the guided practice and independent practice portion of the lesson. This
time will be compared to the average participation time during the three weeks of guided
practice and independent practice where no choice is being provided. The
teacher/researcher will be responsible for observing and recording student demonstration
of generalization of skills throughout each week of instruction. Students’ generalization of
skills will be evaluated and charted to view whether or not choice activities influenced
generalization of their learning.
Chapter Two: Literature Review

Proactive and preventative interventions are popular management techniques for educators today. With this management philosophy special educators are acknowledging the power of choice making opportunities for students with disabilities. As relevant today as it was over twenty years ago, Shevin and Klein (1984 & 2004) provoke questions about what choice making is and the impact it has on students with severe disabilities. Many of these questions continue to go unanswered because further research must be completed. Peterson (2005), an avid choice making researcher, recommends in each of her studies that further research needs to be done to evaluate the effectiveness of choice making interventions. The need for further research is due to the demonstrated effectiveness of choice making opportunities with a variety of students across a number of environments. The data found in all choice making intervention studies suggested that choice making decreases problem behavior.

Understanding Student Misbehavior During Academic Activities

Student misbehavior can be extremely difficult to deal with and teachers will try almost anything to maintain classroom control. One positive approach to challenging behavior is Positive Behavioral Support (PBS). This approach to behavior management is based upon the reasons behind misbehaving. Ruef, Higgins, Glaeser and Patnode (1998) include attention, physical contact and escape as the main reason for challenging behavior in the classroom. Once a purpose for the challenging behavior is established Ruef et. al. describe six proactive and proven strategies that can be implemented to maximize student participation and minimize negative behaviors. Strategy number three is to increase
choice making as part of the approach aimed to increase productivity, inclusion and independence.

Student defiance encompasses a range of behaviors from disruptive incidents to dangerous events. Smith and Bondy (2007) report several characteristics of student defiance, common reasons for defiance and how to create a psychologically supportive classroom environment for students who display defiant behavior. Defiance serves either of two functions: to acquire something such as power, autonomy and status or to avoid something such as a task or person. One suggested proactive strategy suggested is to increase choice making. In attempt to meet the terms of local, state and national standards teachers are forced to follow strict curriculum and testing guidelines. The likelihood of incorporating choice decreases as more standards are mandated. Ruef et al. (1998) assert that students need the chance to make choices in order to believe that they have control in their environment. This empowers students and decreases their defiant behavior during instruction.

Wheeler and Anderson (2002) outlined essential steps that a teachers must take while teaching students who are emotionally and behaviorally disturbed. They began their methodology article by stressing the prevalence of increasing amounts of children who meet the diagnostic criteria for oppositional defiant disorder (ODD) and/or conduct disorder (CD). Wheeler and Anderson talk about Kazdin’s (1995) study by reiterating that early behavior problems are identified as a later predictor of violence, drug abuse and school dropout. With the rise of zero tolerance policies in schools and the rise of students
with behavioral problems students do not receive services and support interventions in order to be successful.

For teachers who have not yet established a successful behavior program for their students with emotional and behavioral needs Wheeler and Anderson (2002) provide several components to include while working through the process of development. Their goal in this process is for teachers to create a community that facilitates and supports student behavior. While doing these target interventions, behavioral expectations, student activities, rewards and routines must be established. Teachers need to rely heavily on student behavior intervention plans which should involve community resources. If this occurs students will be able to implement strategies that can be generalized and maintained in a variety of settings, school and community.

Cheney (2002) presents a collection of stories, statements and quotes from parents and students in grades eight through eleven commenting on their educational experiences and concerns. The students who participated were 75% male and 25% female. In Cheney’s introduction he explained that the stories illustrate that education is more than conveying knowledge, filling out paperwork and compiling test scores. Education is about reaching out and feeling the experiences of our students.

Many of the student responses to problems in current education had to do with not attending academic work time. This problem often led to student placement in a specialized special education program. Student participation has a direct influence on their placement. The most common positive student response regarding their education was having choices throughout the school day and receiving rewards for good behavior.
The second half of the article includes stories that parents and students shared about their special education school experiences. These short stories included negative and positive views toward the American school system. One common thread between the stories was that one single teacher can make a difference with the right approach, consistency and kindheartedness.

*Improving Instruction for Students with Disabilities*

Grinsven and Tillema (2006) focused on improving instructional formats in vocational schools. In the research study they analyzed a variety of learning environments for self-regulation. Their purpose was to report the relationship between student perceptions of their learning environments and motivation and how that was associated with use of learning strategies used for self-regulation. A total of 623 students from five different programs in the Netherlands were studied. Questionnaires were used to measure student motivation and application of self-regulation strategies. The data collection consisted of two parts: an inventory of learning environments in secondary vocational education (checklist), and a second student questionnaire on perceptions of learning environments at those selected sites.

Their findings indicate that some vocational school learning environments offer positive experiences for self-regulations. At those schools, positive relationships were established between students’ motivation for learning and the strategies used for self-regulated learning. Grinsven and Tillema also found that student motivation was the strongest influence on self-regulated learning. Students who are in self-regulated learning environments are motivated to learn, enjoy materials and are actively involved in their
environment and learning. Self-regulation provides ownership and independence for students.

Classroom interventions often consist of frequent reprimands and lowered expectations for students who display problem behaviors. Morgan (2006) reviewed fifteen studies that suggest that preference and choice-making may improve both academic and behavioral performance in the classroom. Commonalities between the data findings of each study were that choice-making decreased the occurrence of serious problem behavior. The number of correct responses to the assigned activities also increased under the choice condition. Most of the studies reviewed by Morgan found that by offering student a choice of tasks or rewards increased the percentages of both task completion and accuracy and that students' choice of tasks was more effective than teacher selection. This suggests that choice provides students with control which results in improved classroom performance.

Learning to make choices extends to all areas of life such as vocation, residence, partners, social activities, food, clothing, scheduling etc. According to Shevin and Klein (1984 & 2004) successful fostering of choice making requires both systematic teaching of new skills and providing opportunities to practice those skills in the classroom and in natural settings such as the community. For students with mental retardation instruction must include activities designed to teach specific choice-making skills, integrate choice making opportunities throughout the day and provide occasions for students to experience the benefits and consequences of choices they have made. In order for this type of learning environment to exist, Shevin and Klein urge teachers to depart from their
traditional teaching behavior. Choice making education requires teachers to maintain a balance between student choice and professional responsibility. By increasing the amount of decisions students make teachers forfeit control at times and this can be difficult for the traditional teacher.

**Students with Disabilities as Learners**

Kinchin (2004) completed a research study of how students preferred their role as learners, either in a constructivist learning environment or in an objectivist approach based classroom. The purpose of his study was to learn how students are able to maximize their own learning. Students were presented with two concept cartoons. The first cartoon depicted a teacher-student dialogue in an objectivist classroom and the second cartoon was a dialogue presented in a constructivist classroom. A total of 349 seven and nine year old students were asked to identify what classroom teacher they preferred. Kinchin concluded that students preferred the constructivist teacher approach in the classroom. Of the 349 students in his study, 11.25% chose the objectivist approach to learning and 88.8% chose the constructivist approach to learning.

Bambara (2004) believes that educators have made tremendous progress valuing and encouraging choice making for people with severe disabilities but still have a long way to go. In review of Shevin and Klenin’s 1984 article Bambara reiterates that choice is more than the act of selection among set alternatives, even though in research we commonly measure choice as this act. Meaningful choice for students is the expression of preference that requires knowledge of ones likes and wants. Children innately need to express their wants and needs, and students with severe disabilities need to be taught how
to do this appropriately. A classroom that facilitates choice making should be fostering a continuum development of student preferences so that students are able to acquire choice making skills. Students with severe disabilities are capable of having preferences and have the right to express their preferences through choice. Students with severe disabilities participate more in an environment that fosters preferences and choice making because they are doing something they enjoy and engage in negative behaviors less frequently because their preferences are being honored rather than denied.

Grandin (2007) a university professor and industrial designer with autism shares what she would like for teachers to know about students with autism. As an advocate living with autism she provides insight on what teachers need to understand about their students. Students with autism process information in high-imagery and low-imagery sentences in the visual part of their brain. Grandin provides the example, “Adding and subtracting are math operations (low-imagery sentence). The number 8 on its side looks like a pair of eyeglasses (high-imagery sentence)” (p.29). The nonautistic student is able to shut off the visual area of the brain therefore able to process the low-imagery sentence and the autistic learner immediately focuses on the high imagery sentence. Students with autism process information slowly, need to develop social skills through shared interests, have poor sequential memory for verbal directions, are sensory sensitive, think concretely and often have a strong area of interest. Because of these differences students with autism have difficulties in school processing information, identifying important global concepts, generalizing skills, sequencing information, transitioning and managing their time. In addition to her description of common characteristics of autistic students she includes
useful strategies for teachers. Grandin urges teachers to give students time to respond, avoid long strings of verbal directions, respect sensory sensitivities, avoid vague language, develop students strengths, develop social skills through shared interests and be a mentor. She believes that the secret to motivating a student with autism is to break their fixations into useful activities.

*The Power of Choice Making*

Jolivette, Wehby, Canale and Massey (2001) examined the effects of choice making within an academic setting. They studied choice making as an antecedent-based intervention by providing individuals with the opportunity to choose from different activities in their home, school and community settings. Jolivette et.al. discovered that there was a lack of literature and research regarding choice-making opportunities for students with emotional and behavioral disabilities. The purpose of the research was two-fold. The authors investigate how multiple choice-making opportunities during independent math activities result in positive changes in the task-related and social behavior.

Jolivette et al. found that the implementation of choice-making opportunities was effective for students with severe and profound developmental disabilities. Two of the three students in this study demonstrated moderate effects with differential results for each measured variable. The results suggest that providing opportunities to make choices can positively influence the behavior of some students with emotional and behavior problems. Choice opportunities appeared to increase levels of appropriate behavior for two of the three students. The research also demonstrated that the number of attempted
math problems was highest for all three boys when choice-making opportunities were reintroduced.

Moes (1998) provides four students with autism opportunities to make choices regarding the order of task completion and the use of stimulus materials in his research. The four boys exhibited a range of cognitive and behavioral difficulties related to academic tasks. Each boy participated in full-inclusion educational settings and was given weekly homework assignments that they were expected to complete outside of class. The study took place in a small study room at the Autism Research Center in a one-on-one setting. Trained and educated undergraduate and graduate students worked with the students and recorded the data. The teaching procedures, no choice and choice conditions were identical each session. An A-B-A-B and B-A-B-A research designed was used so that each student was provided two occasions of choice and no choice conditions. During the no-choice condition the tutor chose the order of homework activities, the sequence of items and the stimulus (ex. Pens, scissors, glue). In the choice condition the child was allowed to choose the order of homework activities, the problems to be completed in his chosen activity and the stimulus. Correct responses were identified as any behavior that demonstrates progress toward homework completion.

The results of Moes research showed that all four students demonstrated more favorable patterns of correct responding and engaged in less disruptive behaviors during the choice conditions. The rates of homework completion were greater in the choice condition. Only in the choice condition did the students complete the homework assignment during their allotted twenty minutes. The choice condition was consistently
positive for percentage correct responding, rate of homework completion and composite affect ratings. The choice condition showed low percentages of intervals with disruptive behaviors. The results indicate that positive effects on performance were demonstrated when students were provided with opportunities to choose the specific homework activity, the problems to be completed and the stimulus. Having the opportunity to choose is reinforcing for students with autism. Moes suggests future investigations evaluating choice making as an antecedent based curricular intervention for children with autism need to be completed.

Watkins (2005) explains the importance of establishing the right environment for students with special needs to avoid failure. She wrote about the use of empathy statements to enhance communication and provide power to students in the classroom. She contended that by teachers offering students choices, using active listening, and empathy statements a positive learning environment would be established. Watkins provided specific examples of students with ADHD who had negative school experiences. Once the use of these methods was employed by the teacher, behaviors subsided and learning began.

Watkins also reviewed the commonly used Functional Behavioral Assessment (FBA) that many teachers utilize. She claimed that the immediate use of a FBA is so that teachers together can develop and implement a behavioral support plan. An integral part of this process is the teacher’s proactive analysis and implementation of a support plan. The FBA coupled with empathy statements, choices and active listening in the classroom provide students with a caring classroom environment. As a result students potentially
would be more willing to accept assistance, take risks and participate in active learning experiences.

The authors of a methodology article described the importance of presenting young children with the power of choice making. McCormick, Jolivette and Ridgely (2003) stated that both the Division of Early Childhood (DEC) and the Council for Exceptional Children (CEC) support and promote providing young children with choices in a variety of home, school, and community settings and activities. McCormick et al. comment on a study by Bambara, Koger, Katzer and Davenport (1995) stating that providing children with opportunities to make choices can positively affect both social behaviors and task-related behaviors across all environments. Choice making provides children ownership of their daily activities and routines. They consider this to be the beginning of independence and autonomous decision making.

The authors also stated that there are limited classroom investigations and research that assess the implementation of choice-making opportunities for students with emotional and behavioral disorders. They reflect upon Sigafoos and Dempsey's (1992) study and state that incorporating opportunities for choice making into classroom instructional routines is one segment of high-quality instruction for severe and multiple disabled students.

Throughout the article McCormick et al. explained that choice making can be used as an intervention strategy both at home and in school. Choices are naturally occurring and according to the authors families and teachers should provide children the opportunity to use their cognitive skills to make choices and expand their communication especially
during early development. The authors believe if this process is embedded in children’s learning then ultimately their self-direction, negotiation and social skills will be superior in the future.

Peterson, Canigilia, Royster, Macfarlane, Plowman, Baird and Wu's (2005) study evaluated the effects of choice making in a Functional Communication Training (FCT) to increase the task engagement of two participants with inappropriate behavior. The first boy was a four year old diagnosed with developmental delay and tubersous sclerosis and the second participant was a nine year old boy with moderate mental disabilities.

Peterson et al. completed a functional analysis that indicated both boys behavior was mainly for escape purposes. They did not like the training because it did not allow them time to engage and enjoy themselves. The FCT was implemented to teach the boys to ask for breaks as a replacement behavior. The boys then understood this and took continual breaks throughout the training and learning never occurred. The participants were then presented with a choice to either finish their training segment or take a break. Once the boys were given this choice their individual requests for continuous breaks decreased and they were able to complete their current training segments. The authors suggest that individuals’ choices are governed by various dimensions of reinforcement that are in tandem with different response alternatives.

Peterson et al. reached their goal of teaching the participants to ask for breaks; a replacement for problem behavior while increasing their engagement and reducing problem behavior when the task demand is presented. The participants were able to do
this because they were presented with a choice between engaging in the task and asking for a break from the task.

Providing students with opportunities to make choices is another way of teaching them that they can influence others without having to participate in challenging behaviors. Ruef et. al. (1998) suggest once the reason for misbehavior is established that teachers, parents and students together can create a list of choices for a variety of activities and the child makes the final selection. By doing this the student feels empowered and is provided opportunities they maybe seeking out by participating in negative behavior. Once a list is formed, several components must be followed in order to have a successful choice making classroom work. Honor choices not offered unless they would result in disruption, embed choice into activities and monitor for success are just three suggestions. In addition to making choice lists, a teacher can also adjust the nature of the activity by taking advantage of student preferred activities. Teachers must be aware of students’ interests and incorporate specific interests throughout the lesson by providing them an opportunity to engage in that activity with peers. This will provide students with challenging behaviors an opportunity to interact with their peers in a positive learning environment.

A study completed by Reinhartsen (2002) compared two conditions as they evaluated the antecedent choice-making intervention. Three two year old boys with autism were provided with teacher selected toys and child choice toys. Each condition was alternated daily and each of the ten sessions consisted of five minute segments. The boys were timed on how long each of them was engaged appropriately with each set of toys. Problem behaviors were also noted for each session. The results demonstrated that
each of the three boys were consistently engaged for longer periods of time when they chose the toy to play with. When provided a teacher selected toy the boys had either immediate engagement or none at all. Problem behaviors also decreased for two of the three boys when they were provided with the toy of their choice. Reinhartsen found that under the child choice condition increased engagement with toys and decreased problem behavior was consistently demonstrated.

Peterson, Caniglia and Royster (2001) completed a Functional Behavioral Assessment (FBA) for a ten year old boy named Trevor with autism and problem behavior. Trevor was in fourth grade in a self-contained special education classroom where he was included in general education for specials. Trevor's problem behavior included crawling under tables, verbal outbursts common during work tasks, unable to appropriately walk in the hallway and verbal outbursts during physical education. At times Trevor also engaged in preservative speech and did not use language functionally. Trevor displayed challenging behavior when demands were given, he did this either to escape or to obtain teacher attention. Appropriate behavior was defined as Trevor being able to remain in his seat, looking at his paper, writing answers and answering questions asked by the teacher. The team working with Trevor agreed upon an intervention where Trevor could choose either to work with a teacher to complete an activity or to work alone. Trevor was also given the choice to receive a break following his work or a chosen reward. The two choice interventions were simultaneously carried out. During the intervention ten sessions were two to ten minutes in duration depending on how long it took for Trevor to complete his work. Peterson et al. reported that in the first three
sessions Trevor’s inappropriate behavior varied, sessions 4-6 his inappropriate behavior scored at 100% because he refused to participate and a decrease in inappropriate behavior was observed by the last four sessions. Peterson et. al. concluded their study by stating that choice making may be an effective intervention option for some children with autism who display problem behavior for multiple reasons.

Jolivette, Peck-Stichter and McCormick (2002) research the influence of making choices for students with emotional disabilities. The article focuses on Isaac as the case study who has emotional and behavioral disorder (EBD). According to IDEA 1997 students with EBD have an inability to learn that can not be explained by intellectual, sensory or heal factors. They also have an inability to build or maintain relationships, display inappropriate behaviors or feelings, are generally unhappy and have a tendency to develop physical symptoms of fears associated with personal or school problems. Prior to the study, Isaac engaged in inappropriate behavior such as ripping paper, throwing work and verbal disruption to obtain a predictable response from the teacher. He often faced punitive consequences that were ineffective and the behavior often continued. Jolivette et. al. highlight providing students with opportunities to make choices as a useful strategy. For Isaac making choices improved behavior as well as facilitated engagement in learning. Once choice was presented during the academic period Isaac’s inappropriate behaviors decreased and participation increased. Isaac was given the choice of what writing tool he wanted to use, the order of work to be completed, where he wanted to sit and the method in which he wanted to complete the task. Choice-making is a cost-
effective method to minimize inappropriate behaviors and promote positive teacher-student interactions.

Summary

In my classroom I teach all students that choices are naturally occurring actions that provide positive and negative consequences. Often for students with special needs inappropriate behavior is maintained by a tangible and predictable consequences. Teachers must take advantage of this opportunity and incorporate the choice making component to increase task engagement and make learning enjoyable for everyone. The literature provides methodology that empowers choice making interventions and a few studies that demonstrate the power that choice making has for students with disabilities. McCormick et. al. (2003) believe if the choice making process is embedded in children’s learning then ultimately their self-direction, negotiation and social skills will be superior in the future. It is my goal to incorporate choice making into the students’ academic instruction to increase time on task and appropriate participation.
Chapter 3: Applications and Evaluations

Introduction

While creating the lessons for this study and preparing to carry out the project, many different methods and procedures were developed. I found data collection to be a crucial element of the study because there are so many pieces of information that needed to be noted daily throughout the five week period. In order for the observational data to be easily recorded and compiled I created a leveled checklist to be used during each of the sessions that all of the participating adults in the classroom were trained to use. After much planning, preparation and review of the literature I created a flexible four week plan for students to participate in choice and no choice academic activities. This study was created to gain a better understanding on the impact of choice making during preferred and non-preferred activities for students with autism, mental retardation and traumatic brain injury.

Participants

The study took place at a Western New York suburban school. The elementary school where the study was completed houses second and third grade students. According to the New York State District Report Card Accountability and Overview Report (2005-2006) the number of students enrolled kindergarten through twelfth grade was 4,255. Out of those students, 90% are white, 1% have limited English proficiency, and 27% receive free or reduced lunch making the school eligible for Title I funding. The school employs a total of 327 teachers, all of whom are considered to be highly qualified. An average class size is 22 students and the annual attendance rate is 96%.
The researcher is a special education teacher in a third through fifth grade 12:1:1 classroom at Bee Elementary School (BES - pseudonym). She has been teaching at BES for two years, prior to her current position she taught in a kindergarten through second grade 12:1:1 classroom for students with emotional disturbances. She has a Bachelor of Science degree in education with dual certification in elementary education and special education. The researcher is currently working toward her Master’s Degree in Elementary Education and Curriculum Development.

There are three aides to assist in the third through fifth grade 12:1:1 classroom. The first aide, Mrs. Montfond (Mrs. M. - pseudonym), has three years of experience working as a one to one aide at BES. Mrs. M. has received training in American Sign Language. She currently works with Travis (pseudonym) a student who is classified as mentally retarded. Mrs. Hunter (Mrs. H. - pseudonym) has been a one to one aide for two years. Prior to her time with this school she worked as a secretary at a local car dealership. This is her first year working in a self-contained setting and she has had some difficulty adjusting to the needs of the students. Mrs. H works with Manny (pseudonym) who has autism. The third classroom aide, Mr. KanKan (Mr.K - pseudonym), has ten years of experience in the School District. He has worked as a hall monitor, classroom aide, bus driver and one-to-one aide. Mr. K is charismatic and dedicated to the students in the classroom. He works as the classroom aide but mainly assists with Kyle (pseudonym) who has a traumatic brain injury.

The class consists of eight boys and two girls. All of the students receive speech therapy and occupational therapy within the classroom daily. A total of four students will
participate in the study; their parent consent forms were received. Travis (pseudonym), a fifth grader with Down Syndrome, is an outgoing student who loves hands-on activities that are at his academic level. Travis can count to ten, read level one books independently and uses sign language as his main form of communication. Mrs. M is Travis’s one-on-one aide, she assists him during transitions, whole group activities that include multi-step directions and during specials.

Manny (pseudonym), a third grade student with autism, is a friendly student who enjoys outdoor play and computers. His reading skills are a strength but comprehension is a weakness. Manny has many academic strengths yet has a very difficult time generalizing his knowledge during classroom activities. Manny thrives during structured activities that are not language based. Manny requires a daily written schedule, social stories and several verbal reminders of appropriate social coping skills throughout the school day. Mrs. H is Manny’s one-on-one aide.

Tina (pseudonym), a fourth grade student who is mentally retarded, is the leader of the classroom. She enjoys being the example for others to look toward. Tina reads at a level three independently and can tell time and identify money amounts. Functionally she is independent but her behaviors are not always appropriate. She needs reminders of good behaviors throughout the school day.

Anthony (pseudonym), a fifth grade student who is classified as other health impaired (OHI), is a socially aware and streetwise student. He has emergent reading skills and can independently read at level one. His math abilities are much stronger. He is able to use an abacus to count up to fifty and add/subtract single digit numbers. Anthony has a
difficult time adhering to the classroom schedule and often needs to take breaks throughout the school day in order to keep himself calm.

The classroom offered a comfortable and inviting atmosphere with a variety of student reference posters on each wall in addition to student work. There are four tables in the classroom where students meet for small group instruction. Students typically remain at the table until the lesson is complete. If a student requires one on one time during any portion of the lesson the student has the option to move to a single desk and work with an adult. This routine is an unwritten rule of the classroom. The only written rule posted and discussed throughout the school year is for students and adults to “Make Good Choices.”

Procedures of the Study

To assure parental permission I sent a letter and consent form home to the parents. This letter was used to share information about the purpose of the study along with a consent form to grant permission for their child to participate. Parents and students were notified of their rights and knew that at any time they could decline participation from the study. Parents were also notified that all personal information and data collected during the study would be securely stored and used for research purposes only. Signature consent from the students was obtained and an explanation of data collection methods was given. I asked permission to use the data in this study. Four out of ten parent forms were returned.

A letter of consent with an attached copy of the research proposal was also submitted to the principal. Student rights and confidentiality were assured by providing pseudonyms before data collection began. All student names were deleted from work that was collected, and identified only by pseudonyms. All collected data was locked in a
filing cabinet in my classroom and student data was shredded after completion of the study.

For four days a week during a four-week period I chose the students at random to teach a lesson that incorporated choice. The same students were then taught the same subject without choice for a total of three weeks. Their reactions during one week of choice were compared to the four weeks of no choice. This was done during math, ELA, life skills and OT/PT. Concentrating on a smaller sample of students daily gave the ability to spend more time evaluating and observing. This allowed me to collect more detailed data and get a true analysis of the students’ participation during choice and non-choice activities.

*Instruments for Study*

Collection of data took place through the use of an observational rubric (see Appendix A). The teacher observed the students and encouraged the students throughout the academic tasks as well as collected the needed data. The teacher/researcher explained the data collection process as well as how to use the observational rubric. The data collected included the students’ immediate reaction to the center, interaction throughout the center, time on task, materials reproduced (if any) and later their demonstration of mastery. Students must demonstrate mastery by displaying active engagement, appear to enjoy the activity, produce finished work and be able to reiterate learning material.
Chapter 4: Results

The purpose of this study was to study the effects that choice making has on students in a grade 3-5 12:1:1 self-contained classroom during preferred and non-preferred activities. The students were randomly selected to participate in the study. Each student’s achievement and behavior was recorded using a rubric by the researcher. Ten parent consent forms were sent home prior to the study. Four students were granted permission by their parents to participate in the study.

Week 1

The first week during math lessons students were able make choices during their guided practice and independent practice. All four of the students are able to tell time to the hour and are able to read digital time. Students were taught about how to read the analog clock to the quarter hour. During the guided practice portion of the lesson students were given the choice to use a Judy Clock with a partner and make the times given on a worksheet or play Time Bingo. Students’ initial reactions were positive 80% of the time when the choices were presented. Time is a preferred classroom activity, all of the students love working with the manipulative clocks. The independent choices were Matchtime on the computer or playing Time Memory.

Student engagement was an average of five minutes before an adult prompt or modeling was needed. Anthony was able to maintain engagement for an average of ten minutes and Travis as able to remain engaged for an average of one minute. Anthony became distracted from his peers at the table who were not able to concentrate for a
lengthy period of time. On day one and day three Andrew became frustrated with his peers and had to take a break for the remaining period of the math lesson. If he were to have stayed for the lesson in its entirety the average time may have been higher.

The guided practice portion of the lesson was five minutes long and students were provided with a choice of using a Judy Clock or playing Time Bingo. The average time on task for the week was four minutes. When a choice was given students were on task for 80% of the time. Reflecting back on my observation notes from day two and day three both Tina and Travis became distracted with the magnetic bingo chips and wand. On day four Tina was encouraged to participate in the Judy Clock activity, both Tina and Travis remained on task for the entire five minutes.

The independent practice portion of the lesson was also a total of five minutes and the students were provided with a choice of Matchtime on the computer or playing Time Memory. Students remained on task for a total of two minutes. Every student was engaged for at least one minute during the independent practice and the class was able to participate independently with the activities 40% of the time. Manny chose the computer program each day, he enjoys computers and is familiar with the program. He also likes the music played in between the questions and “stims” on the sounds. Manny requires additional supervision to maintain appropriate engagement. Travis also had a difficult time using the computer program, he “clicks” without listening to the entire question and he too required adult support.

Students were able to demonstrate or provide knowledge of content immediately following the lesson 40% of the time. Manny and Travis had to demonstrate their
knowledge by using the manipulative to communicate their answers while Tina and Anthony were able to provide knowledge through written examples.

All students were not able to demonstrate generalization on day one of the choice math lessons. Manny and Anthony were able to demonstrate their knowledge of reading an analog clock on days two, three and four before lunch, while lining up during specials and during dismissal. Tina was observed reading the analog classroom clock at dismissal on day two or day four. On day three she was asked to read the analog clock at the office and became confused. The clock in the office is clearly much higher than in the classroom. Tina’s eyes were immediately tested by the school nurse who referred her mother to visit an eye doctor. Modifications to Tina’s school day are now made. Travis was able to provide the hour using sign language during read aloud each day at one o’clock. Several opportunities were given to each of the students throughout the school day by the researcher.

During week one students were not presented choices during ELA, lifeskills, and OT/PT lessons during the guided practice and independent practice portion of the lesson. Collectively through the lessons the students were able to maintain engagement through direct instruction for an average of four minutes. During ELA attention was maintained for an average of one minute before an adult prompt was needed. Lifeskills and OT/PT lessons are hands-on learning activities that incorporate more movement and gross motor skills and students maintained engagement for an average of seven minutes.

Students were asked literal questions to verbally answer during the ELA lessons. They had to demonstrate their knowledge through appropriately participating in the
activities during the lifeskills, and OT/PT lessons. Students were able to demonstrate and provide knowledge of content immediately following the ELA lesson 25%, lifeskills 50%, and OT/PT 25% of the time.

*Week 2*

The second week during ELA lessons students were able make choices during guided and independent practice portion of the identifying story elements lesson. Throughout the year during daily read aloud students identify story elements within a group discussion. ELA instruction during the study focused on teaching students using Boardmaker symbols (visual symbol coupled with the label made on the computer program Boardmaker). The students were able to use the symbols as a manipulative while reading the story. During the guided practice portion of the lesson students were given the choice to use a large Velcro graphic organizer or play Who What When Where Bingo. The independent choices were a reflective story element writing piece or reading a Level 1 book and labeling the story elements using the Boardmaker symbols.

Students' initial reactions were positive 10% of the time when the choices were presented. Typically, ELA activities are non-preferred for students because of the complexity of tasks. When letter, word or book activities are introduced many of the students react negatively. Students who are in 12:1:1 classrooms have faced several failures throughout their academic careers and often do not think of reading positively. When teaching the lesson and explaining the guided practice activities Manny screamed, “NO I won’t do it!” He then began to cry.
Student engagement during direct instruction was an average of two minutes. Each day a new story element was explicitly taught: Day 1 was Who/Character, Day 2 was When/Time, Day 3 was What/Plot and Day 4 was Where/Place. Typically students were able to participate in the reading portion of the lesson but when the manipulatives were introduced they became distracted with the physical hands-on materials. Tina on day one was extremely concerned that the person on the Who card did not have hair. She said, “Why does this man not have hair?, Is he sick? How old is he? Where are his eyebrows?” These questions were important to Tina yet were a distraction for the remainder of the students and it also interrupted the lesson. On day three it was decided to provide the students with the materials prior to the lesson and do a pre-teach lesson so that they were familiar with the pictures. This improved their engagement because they were not asking questions and playing with the manipulatives during the direct instruction.

The guided practice portion of the lesson was five minutes long and students were provided with a choice of using a large graphic Velcro organizer or playing Who What Where When Bingo. The average time on task for the week was three minutes. When a choice was given students were on task for 60% of the time. The Velcro organizer was placed on the white board and student had to get out of their seats and walk to the organizer in order to use it. This became a distraction for Manny. He was unable to follow the multi-step directions during guided practice. He often would stim as soon as he left his seat.

The independent practice portion of the lesson was also a total of five minutes and the students were provided with a choice of completing a writing piece or labeling the
story elements using a simple Level 1 book. Students remained on task for an average of 1 minute. For the majority of the independent ELA practice the students required adult assistance, only 20% of the time they were able to participate independently. Travis requires one-on-one assistance during writing activities, he continues to struggle writing his own name. He is dependent on adult assistance during writing activities as is Manny. Anthony has a tendency to work quickly and not focus on accuracy. He needed adult modeling and prompting so that he was able to appropriately participate in the independent activities.

Students were able to demonstrate or provide knowledge of content immediately following the lesson 60% of the time. Each student used the manipulatives to communicate their answers. Tina and Anthony are able to verbally communicate effectively but chose to use their symbols while providing knowledge of content. Each student was asked to identify the story elements in their book, “Who is the character?” was the question asked on day one. Each student used their Who/Character manipulative and placed it on the character. This was the only story element that each student was able to immediately answer correctly following the lesson.

Students were given opportunities during the daily read aloud and morning message to demonstrate their generalized knowledge. Each student was able to answer Who/Character questions and Where/Place questions using a visual as a reminder. Travis, Manny and Tina did not answer What/Plot and When/Time questions accurately. Anthony was confident with all of the story elements except What/Plot.
During week two students were not presented choices during math, lifeskills, and OT/PT lessons during the guided practice and independent practice portion of the lesson. Together through the lessons the students were able to maintain engagement through direct instruction for an average of three minutes. Week two of the study took place the week before spring break and many of these lessons were in the afternoon. Manny was very distracted with when he was going to be able to go outside. Travis on day three of the study refused to participate all afternoon, he sat under the table and cried for his mom.

Students were able to demonstrate and provide knowledge of content immediately following the math lesson 40%, lifeskills 60%, and OT/PT 40% of the time. Students were not provided choices during the lessons yet their ability to demonstrate or provided knowledge of content following the lesson increased from week one.

**Week 3**

The third week during lifeskills lessons students were able make choices during guided and independent practice portion of living and nonliving lesson. The students had to analyze their environment and classify whether things were living or nonliving. Students were taught that living things breathe and eat, but nonliving things do not carry out these life functions. During the guided practice portion of the lesson students were given the choice to take an observational walk and label the living and nonliving things or make a living/nonliving collage. Each student chose to take a walk and everyday they walked somewhere different in the school to label living and nonliving things. The independent choices were to make a photo album of living and nonliving things using the school camera or to make a hallway display using books, magazine cut outs and drawings.
of living and nonliving things. Students’ initial reactions were positive 40% of the time when the choices were presented. Often when concepts such as this are introduced, the students’ confusion often comes across as negative behavior.

Student engagement during direct instruction was an average of four minutes. Different types of living things were discussed each day. The students were confident with identifying that people and animals were living. When plants and insects were discussed as living things Andrew became confused because you cannot physically see plants eat and breathe and you cannot see insects breathing. When a picture of grass was shown to the students all of them replied nonliving and when a picture of a rock was shown they responded living. By day four of instruction the students became much more fluent with categorizing the pictures. The students were engaged in the direct instruction 80% of the time and appeared to be genuinely interested in the topic of living vs. nonliving.

The task during the guided practice part of the lesson was to label items throughout an observational walk or make a collage. The average time on task for the week was four minutes. Each day every student chose to go on the walk and they maintained their attention and appropriate behavior for 80% of the time. The walk took longer than the designated five minutes, usually it was 10 – 15 minutes long. Each day the students were able to walk to a different area in the school and observe familiar environment things. The walk provided them with an opportunity to get out of the classroom and move which is needed after one week of vacation. The students walked to the art room, courtyard, cafeteria and library. Inside the library are plants and pets, Travis
became extremely excited when he was able to label the turtle living. At this moment living and nonliving “clicked” for him and he was able to identify living and nonliving accurately for the remainder of the lessons. The walk presented several extremely important teaching moments. The students were able to choose and control what things they observed and labeled.

The independent practice portion of the lesson was a total of five minutes and the students were provided with a choice of making a photo album or hallway display. Students remained on task for an average of three minutes. The hallway display activity presented opportunities for students to get up and move about, this can be both good and bad for the students. Manny and Anthony when working on the hallway display decided to use this opportunity to wander around the halls. The photo album activity excited Tina and Travis, they both loved taking pictures but did not want to complete the other parts of the independent practice to make the photo album.

Students were able to demonstrate or provide knowledge of content immediately following the lesson 90% of the time. When presented with photo cards Manny, Tina and Anthony fluently could answer living or nonliving. Travis had to think about his answers and became confused when presented with a picture of water, dirt, hamburger and a flower.

Students were given opportunities throughout each school day to demonstrate their generalized knowledge. On the playground was a daily time for students to provide quick living and nonliving answers as they played. The playground is lined with woodchips and each student categorized this as living. Each student consistently answered that a tree,
bush, other kids on the playground and birds were living and that the swings, slide and rock wall were nonliving.

During week three students were not presented choices during math, ELA, and OT/PT lessons during the guided practice and independent practice portion of the lesson. Together through the lessons the students were able to maintain engagement through direct instruction for an average of two minutes. The students typically demonstrate regression of skills and behavior the week after a long break. Many of the routine activities that students were confident in prior to the vacation needed to be re-taught and practiced after the break.

Students were able to demonstrate and provide knowledge of content immediately following the math lesson 20%, ELA 40%, and OT/PT 10% of the time. The students were unable to appropriately participate in OT/PT for the majority of the time because they needed to be re-trained again on how to appropriately complete the exercises and use the equipment. During the activities together the students were not engaged and participating in negative behaviors. Travis, Tina and Anthony could not tell time to the quarter hour and had to participate in review lessons on how to use the Judy clock. The skills regression was noted on each student’s Extended School Year Regression Statements.

Week 4

The fourth week during OT/PT lessons the students were able make choices during their group activities. The OT/PT therapy time focused on teaching students a variety of Brain Gym exercises. Brain Gym is a series of calisthenics that are connected to
certain areas of your brain; students practice crossing the midline of their bodies during the movements. During the guided practice portion of the lesson students were given the choice to practice their exercises using a ribbon wand or to play music while they go through each exercise. The ribbon wands were introduced ahead of time and the students were provided an opportunity to practice using them. The independent choices were video tape themselves completing a series of five exercises then review the tape to critique what was good and what needed improvement or to teach another student in the classroom a new exercise. Students’ initial reactions were positive 90% of the time. The class loves movement, exercising and physical activities.

Student engagement during direct instruction was an average of three minutes. The classroom environment during activities such as Brain Gym is less structured. Students are out of their seats and are moving about the classroom. For Travis and Manny this poses the opportunity for them to navigate toward areas of the room they would rather be in, such as the toy area. On each day both boys maintained appropriate behavior during the instruction for less than a minute before wanting or attempting to move toward another area of the room. Once the guided practice activities were introduced this maintained their attention.

The task during the guided practice part of the lesson was for the students to chose using a ribbon wand or listen to music while completing a series of five exercises. The average time on task for the week was four minutes. Tina enjoys music and chose to listen daily. She maintained her attention for the entire five minutes daily. The boys chose the ribbon wand except for Manny who chose music on the first day. Travis used the wand as
a sword on day one and day two, he did not participate on either of these days. He chose the wand again on day three and was able to engage appropriately for three minutes.

The independent practice portion of the lesson was a total of five minutes and the students were provided with a choice of making a video or teaching a peer a new exercise. Students remained on task for an average of two minutes. For the students who chose to be videotaped, they were able to use visual cue cards so that they knew what movement to do next. These were an extremely beneficial aide to use while encouraging independence. After the taping the students were then able to watch themselves on television, this provided major classroom entertainment. The task was for them to complete a self-critique but as the other students gathered everyone became involved monitoring what the student needed to improve on and what was good. Each student in the classroom became involved in watching and evaluating. This instant is what educators call a teachable moment.

Students were able to demonstrate or provide knowledge of content immediately following the lesson 100% of the time. Andrew had difficulty completing certain exercises because of his size and physical disabilities but he was able to provide knowledge of what the movement was by verbal explanation.

Students were given opportunities throughout each school day to demonstrate their generalized knowledge. On the playground, lunch and waiting in line was where each student was asked daily to complete a “hook up”, “elephant ear” and/or “figure 8” on the first day. Providing the students with an opportunity to exercise while they are in lunch or waiting in line in the library was problematic. Once they completed the movement they
continued on with a series of exercises or repetitively kept doing them because they are fun to do. Once this was discovered the students were asked in the classroom to complete an exercise. The students without visual cues were able to demonstrate each exercise daily. This was found to be beneficial throughout the school day because it was an appropriate break from an academic task that the students could participate in rather than bolting, screaming or refusing to participate. When a student began to show frustration they were asked to complete a Brain Gym exercise. This gave them an opportunity to practice, demonstrate generalization of skills and provided them with an appropriate release of tension.

During week four students were not presented choices during math, ELA and lifeskills lessons during the guided practice and independent practice portion of the lesson. Together through the lessons the students were able to maintain engagement through direct instruction for an average of three minutes. This was the fourth week of participating in the same content. The students showed confidence throughout the instruction and activities.

Students were able to demonstrate and provide knowledge of content immediately following the math lesson 60%, ELA 80%, and lifeskills 90% of the time. The students were able to demonstrate knowledge confidently. Exposing them to the same type of learning materials and covering one area within a content area was beneficial. Each student demonstrated major gains telling time which has been a goal for each of them since the beginning of the year. Identifying story elements has been a weakness but with a months worth of pure instruction focusing on this particular skill the students were able to
demonstrate their knowledge 80% of the time. Teachers have a plethora of information that they have to teach students. Unfortunately many topics are covered minimally, this study forced pure instruction. For one month time, story elements, living/nonliving and Brain Gym were focus of all instruction and the students demonstrated gains like they have never before. Not only were they able to demonstrate knowledge and skills their confidence was much improved and problem behaviors decreased. This is dually from having choices infused throughout instruction and from having a more focused teaching approach.
Chapter 5: Discussion

The purpose of the research was to study how choice making affected student participation and generalization of knowledge and skills. Like Jolivette, Peck-Stichler, & McCormick (2002) I wanted to study how making choices both improves behavior and engages students in learning. Conducting the research study gave me the opportunity to reevaluate my own teaching style and attempt a new facet of teaching.

Discussion

The results of the study demonstrate the power that choice making has during instruction for students with disabilities. Choice making presents students with the chance to have control over their learning activities which in turn gives them a sense of ownership within the lesson. Bambara (2004) argues that children innately need to express their wants and needs, and students with severe disabilities need to be taught how to do this appropriately. Providing students with disabilities this unique learning opportunity is both beneficial and rewarding for both the students and teachers involved. Students with severe disabilities are capable of having preferences and have the right to express their preferences through choice. Students are then able to participate more in an environment that fosters preferences and choice making because they are doing something they enjoy and engage in less negative behaviors.

Choices surround each of us by thousands throughout the day. Imagine the life of a student with disabilities and how many choices they are able to make independently throughout their school day and it could be counted on one hand. This study gave each student the opportunity to make a total of eighty academic choices within a four week
period. Each student was able to make up their own mind about an activity that they wanted to participate in and 100% of the time the students made a choice. Only during the non-choice academic times both Travis and Manny on two different occasions participated in negative behaviors and refused to join the class lesson. Both of these students have limited communication skills and when they were not provided a choice could not let their thoughts and needs be known appropriately. This type of negative behavior did not occur during any of the choice lessons throughout the four week study.

The study has initiated a different way to present lessons to students with disabilities. Presenting choices throughout an academic task successfully engaged all students and encouraged collaboration, independence and social skills. Planning for choice based lessons requires more time, materials and strategy but can be done easily. Providing students with disabilities the opportunity to practice and carry out choices that they have made benefits them both academically and socially.

Action Plan

Providing students with choices is not only an effective behavior management strategy it is a sound teaching practice. While choices were incorporated throughout the students’ academic day, I would like to take some time to further incorporate choice into academics. The classroom environment next year will be set up to infuse choice into each academic area. Student goals and target skills will be written out with each activity and they will then be able to chose when they want to work on time or money during math. Once they make the choice of topic they then can participate in the lesson and chose what activity they would like to complete for guided and independent practice. Again, this will
take much time to prepare prior to the lessons but will promote student choice and independence within a self-contained classroom.

Since independence is difficult to successfully promote for students with disabilities I plan to share the choice theory and literature about the power of choice making with special education teachers. Once they are educated on the current research pertaining to choice making we can have a discussion about how this can actually be implemented in our classrooms. I will share the results of my study and share how I infuse choice into my academic activities. The discussion will focus on how choice can better both classroom management and instructional approaches. Teachers involved will be invited into my classroom to observe choice making lessons before they incorporate it into their own teaching.

It is recommended that during the instruction portion of the lesson that the teacher remain focused on instruction and not get “off track”. The students involved in the study were often distracted with the new learning materials such as the magnetic chips/wand and Boardmaker symbols. This type of distraction inhibits learning to take place. Students need to be introduced to all learning materials prior to the lesson. They also should be given the opportunity to practice using the materials. This would eliminate student confusion and distraction during the teaching portion of choice lessons. Students would then be able to focus on the choice at hand and not the distracting materials.

Recommendations for Future Research

Further research on the benefits of choice making for students with multiple disabilities with a focus on ability to demonstrate generalization of knowledge needs to be
continued. Through this short four week period students were able to demonstrate generalization better when they participated in choice lessons, then when they did not. This poses the idea that students are able to internalize the information better when they are in control of the learning task. It has been shown that students’ participation increases and problem behaviors decrease during choice making activities.

Generalization of knowledge could also be due to the implicit content area instruction. Students were not inundated with multiple skills, facts and strategies daily. The same content during each math, ELA, lifeskills, and OT/PT lesson was taught. Students were able to retain more and more information weekly. By the fourth week of instruction students improved their immediate knowledge tremendously. During math they were able to demonstrate knowledge 60% of the time, reiterate story elements 80% of the time, distinguish between living and nonliving 90% of the time, and perform the Brain Gym exercises 100% of the time. Self-contained teachers should evaluate student goals, skill sets and N.Y.S. standards to determine what instruction they need to purely focus on. If students with disabilities are able to focus mainly on four skill sets within four weeks and show a major improvement in ability to demonstrate skills then at least this deserves a building level discussion among educators. This improvement is both remarkable and should be further researched.

Conclusions

Choice is a silent contributor in the classroom. With the implementation of choice students are able to participate in an activity that they enjoy, have control over their learning and demonstrate appropriate classroom behavior. The average time on task
during direct instruction for students participating in choice activities was three minutes and 30 seconds while the average for non-choice instruction was three minutes. This may seem like a minimalist result but if you average that time through the school year students will be engaged for an average of ten minutes more throughout the school week. Through the school year they will be participating and paying attention for an increased six hours of instruction.

Students were able to participate in guided practice appropriate during choice activities for an average of three minutes and forty seconds. When students were not given a choice during this time the average time on task was two minutes. During independent choice time students remained on task for two minutes while during non-choice time the average time on task was one minute. Students were able to increase their appropriate independent work by two when given a choice within the content area.

Students were able to immediately demonstrate their knowledge and skills 73% of the time following choice lessons. During non-choice lessons students were able to demonstrate their knowledge 45% of the time. During both choice and non-choice instruction students were able to display their comprehension 40% of the time. The math choice lesson took place during the first week of the study. More dramatic results may have been demonstrated if the students were given more exposure to the content. During ELA choice instruction students displayed their understanding of story elements 60% of the time compared to the average of 48% of the time when not given choices. Students showed their knowledge 90% following the lifeskills choice lessons and 67% of the time during the non-choice lessons. The most dramatic results were during the OT/PT lessons.
where students were able to demonstrate their knowledge of Brain Gym exercises 100% of the time following the choice lessons. The students were only able to perform the exercises 25% of the time during the non-choice lessons.

As the four weeks of instruction took place students were able to generalize their knowledge of content and skills increasingly with time. This shows both the power of choice and the importance of focused instruction can have on student learning and achievement.

Cheney, D. (2002). In their words: The lessons we learn if we hear. Preventing School Failure, 46(2), 57–61.


intervention strategy for young children. *Young Exceptional Children, 6*(2), 3-
10.


academic tasks to facilitate the performance of children with autism. *The
Association for Persons with Severe Handicaps, 23*(4), 319-328.

intervention for a student with multiply maintained problem behavior. *Focus

Peterson, S.M.P., Canigilia, C., Royster, A.J., Macfarlane, E., Plowman, K., Baird,
making to improve task engagement and decrease problem behavior.
*Educational Psychology, 25*(2-3), 257-274.

Reinhartsen, D.B. (2002). Engagement with toys in two year-old children with autism:
Teacher selection versus child choice. *Research and Practice for Persons with

support: Strategies for teachers. *Intervention in School and Clinic, 34*(1), 21-
32.


Appendix A: Observational Rubric

Observational Rubric

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Student Name</th>
<th>Initial Reaction</th>
<th>Engagement throughout lesson</th>
<th>Able to demonstrate or provide knowledge of content immediately following lesson</th>
<th>Time on task during guided and independent practice (tally)</th>
<th>Demonstrates generalization throughout day (tally)</th>
<th>Student work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Student Name</th>
<th>Initial Reaction</th>
<th>Engagement throughout lesson</th>
<th>Able to demonstrate or provide knowledge of content immediately following lesson</th>
<th>Time on task during guided and independent practice (tally)</th>
<th>Demonstrates generalization throughout day (tally)</th>
<th>Student work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 1</td>
<td>No Choice: Life Skills</td>
<td>Student Name</td>
<td>Initial reaction</td>
<td>Engagement throughout lesson</td>
<td>Able to demonstrate or provide knowledge of content immediately following lesson</td>
<td>Time on task during guided and independent practice (tally)</td>
<td>Demonstrates generalization throughout day (tally)</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------------</td>
<td>--------------</td>
<td>------------------</td>
<td>------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Day 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 1</th>
<th>No Choice: OT/PT</th>
<th>Student Name</th>
<th>Initial reaction</th>
<th>Engagement throughout lesson</th>
<th>Able to demonstrate or provide knowledge of content immediately following lesson</th>
<th>Time on task during guided and independent practice (tally)</th>
<th>Demonstrates generalization throughout day (tally)</th>
<th>Student work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Scoring**

**Time:** 1 tally = 1 minute or 1 occasion

+++ = active engagement, excited about materials, appears to be enjoying the activity, produces finished work, able to reiterate learning material (demonstrates full comprehension)

++ = actively engaged the majority of time, participates appropriately, finishes work with on task reminders, able to demonstrate some knowledge of learning activity

+ = engaged sporadically, needed constant on task reminders, progress toward finishing work, able to identify and discuss few parts of the learning activity

- = not appropriate participation, unable to identify or discuss learning activity

57