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Literacy Support For Children With Autism

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Literacy Support For Children With Autism

By

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An Honors Thesis Submitted in Partial Fulfillment
of the Requirements for Graduation from the
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Abstract

For many years, children diagnosed with autism spectrum disorders were often a mystery to both doctors and researchers. While exact causes are unknown, there are a variety of ways to lead these children down a successful educational path. Starting at a young age, treatments and educational approaches can support healthy and productive lifestyles, and enhance learning in the classroom. While many people who are autistic excel in art and other creative subjects, without proper instructional techniques, becoming a proficient reader can be a great challenge.

This study explored the benefits and drawbacks of existing reading techniques and strategies for children with autism spectrum disorders. The researcher implemented the strategies, as well as developed some new ones as a result of the experiences working with Matthew*, an eleven- year- old child with autism. Developed and implemented lesson plans through trial and error in order to discover what worked most effectively.

*Name has been changed

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Literature Review

Autism Spectrum Disorder, also known as ASD, points to a complicated and often mysterious brain disorder that affects 1 in 88 children in the United States today (Autism Speaks, 2012). Autism comes from the Greek word *autos* which means *self*. This concept of *self*, when referring to autism, points to an isolated self, separate from social interaction (WebMD, 2011). Many people have difficulty understanding this disorder and struggle to find effective ways to help make these children feel successful in the classroom. Research points to several methods of learning, as well as adjustments that can be made to classroom and home environments in order to stimulate learning and productivity for children with autism (Williams, 2011). If instructors and parents are knowledgeable about the little changes they can make to their classroom setting and instructional methods, they can positively change the educational course that students with ASD experience.

In order to stimulate learning, an understanding of this complex disorder is required. In the early 1900s, groups of schizophrenic patients displayed characteristics that were different than most of the other patients in that they were quiet, reserved, and withdrawn. These characteristics are similar to today's diagnose of autism. Patients with such personalities were looked upon as having a mysterious condition, often stigmatized as a mental illness. Children and adults

alike were isolated and given little or no attention because the belief was that

these people were incapable of progress (Wilson, 2010). It wasn't until 1943 that

child psychologist Leo Kanner developed ideas and new research regarding the

unknown disorder that these children seemed to have in common. Kanner

observed a group of 11 children that he believed displayed similar behaviors and

habits. Such behaviors included

- Impairment in social interaction

- Difficulty with change

- Good memory

- Belated echolalia

- Over sensitivity to certain stimuli

- Food problems

- Limitations in spontaneous activity,

- Good intellectual potential

- Repetitive behaviors, and

- Often coming from talented and high achieving families (Kanner, 1943).

When discussing a particular child, Kanner said,

He seems to be self-satisfied. He has no apparent affection when petted.

He does not observe the fact that anyone comes or goes, and never seems

glad to see father or mother or any playmate. He seems almost to draw

into his shell and live within himself (Kanner, Case 1, 1943).

He described these children as autistic (WebMD, 2011).

Eventually autism became a much broader collection of disorders that

were grouped under the umbrella term of Autism Spectrum Disorders (ASD).

Several disorders are encompassed within the spectrum each with specifics that

define their differences. The disabilities range from high functioning to severe in

autistic disorder, Asperger's syndrome, Rett syndrome, child disintegrated

disorder, and pervasive developmental disorder. Characteristics of these

disorders range from intellectual disability, problems with motor coordination,

and physical health issues such as difficulties with gastrointestinal systems and

sleeping (Autism Speaks, 2012).

Hans Asperger, a Viennese pediatrician first described Asperger's

syndrome. Initially, it was recognized as a more mild form of autism because

children with Asperger's syndrome had little or no language or cognitive delays.

Some defining features of Asperger's syndrome include proficiency and obsession

with collecting, memorization of categories of information, inability to pick up on

social gestures, and while highly developed, unusual patterns of speech (Autism

Society, 2012). Some children and adults with ASD have little difficulty

communicating, but often lack social graces and are unable to pick up on implied meanings.

Over time, the viewpoints on autism have been under constant change. Since the first diagnoses of autism in 1943, drastic changes have occurred in the ways students are treated in the classroom. Students facing the challenge of autism were once put into separate facilities, and barely taught basic educational skills because it was believed they were inept learners (Daily, 2005). Today, parents, teachers, and researchers continually work toward more effective ways to help their children be successful in school settings. What was once believed to be a complete inability to learn, form relationships, and grow emotionally, is now a continually changing disorder when it comes to treatment and intervention. Even without a cure, there are ways to effectively teach students with ASD so that they will be able to thrive in a classroom with their peers. In order to appropriately interact with peers, students must first practice basic communication skills and rules. Whether communication is fully developed, or is delayed and limited, it is a common struggle for people with ASD.

It is believed that up to one half of all people with ASD do not meet their daily communication needs (Knapp, 2013). Communication is a life skill that is difficult to go without. It is essential for students to learn educational concepts, but perhaps the most important skills to master are communication, form

positive relationships, and learn to empathize with peers and mentors (Daily, 2005). Students with autism will greatly vary on their ability to communicate. One student may have a broad and flourishing vocabulary while another might struggle to communicate basic needs and wants. Over 50% of people with ASD have some kind of speech deficiency (Knapp, 2013). Children with ASD who are verbal, typically have difficulty keeping a conversation going. They lack the ability to take on the roles of speaker and listener, and to continually interchange those roles (Diagnostic Symptoms of ASD, 2013). Children with ASD who are nonverbal will use some expressive language that is familiar and repeated regularly to them. Their expressive language is generally limited to short one-word utterances that might represent specific nouns, or in other cases may just be a made-up word. Unnatural intonation and rhythm of speech is a commonality as well. Children with autism often get frustrated because they are unable to communicate their basic needs and wants. Temper tantrums are often the result of this inability to communicate basic needs and wants.

Proloquo™ (Niemeijer, nd) is a widespread Mac program that is used as a communication device for adults and children who are unable or have difficulty talking and dealing with the frustration of communication issues. This application is known as an Augmentative and Alternative Communication solution that can be programmed for people with specific disabilities. Proloquo™ (Niemeijer, nd)

uses icons and voice commands in a variety of categories to assist in building

sentences and pronunciation of words. Although there will be a many variances

in the student's ability to communicate, most will be unable to communicate

effectively, especially in regards to other people and situations of social

interactions (NIDOCD, 2009).

Because social situations are often a challenge for children with ASD,

simulating situations where practice can occur is beneficial. Social interaction can

be introduced during *play time.* Teachers must simulate situations in which

students with ASD can be successful interacting with other students. The

classroom or space must not be too big or too small or else it will be easy for the

child to get lost in the commotion or create conflict with another student

(Radunovich & Kochert, 2010). The idea of *Integrated Play Groups* (IPG) was

developed by Pamela Wolfberg, Ph.D. IPG includes an adult facilitator guiding a

student with ASD and other students through playtime. The facilitator focuses on

interpreting, observing, and building on the child's interests and strengths

(Wolfberg, 2012). By using this model, the child develops a more effective

method of communication and experiences success in the way that they speak

and interact with their peers. Once communication needs have been addressed,

the teacher must look at the environments where interactions take place

between peers.

Environment plays a crucial role in the learning process for a child with ASD. Auditory considerations must be taken into account. Too much noise or movement can cause over-stimulation and frustration when attempting to work (Autism World, 2007). Teachers must be attentive to the fact that students with ASD may be more sensitive than other students to auditory stimulus. Limiting the amount of noise around student work areas will benefit their learning process and encourage them to focus on their work. To address unavoidable classroom noise, teachers may use headphones to block out noise and encourage students with autism to focus.

Students thrive in environments that are consistent (Autism United, 2008). Consistency of classroom rules must be enforced continually. Also, expectations of behavior must not fluctuate. If a student clearly knows what is expected of them, they can eventually learn to adapt to those requirements. Daily schedules can either be a benefit or a difficulty for students with ASD. Their effect is contingent on the consistency from a day-to-day basis. Visual Schedules have been shown to be successful as they are implemented in the classroom (Autism World, 2007). Schedules are displayed in a place where the student can see them throughout the day, whether it be on a desk, book, or lanyard. Objects or icons can also be associated with daily tasks in order to provide visual clues to the student and prepare them for new activities. Anxiety levels and frustration can be

reduced by providing notice to the student about what they will be doing during

the day (Radunovich & Kochert, 2010). If a student has preferred activities on

their daily schedule in between less desirable activities, the student will be able

to look forward to what must be done first in order to get to the activity they

would rather do.

Because individuals with ASD have difficulty processing auditory

information, it is essential that all types of visuals be continually incorporated

into classroom instruction and structure (Use Visual Strategies for Autism, 2012).

Visual supports may help easy daily classroom transitions that are often difficult

for all children, and especially difficult for children with ASD. Visuals are also

beneficial when it comes to literacy instruction. Books with pictures are an

obvious answer, but also using objects to associate concepts or words too are

helpful. It is not effective to use flashcards or memorization tools to help children

learn vocabulary or spelling. Learning vocabulary or spelling words, for children

with ASD, can be internalized on a deeper level, when visual supports are

incorporated. If it is difficult to show a tangible object, the instructor might use

hand cues or pantomiming to present the word. This method might be an

excellent opportunity to allow children to present information in a way that

caters to their interests and talents.

Each student is unique with his or her own interests and talents. Using the strengths of a student and incorporating them into an educational setting can be a successful approach. Many children with autism excel in art, music, counting, memory, and computers (WebMD, 2011). By implementing elements of their strengths into lesson plans, students are more interested and motivated to learn. Creativity is a requirement for teachers in developing such lesson plans for students with ASD. A common characteristic of children with autism is echolalia, the repetition of words or parts of words. Often, the words that are repeated have little or no communication content, and are often referred to as "parroting of speech" (Biklen, 1990). Because repetition and repetitive behavior is a commonality of many children with ASD, these practices can be implemented into lessons as well. A teacher might read a book to a student twice, repeating important vocabulary over and over again to help instill the word into the child's memory, as well as show extra visuals, do an activity, and show a movie about the book. There are times when an alternative curriculum, that does not involve traditional school activities, is required for a child with ASD.

If traditional school curriculums are not working to the advantage of the student, it may be necessary for instructors to focus on a functional curriculum for students with ASD. Functional curriculum entails a set of life skills that help the child learn to be a more functional adult someday. " Functional academics

should always include reading and writing, basic math, time and money skills,

self-care skills, domestics, recreation, and community experiences" (Autism

World, 2007, p. 9). With an emphasis on these skills, opportunities for

employment and eventual adult independence will be in reach. The goal of this

curriculum approach is to assist children with disabilities in acquiring some basic

skills that can be utilized in an employment situation in their future. A functional

curriculum may be an essential component in eliminating poor post-high school

outcomes for children with disabilities. Although proven to be successful in many

school settings, Boucks and Flanagan (2010) present critical arguments against

the use of functional curriculum in their research.

- 19% of special education instructors completely implement

  functional curriculums with students with mild intellectual

  disabilities.

- The use of functional curriculum may lead to tracking in the school

  system, creating even more division among students. Inclusion is

  often the goal, but isn't always possible when a functional

  curriculum is emphasized.

- It was more typical that functional curriculum was put into place in

  situations where the *pull out* system was used. The idea of *pulling*

out children from traditional classrooms is an idea that is slowly

fading out.

- It is often difficult to determine which skills should be focused

    upon in order to create the most helpful outcomes. (Boucks and

    Flanagan, 2010)

Reading may be one of the most important life skills for students to

achieve, as literacy will greatly assist a person in multiple facets of their life

(Touchpoing Life Skills, 2012). Literacy needs to be a priority from the beginning

of a child's education experience. Exposing very young children to books will

greatly impact their learning curve as they enter a school setting. If child with

autism is literate, they will be able to communicate more effectively, using

vocabulary that they have learned through reading (Autism World, 2007). When

students with ASD are able to express themselves through verbal skills, they are

less likely to become frustrated and act out as a result of their inability to express

needs and feelings.

Broun (2004) implemented a methodology with students with ASD

developed by Oelwein for students with Down syndrome. This method, referred

to as the Oelwein method (Oelwein, 1995), utilized visuals in teaching students

with learning disabilities how to read. Oelwein identified the fact that students

with Down syndrome had great difficulty when it came to phonological

awareness and had significant short-term memory challenges. These issues made the traditional method of using phonics to be particularly ineffective (Broun, 2004). Broun emphasized the importance of students with ASD recognizing *whole words*. It is common for teachers today to instruct their students on learning a new vocabulary word by stretching it out slowly with each sound and only presenting students pieces of words. Students with ASD benefit much more from learning an entire word and associating it with a visual (Broun, 2004).

Another important concept from this methodology is the point that children feel accomplished when they are able to complete the reading of a book (Broun, 2004). Broun (2004) encourages instructors to have their students with ASD complete a book, no matter how simple it is, as soon as they can do so. This not only creates a sense of self-achievement and success, but also encourages the student to continue on to another book. The last point Broun makes about literacy instruction is that students need time to create their own sentences with provided vocabulary. Students who are able to read a sentence and use words they learn from books to create their own sentences will become better writers. Writing is a positive outlet for expressing feelings for all students. Because they have significant difficulties with reading, children with ASD are often left out of many of the meaningful activities that other children take part in throughout the day. If children with ASD are given effective instruction when it comes to reading,

they will be able to benefit from these educational experiences as well. Each and every student can have enriching educational opportunities with effective communication, appropriate environmental stimulus, and adequate literacy and language development.

Susan Stokes, an Autism Consultant, developed a method for teaching children with ASD titled Structured Teaching (Stokes, 2010). Structured Teaching involves a few basic principles. First, the instructor must understand how children with ASD think, respond, and associate various ideas and objects. If instructors can more thoroughly understand their student's daily challenges, their awareness of how they can help to encourage learning significantly increases. Second, Structured Teaching includes a system in which the environmental conditions are conducive to learning. This includes classroom set up, location of students' desks and work places, and auditory environment that they are placed in. Stokes suggests several ways that a classroom can be adapted to reduce extra noise and decrease distraction and chaos.

Next, when a student is participating in disruptive behavior in the classroom, it is addressed by analyzing the possible reasons that a student may be acting in the way they are. It is common for a teacher to become frustrated and even angry with students when they are disruptive and come across disrespectful and rude. Many times, the child with ASD is frustrated with their

inability to develop language, which may cause inappropriate behavior. Recognition that disruptive actions are often a result of the student trying to make up for a learning deficit will help the teacher be more aware of what is going through the child's head. Lastly, it is emphasized that people with ASD are able to relate to visual information better than spoke or verbal instruction and information (Stokes, 2010). Visuals in the classroom are beneficial if used regardless of the subject or topic. Structured teaching can be implemented at home with parents as well. In addition, a positive home to school connection will be helpful in maintaining consistency.

A child may respond to a parent rather than a teacher when it comes to overall discipline and structure. By keeping rules and routines consistent from home to school, students with autism spectrum disorders will be able to maintain balance and continuity no matter where they are (Evans, 2011). Any kind of adjustment to a schedule or environment is very difficult for a child with ASD to cope with. Changes can create a great deal of anxiety. Teachers and parents must work together as a team to make any kind of transition as smooth as possible.

In *Teaching the Student With Autism Spectrum Disorder* (Autism Society of Canada), methods of evaluation were discussed when working with students with autism at home and at school. The Autism Society of Canada used these methods to determine the most effective way to teach a student with ASD. To begin, a few

basic areas need to be evaluated and observed before any kind of action is taken. First, the parents and teacher must determine the student's specific strengths and needs, collaboratively. By playing to strengths, weaknesses can be compensated for. The feeling of success is important for students with ASD because they often compare themselves and their different learning styles to others. *Teaching the Student with Autism Spectrum Disorder* next points to ways of motivating students through their interests. "Students with ASD are typically motivated by highly individual and frequently idiosyncratic things. They may not be motivated and rewarded by the same things that motivate other students, such as verbal praise" (Autism Society of Canada, p. 4). It is much easier to motivate a student when they are genuinely interested in the subject topic or idea.

Students that are motivated will enjoy the activity, stay engaged for much longer, and command less encouragement for finishing the activity. Students benefit from structure, routine and predictability inside and outside the classroom (Autism Society of Canada, nd) This doesn't necessarily mean that the student needs to have a strict routine with no room for adjustments. Choice making is often a major struggle, but it is a necessary part of life to become comfortable with. Choice making only becomes easier when it is practiced with the help of visual aides and other prompts from instructors. Instructors have a

key position in providing and adjusting environments that are conducive to learning.

It is most important that the learning environment is structured, consistent, and expectations are clear (Autism Society of Canada, nd). Visual support greatly assists the process of a predictable schedule. If a student can visually see a poster or schedule that indicates their upcoming activities, anxiety can be greatly reduced. Finally, visual support must be implemented into each and every activity that is presented to the student. Visual support can include color photographs, pictures, graphs, line drawings, videos, sensory objects, books, checklists, schedules, written work, and anything that can be related to assignments and activities. "Visual Support allows the student to examine the information until they are able to process the contents of the message" (Autism Society of Canada, p. 4). The Autism Society of Canada believes these steps stimulate the learning process of a child with autism. Although these methods have proven to be effective, it is difficult to instruct students with autism if they continually struggle to communicate at all.

Sally J. Rogers researched a model for stimulating communication for students with ASD who were non-verbal. This model, called the Discrete Trial Training (Rogers, 2006) involves the instructor presenting the student with the instructions, and then prompting them to respond in some way. Once the

student responds, the instructor can provide a consequence, either to encourage the behavioral response, or to discourage it. Repeating this process helps to ingrain appropriate responses. Verbal commands need to be short and direct, as students with autism have difficulty distinguishing long strings of instruction that require interpretation. Because verbal communication is so essential, parents tend to believe that they can have an impact on their child as an infant in preventing them developing a form of ASD.

One current theory is that autism is an innate contact disorder (WebMD, 2011). Infants tend to focus on the human face as a manner of comfort and communication. Children with autism are unable to interpret the emotions and feelings of the human face, resulting in their lack of connection with facial expression and eye contact (Autism Society, 2012). Babies often imitate the faces that their parents make, but children with autism often do not. Later in life they find it especially difficult to take on others' perspectives and to empathize with those around them.

Infants as young as six months of age may begin to portray the early signs and detectors of an autism spectrum disorder. Early treatment can greatly improve outcomes for children that are detected early. These signs include (Autism Speaks, 2012, p. 1)

- No smiles or other expressions of joy by six months of age

- No reciprocal sound sharing by nine months of age

- Little or no babbling by one year of age

- Limited eye contact

- No big smiles or other warm, joyful expressions by six months or thereafter

- No back-and-forth sharing of sounds, smiles or other facial expressions by nine months

- No babbling by 12 months

- No words by 16 months

- No two word phrases that convey meaning by 2 years of age

- Any developmental backtracking or loss of speech

- Loss of social skills

Geraldine Dawson, Autism Speaks Chief Science Officer, (Autism Speaks, 2012) studied the effects of early intervention programs and behavioral therapies for children with ASD that were detected at a young age. Dawson's findings included that there were five major benefits of behavioral therapy that were crucial at a young age;

- Intensive behavioral intervention for toddlers can increase language and mental abilities. Intensive behavioral therapy must include 25-40 hours a week of therapy for 2 years.

- Targeted behavioral interventions can improve social communication in toddlers and young children. It is recommended that these behavioral interventions be put into effect for at least 6 months.

- To improve parent-child interactions, parent-delivered early intervention can be helpful.

- Group programs can greatly increase social and peer interaction

- To reduce anxiety and aggression, behavioral therapy will be beneficial to children and adults of all ages. (Research Confirms Benefit of Behavioral Interventions, Autism Speaks, 2012).

There are many different approaches to educating a child with ASD in the best possible way. These ideas may have their differences, but each commonly emphasizes the importance of reading as a life skill to be achieved. As communication is a challenge in some way or another in children with ASD, early reading instruction can help to prompt language and vocabulary as well. There are many different reading programs, but one in particular has been widely used in specific with children who have autism spectrum disorders. This program is called Edmark (History of Edmark Corporation, 2010). The Edmark reading program is being used in special education classes as well as English for speakers of other languages (ESOL) across the nation. The program was originally intended

for any person that is struggling to read.

The Edmark Corporation had its early beginnings in 1970. It began as a company that provided print materials to schools around Redmond, Washington. The beginnings of the program received much of its funding from the National Institute of Mental Health (Sulzbacher, 2001). The original Edmark intent was focused on special education materials (History of Edmark Corporation, 2001). In 1986, the company become more public and began a computer-based curriculum (History of Edmark Corporation, 2001). In 1988, the chief executive of Edmark, Tom Korten, helped to direct the process of developing a touch screen software for the program to help assist children that had difficulty using a keyboard. The touchscreen essentially replaced a keyboard as a more accessible method for children lacking motor skills to utilize, a component useful for children and adults with ASD and other disabilities.

During the early 1990s, Sally Narodick became the chief executive of Edmark as it continued to supply special education workbooks to schools across the United States. The company made the decision to hire Donna Stanger, an award winning software developer and schoolteacher from Minnesota. Stanger brought a great amount of experience in the teaching and computer software field to the company. In 1996, IBM, a multinational technology corporation, took over Edmark as it continued to expand and become increasingly more

marketable.

There are five main components of the Edmark program:

1. Pre-reading

2. Word Recognition

3. Direction Cards

4. Picture/ Phrase Cards

5. Story Books (Sulzbacher, 2001)

There are two levels in the Edmark program. Level one is specifically for PreK-1st

grade, and Level 2 is for first through third grade. The teacher, in a 1:1 format,

designs the lessons for delivery for 5-15 minutes. The suggestion is to only teach

one lesson per day, but the situation may vary depending on the student (Lundy,

2012).

The Edmark program has proven itself to have helped and continue to help

with the success of all kinds of learners in their mastery of reading skills. Some

strengths of this program include:

- Positive reinforcement is consistent throughout the program.

- The small steps within the instructional format may minimize memory

  demands and the possibility of making errors.

- Teacher materials are explicit and provide enough information to

  facilitate the program's use for teachers and paraprofessionals without

the need for extensive professional development.

- The program's multisensory approach may assist in holding student's attention. (Lundy, 2012)

Edmark does have its weaknesses as well. The program itself is very expensive, totally over $900.00 that provides materials for no more than ten students. It is also difficult to use this program with a large group of students; it is more beneficial on an individual basis, which can become time consuming for the instructor. Because the Edmark program was developed for students with cognitive disabilities, it is not considered a core reading program, as it is not comprehensive enough.

The research points to the fact that children with ASD can become proficient readers, but only with the supplemental help of their instructors and mentors. Special attention must be focused on the planning of lessons, creating environments conducive to learning, and utilizing appropriate technology equipment. Because ASD is a broad spectrum, each and every child will take a different learning path. Instructors must be persistent, invested, and consistent to make a positive difference in the educational path that the child is undertaking.

Data Collection

For the past six months I have been working as a caregiver for an 11-year-old boy who has autism and a communication disorder. At age two, Matthew*'s parents saw a drastic decrease in his developmental progression. He hadn't gone through the natural patterns of babbling and forming words, he liked to play alone, avoided eye contact, and didn't interact with his parents or siblings with smiles and laughs. After all kinds of testing and waiting, he was diagnosed with autism. His parents immediately began the process of early intervention programs in order to help him progress as much as possible. When Matthew was three years old, his parents spent a lot of time reading books to him, as it was one of his favorite activities. They said that he was eventually able to recognize certain words and pictures after a lot of repetition of the same book. As Matthew got older and began attending public school, he began to lose interest in books and started to become enthralled with computers and television. By age four it became apparent that his autism was on the very severe end of the spectrum, and dealing with behavioral issues became more of a priority. It was when Matthew began his public school experience that his parents and teachers ceased their focus of developing his reading skills, and brought more attention to helping him master life skills such as cleaning up after himself and getting dressed in the morning before school. Matthew was also diagnosed with a communication

disorder as his language skills completely diminished. The communication disorder makes it difficult for him to form words and use any kind of language effectively. Inability to communicate often results in frustration in not being able to voice needs, wants, and feelings.

Each week, I spend two full days with Matthew. I arrive at his house before he wakes up around 7:30 am and prepare his breakfast so that it is all ready for him when he wakes up. Because children with autism thrive on a consistent schedule, I utilize visual schedules that let Matthew know exactly what his day will look like. I also use timers in between activities and events to insure smooth transitions. When Matthew gets off the bus from school, I once again have a planned out visual schedule of exactly what we will be doing during that day. A system of differential rewards is used for behavior modification as well. Matthew is rewarded with preferred activities or desired foods when he follows the schedule without poor behaviors.

Matthew has been working with the program Edmark in his special education classroom at school to help develop his reading skills. To supplement the efforts they are making at school to help Matthew learn to read, I am also working with him at home to reinforce the information he is learning at school. The following is a journal of the experiences I've had thus far working with

Matthew, and the different methods that I have found to both work and not

regarding his progress with reading and communication.

Journal Entries

Day 1: It has been about a month since I started working with Matthew. It has taken this long for me to get used to his routines, and for him to trust me in situations where he feels vulnerable and uncomfortable. I have started the process of working on reading skills slowly so that I do not overwhelm him all at once with activity after activity. I have found some of my methods to be a failure, but I am continually changing my approach to figure out what works most effectively. The basic approach I am utilizing is through trial and error. I am taking the knowledge I have about children with autism, and doing my best to implement lessons that will be most beneficial to him as a unique learner. I want to work on his life skills while also helping him to progress as a reader.

First of all, one of the life skills that Matthew has been practicing is hand washing before meals, and after using the bathroom. He was having a lot of trouble washing his hands for more than just a few seconds, and so I have been singing the ABCs to him, and not allowing him to finish washing until I am done singing. He started singing along with me over the past week, and today he sang practically the whole song by himself. Learning the alphabet, even in just a song, is one of the first steps in helping him learn to read. Matthew is a person of very distinct habits, and I believe that if I am consistent, he will continue to improve with his alphabet and letter recognition.

I have also been attempting to read books to Matthew before he goes to bed, but it has been a real battle. He seems uninterested and isn't willing to sit down and listen or look at pictures. I am going to work on a more tactile approach. Matthew uses different fidget toys with various surfaces that regularly keep his interest. With the implementation of sensory objects, the process may become more stimulating.

Day 2: Today I began my tactile approach in helping Matthew. After school we did our usual hand washing routine before eating dinner with the ABCs song. I'm not sure that Matthew is recognizing the significance of the individual letters of the song we are singing, although he is catching on how to say each letter. To make the alphabet more visual, I decided to use a letter board that had raised bumps along each line. Guiding Matthew's finger, I had him trace the letters. First he did the whole alphabet, and then next with the letters of his name. He seemed to connect with what we were doing and really enjoyed the feeling of the letters. My next step would be internalizing the sound of the letters, not just their names. Reading will include recognizing words, not just individual letters. Other than those two activities, I had a really difficult time getting Matthew away from his iPad. I once again read a book to him before he went to bed, but he remained disconnected.

Day 3: Matthew has begun using the communication program Proloquo on his iPad at school. This program uses picture symbols, as well as voice commands to help him communicate his needs, wants, and feelings. With his preference for technology, I believe that this program could be a great benefit in helping him to communicate more effectively. More effective communication could lead to fewer behavioral problems because the majority of his behaviors occur when he is unable to communicate what he wants, or how he feels. To encourage his use of the program and continually familiarize him with the process, I have been asking him questions on the iPad in which he can answer using the keypad that is filled with pictures. Asking him questions like, "how do you feel?" or "do you want pop or juice?" are simple ways that Matthew can practice his communication skills. He is able to answer these simple questions, and he is also beginning to find certain pictures of things he wants.

Day 4: Today I was able to take Matthew to the library. Because I have been struggling to find books that he is interested in, I thought it could be a positive experience letting him choose his own books. I want him to enjoy reading and to eventually see reading as a preferred verse non-preferred activity. Matthew doesn't have a lot of independence in his daily routine because someone is

constantly guiding him between activities, but this would be a situation in which

he could give input on what he wants. Visiting the library was a successful outing.

We spent over two hours browsing the book aisles until we eventually came out

with about 15 different books. There was one book in particular about cookies

that Matthew was fixated on. Before bedtime, I decided to display on his visual

schedule that he was to pick a book for me to read to him. He chose the book

about cookies and was completely focused on every word that I said. We ended

up reading the book multiple times before he went to sleep. I think that finding a

book he was interested in was an important key. By repeatedly going through the

book, Matthew began to recognize the sequence of the story, especially words

that I overemphasized while reading. Repetition is becoming a very common

theme in what drives Matthews progress forward.

Day 5: After finding some success with the tactile approach, I decided to try

another sensory method, using sounds and music during activities. Today I gave

Matthew some time to look through his library books on his own. While he looks

through the books, I played some "nature sounds" music. I was a little bit worried

that it would be a sensory overload to have the music playing, but Matthew was

more relaxed and calm than I have ever seen him while looking at his books. I was

amazed to see him pick up the book about cookies and verbalize a couple of

words that were continually repeated throughout the book. At this point, I knew that he was maybe not quite recognizing individual words, but he was able to remember memorable parts of the story that I had emphasized.

Day 6: In order to begin practicing more word recognition, I made a matching game of a few site words that would be of interest to Matthew. I modeled the game after one that he had played before where strictly pictures were used for matching two like cards. For this game, I added words as well as small pictures to the matching cards. Pictures and words were a mix of things that Matthew is interested in, such as Spongebob, as well as items around the house that he would recognize, such as chair and couch. Matthew caught onto the matching game very quickly and was eager to play it multiple times. I once again played the nature sounds as well while Matthew was playing the game. When he was able to find a match, I asked him what the picture was. I then took his hand and had him track the word and say it aloud to the best of his ability. Once all of the cards were put into matches, I had him repeat the words once more. After the second time of playing the game, Matthew could recite the words without me asking him to do so. This activity is one that I can build upon with more picture/word cards.

Day 7: Matthew has been having a very difficult time straying away from his iPad for more than 15-20 minutes at a time. Instead of completely taking him away from the technology, I decided to find a way to incorporate more lessons on his iPad. I found several children's audio books on YouTube that display the pictures as well as the sentences of each page. The sentences light up as the words are read, making it easy to follow along with your finger. This combination of audio/visuals and technology was an appealing method to Matthew. One of the biggest struggles I face when teaching lessons is transitioning him off of the iPad. In this lesson I was able to utilize it in a different way than he was used to, but he was still able to follow along in the book. We watched the audio book and picture slideshow several times before moving onto the next activity. He was able to participate in a lesson for a longer duration than usual because he was less concerned about when he was going to get the iPad back next. An option for the future could be pausing the videos on each page and reading them much slower.

Day 8: Today Matthew achieved a milestone that is definitely worth noting. This morning when I came into his room to wake him up for school, I said, "Good morning, Matthew!" I say those words every time I wake him up, and I have never before received a response. This time he replied with, "Good morning, Angela," in his own form of language. I was very enthusiastic that he had finally

mastered my name. At times it is difficult for me to tell if Matthew knows me, but

this gave me a lot of encouragement that he recognizes that I am there and

hopefully making a difference. Matthew uses a chart with the days of the week

and pictures of his caregivers on it to tell him who is taking care of him that day

(see Appendix A). When he wakes up in the morning, I take him to the chart and

say, "Today is Tuesday, and Angela is helping Matthew." This method is another

effort to relieve anxiety in schedule changes, but I also use it to help him learn my

name and the names of his other caregivers.

Day 9: Matthew has been asserting his disinterest in following along with his

visual schedules in the past week. In order to encourage him to follow what

happens after school, I have been using a method that was suggested to me by

his doctor called a Differential Reward System. In this method, Matthew has a

two-column schedule of his after school activities. The column on the left has

pictures of his activities with negative behavior. The column on the right has the

same pictures of activities, but with positive behavior. For example, there is a

picture of a person getting dressed in the morning with an angry face on the left,

and a picture of getting dressed with a happy face on the right. Part of the right

column is also a reward for positive behavior. Matthew loves sweets and sugar,

and so we have been using mini marshmallows as a reward. Of course, this

method also has its drawbacks because Matthew is beginning to expect the treat each time that he makes a positive decision, but it has been very successful in getting him back on track with his schedules. I have not been able to do as much reading instruction the past week because it has been a struggle to do simple tasks such as using the toilet or getting dressed in the morning. I think that using this method for the next few weeks will help get back on track, and hopefully push progress forward even more.

Day 10: Earlier in my journal I discussed my experiences working with various matching games to connect pictures and whole words. I found that simple notecards were not as efficient and useful as I initially thought they would be. I thought about adding that tactile approach to help Matthew focus on the words. I decided to use different materials that he would be able to feel. To familiarize Matthew with how this matching game would work, we first played it with no words and pictures attached. He really loved the different feelings of the fabric. Matthew would feel the fabrics with his hands and then also put them up to his face. Some were smooth, while others were rough or bumpy. It really didn't take long at all for him to understand the point of the matching game, and after a few times, I knew that it would be appropriate to move forward. I then used pictures of things from one of the books that Matthew has been really interested in that is

about sailboats. I picked words like ocean, fish, sailboat, sun, and flag to use as the target words. One set had pictures and the other had text on the material squares. Once again, Matthew caught onto this game fairly quickly. I was concerned that he was only paying attention to the fabric, and so after using the fabric squares a few times, I read the book again. I made sure to specifically point out the words that we targeted in the game. Next I took the fabric pieces away, leaving only the text and the pictures. Matthew had a much harder time finding matches but he immediately found sailboat and the picture that went with it. I wasn't too surprised that this was the first word he picked out because he has been very interested in pictures of sailboats lately. I had to assist Matthew with some of the pairs, but after going through the game twice, he was able to completely finish it on his own.

Day 11: I am finding that it is necessary to approach reading lessons and strategies with Matthew in a way that appeal to his favorite activities. Matthew loves to swing. He has a therapy swing in his room that is one of the few activities that he prefers as much as the iPad. Today I decided to do some read aloud while Matthew was in the swing. He seemed to be very relaxed and focused on the words I was saying from the book. I ended up reading to him for about 45 minutes because every time I would stop, he would get me another book to read.

After I read the text, he would stop and get out of the swing and to look at the pictures. Using his arm, Matthew would cover up the words and only focus on the pictures. I thought of this to be very interesting. When I read the text aloud, Matthew did not want to see the pictures. He would close his eyes when I held them up to show him, and so I decided to read all the text and then show him pictures after I was done. I could see him really listening and then making connections once he also saw the pictures. I wonder if the pictures and words are somewhat overwhelming to him, and if experiencing them separately helped him to more fully grasp the story. This might be a situation where it is difficult for him to have more than one sense working hard. While he sits in the swing, I will continue to approach reading this way unless he indicates to me that he wants to see the pictures as I read.

Day 12: Matthew does not have a lot of choice in what he gets to do during the day. Although it would be unproductive to let him do whatever he wants to do, there is a way to let Matthew have input in which activities he participates. Using a visual schedule with the differential reward system, I displayed the activities that he was required to participate in, such as using the bathroom, washing hands, and eating dinner, and then I preceded to display what we call the Choice Board (see Appendix B). The Choice Board is a chart with activity pictures that can

be moved around. Preferred activities such as swinging, using the computer, iPad or television are color coded in red, while non preferred activities like reading, arts and crafts, and puzzles are in black. Matthew uses the Choice Board to pick three non-preferred activities and one preferred activity. When Matthew's behavior was a struggle, we often avoided the Choice Board because it often caused problems, but recently Matthew has been following his schedules with little to no behavioral or transition issues. I was expecting Matthew to avoid doing any kind of reading activity because a month ago, I really don't think that reading would be something that he would pick to do on his own. I was very encouraged and a little surprised when Matthew picked a book as his first choice. He put on the choice board that he wanted to read a book, do a puzzle, and then goes in the swing. I was shocked because using some sort of technology was not one of his chosen activities. When it was time to swing, Matthew automatically went to his bookshelf and picked out two books for me to read. Repetition is such an important part of how Matthew operates. When non-preferred activities become a regular part of his schedule, he not only cooperates, but also really seems to thoroughly enjoy them. If I can do nothing else but teach Matthew to enjoy books, than I really think that he is on the right track to word recognition.

Day 13: A new favorite activity for Matthew has been baking in the kitchen. He

loves the process of mixing brownies and making cookies just as much as he loves

to eat them once they come out of the oven! I decided to incorporate a reading

activity with a baking activity. On the computer I made a very simple recipe card

that used pictures and text (see Appendix C) for making brownies. The recipe

card used plain language that would be easy for Matthew to comprehend. I

targeted words like mix, oven, heat, eggs, water, oil, bake, measure, crack, pour,

and hot. Using the recipe card, I helped Matthew to make the pan of brownies.

We went through each step slowly, rereading it several times with emphasis on

the target words. With each step, the appropriate actions also followed. When

baking with Matthew, he often likes to get ahead of himself and go straight to

pouring the mix into the pan to put in the oven. With the step-by-step directions,

this process went much more smoothly. Also, Matthew was able to connect the

words and pictures with the actual objects. As each step was completed, we

crossed off the number using a pen. This was fun for Matthew to signify his

accomplishment of each step, but it also kept us going in the right direction

without any missing steps. I was very happy with the way this activity went.

Matthew completed the baking activity without getting distracted or becoming

anxious to finish it. He was able to follow the steps and connect words. I think

that as much as letters on a page can be connected with their meaning, the more real that reading will become to Matthew.

Day 14: Matthew has been out of school for the past week because of spring break, and transitioning back into a more regimented routine has been a real challenge. Over the break, Matthew was not using his visual schedules, communication system, or his timers as consistently as he does at and after school. I realized how important maintaining a consistent schedule is in order to promote positive behavior. I spent the majority of the day managing behavioral issues that stemmed from simple tasks such as getting dressed for school and eating breakfast at the table. It was a struggle to get Matthew ready for school and onto the bus in a timely manner. I am also realizing that a lot of stress and anxiety about going back to school after a week off could have been easily avoided by keeping that same schedule during the break as well. Matthew does not respond well to changes in his environment or schedule, especially when non-preferred activities are involved.

Day 15: Because Matthew has been struggling behaviorally at home and at school with following a schedule, I decided to take a step backwards and help him remember how much he enjoys school, reading, and sticking to a strict schedule.

I decided that I was going to take him to do one of his favorite activities that also involves reading; the library. At the library, Matthew struggled and resisted at the beginning to sitting down in a chair to read and look at books, but eventually he settled down and was able to focus on some of the books he picked out. Normally, I keep our library outings fairly short, but today I felt that it was necessary for him to take his time and enjoy the books at his own pace. We still followed a visual schedule throughout the day, but it was a more gradual transition with primarily preferred activities.

Day 16: It has been about a week since Matthew got back into school and following his visual schedules before, during, and after school. Today I chose to start back into an academic focused perspective, centered on reading. We started with a giant floor puzzle that has the ABCs in foam letters. Matthew loves doing the floor puzzle, especially when he has room to spread it out all over the living room. I pushed back the couches and gave him plenty of room. He was able to stay focused on completing the puzzle. After the puzzle was put together I went through each letter out loud one at a time and had him repeat it back to me. After the repetitions, I shifted the activity using the same equipment. Instead of arranging the letters into the order of the alphabet, I arranged them into a few simple words like dog, hat, shoe, etc. When the word was laid out into order, I

found a picture on the iPad of what I was spelling, and then showed the two to

Matthew side by side. I went back and forth between the two symbols of the

word, and once again had Matthew repeat the words. Although Matthew was

not able to recognize the words without the help of the pictures, he could still

recognize the correlation of what the picture was. He was more easily distracted

while looking at the words and pictures, than just arranging the letters in the

alphabet. I think that the ABC puzzle was more of an interest to him because he

was familiar with the order and could do it without any assistance. I am really

noticing that activities that can be done without a lot of dependence on me are

the most successful.

Day 17: The weather has been nice the past few days, and so I decided that

taking Matthew to do something outside would be a nice break from being

indoors. Matthew does not usually like to do much physical activity, but going to

the park is always one of his favorite outings. Instead of taking the iPad in the car

to keep Matthew from getting restless, I brought a few books, and some of his

fidget toys. Fidget toys range from a laytex glove filled with rice to a squishy chew

toy with a sticky texture. These items relieve a lot of anxiety because they appeal

to his sensory needs as well as distract him from everything that is going on

inside and outside the car. The fidget toys made for a smooth car ride reading

books to the park. When we got to the park, Matthew immediately went for the swings, and stayed there for about 45 minutes while I read some of his favorite books. Matthew has recently been having me read the book out of order. He has in his mind a specific order that he wants to see the pictures and see the words. At first, I was feeling like reading the book this way was not going to be a useful method, but I realized that it was important to note that he was recognizing certain pages, whether it be for pictures or words. Instead of insisting that the book be read in order by page number, I read the book in the order Matthew preferred, and then once he was done, I went back through the book according to page number. I am beginning to wonder if the story makes more sense to Matthew in a different order.

Day 18: Matthew relies heavily and responds very well to his service dog, Fiona. Fiona is a two-year-old golden retriever that has been trained to be a therapy dog for children with autism. Fiona's major role is to provide a distraction and sensory opportunity for Matthew when he is having difficulty transitioning between activities and in environments that may be stressful or overwhelming. Today, Matthew responded to an overwhelming situation with ease, mostly thanks to Fiona's support. I took Matthew to the park again today, but this time there were several families with kids playing as well. Matthew doesn't always understand the

concept of waiting your turn for the swings, and so I could foresee a problem in the future. The swings were all in use, and so I directed Matthew over to a bench with some books. Matthew began to get upset. I continually told him that there was 10 minutes until he could go onto the swing, but he was not ready for that kind of a change in his schedule. Luckily, before any kind of behavior arose, Fiona jumped in and put her head right up to Matthew's hands. I was able to direct Matthew over to the bench to take a seat. With Fiona by his side, Matthew ran his hands through her fur while reading books for almost 20 minutes. The sensory opportunity to pet the dog and focus the attention away from the schedule change turned into a positive experience.

Day 19: Creating an environment that is conducive to learning is something that I strive for every single time I work with Matthew. Today I set up a table up a table station in his playroom with quiet "nature sounds" playing. On the table, I put out two colors of play dough. Any more than two colors would be too many options for him to decide between. Limiting his options helps him to focus on the point of the activity rather than decide on small aspects of it. With the play dough, I also had two pieces of paper that had the outlines of the letters "O" and "T". After school was out, I took him up into the playroom and let him listen to the sounds for a few minutes. I noticed him closing his eyes while he listened to the music.

Once he started into playing with the playdough, I turned off the music and he put on his headphones. The headphones help him to block out other noise and focus on what he is doing. Using the letter worksheets, I showed Matthew how he could use the outlines of the letters to form the play dough into the lines of that letter. At first, Matthew didn't seem to be catching onto the concept of the letters, but then he eventually made an "O" using the play dough. I gave him a lot of positive reinforcement and encouragement for making the letter, and so he did another one. I showed him how to make the "T" as well, which he was able to copy. I think that the headphones to block out the extra distractions, as well as the sensory support of the play dough were useful tools.

Day 20: Looking back on all of the days that I have worked with Matthew, I've recognized that when I have helped him to achieve success is when he knows he can trust me and he feels safe. Trusting me is something that I have had to continually prove to Matthew. When I first started to work with him, I had a lot of difficulty helping him follow a schedule. It was frustrating to me that he would follow the rules at school, but not after school with me. Matthew had to learn that he could trust that I would follow the schedules just like his teachers did. Once he began to see that I was being consistent with what I was saying, he became much more cooperative and would listen to the lessons I had planned for

him. Helping him to feel safe and being consistent with my scheduling has been a priority for me from the beginning. I also believe that I am becoming much more aware of his needs, and what helps him to be successful.

Recommendations and Conclusions

Looking back on the strategies I have tried and developed for assisting

him, I have discovered some consistencies with the literature regarding ways to

most effectively help Matthew to function in the classroom and develop literacy

skills. I believe that the connections I have found can be helpful tools for children

with autism in the classroom and at home to develop literacy. Upon reflection

and review of my journals, several themes rose to the surface. In particular, six

key recommendations that were essential components of the journey of my work

with Matthew. Recommendations include the following:

- Appropriate environments

- Visual Schedules

- Communication Systems

- Reading Approach

- Incorporating Interests and Strengths

- Relationships

Appropriate Environments

My first recommendation is related to the importance of an appropriate

environment. I learned through my research that environment plays a crucial role

in the success of a child's educational journey, whether that child has a

developmental disability or not. Creating an environment where children feel

safe and comfortable is critical to learning success. The literature suggests that great amounts of noise can cause overstimulation and frustration (Autism World, 2007), something that I definitely saw happen when I did not use headphones to block out noise, a quiet room, or simple background music to help Matthew focus (see Journal entry 5).

Matthew responded most effectively in an environment that was safe, comfortable, and quiet, but also familiar to him. Whenever I exposed him to a new environment such as the library or the park, it was important that I gave him the time to acquaint himself with his surroundings before he was able to focus on the reason for being there. Removing distractions and overstimulation proved itself to be difficult at times, but the results of doing so were the ability focus on one activity for an extended amount of time rather than less than ten minutes.

Matthew struggled with environmental changes as well as scheduling changes. After a week off of school for Spring Break, Matthew struggled getting back into the schedule of school and following a strict schedule (see Journal entry 14). When rules/expectations at school and home were different, Matthew did not always know what was expected of him. Many things are chaotic and confusing in the world of a child with ASD, consistency is key to pushing progress forward, as well as maintaining that appropriate environment (Evans, 2011).

Expectations need to remain consistent, no matter what environment the child is placed in.

Visual Schedules

Visual schedules were useful tools that reduced much of the anxiety Matthew had surrounding activities that would take place throughout the day (Autism World, 2007). When Matthew was able to come home from school and immediately be made aware of what was happening during that day, he was much more receptive to what I had planned for him. Placing preferred activities, such as computer or swing, between non-preferred activities, such as reading exercises, also motivated him to complete the schedule (Radunovich & Kochert, 2010).

The visual schedules eased transitions between activities with the help of timers or "counting down." It took weeks of persistence and consistency for Matthew to respond to me counting him off of preferred activities, but he eventually was able to transition easily between activities. When Matthew struggled to follow a schedule, I did my best to create schedules that he would want to follow, transitioning into a more regimented schedule. For example, when we went to the library after Spring Break, when he was given extra time to browse for books he wanted (see Journal entry 15). The differential reward system also proved to be successful with Matthew as he had motivation to make

choices about how he would react to a transition (see Journal entry 9). I believe

that using the differential reward system should be reserved for occasional use

because children could begin to expect rewards for every choice.

Communication Systems

Visual schedules were supplemented with the Proloquo communication

system on Matthew's iPad. The communication system assisted in helping

Matthew communicate his feelings about the activities he participated in. When I

asked him questions about how he is felt or what he needed, he was given the

chance to use his voice. The only responses about his schedule that I was able to

understand were negative behavior issues that lead me to conclude that he was

not happy about the activities I had chosen for him. Matthew's behaviors stem

from his inability to communicate what he wants or how he feels. Since he

started using the Proloquo communication system, his behaviors have become

few and far between. He still expresses disinterest towards some activities, but

he is able to communicate what he wants to do instead. When he is able to tell

me what he would rather do, I am able to respond with: "first we are doing this

activity, and then we will do the activity that you prefer." I type that exact

sentence on the iPad, and a picture is displayed of what he wants to do after.

Before the Proloquo system, I was unable to even figure out the alternative

activity that Matthew preferred, thus making the initial activity nearly impossible.

Picture exchange systems, whether on an iPad or printed pictures, and communication systems like Proloque, which were used in this study, were found to be beneficial and highly recommended ways to introduce and supplement reading activities.

Reading Approach

With regards to a reading approach, there are three things that I would suggest to focus on. First, is utilizing the process of repetition. It took days of singing the ABCs while washing our hands (see Journal entry 1) for Matthew to do it on his own, but eventually it stuck and he would do it automatically. I also read the same books to him numerous times before he started to recognize words on his own. The recognition of individual words through repetition will help the child to relate real life experiences to their reading exercises (Broun, 2004).

Next, I would take an approach that involves the senses whenever possible. Research has found that although children with autism are often unable to communicate through verbal language, they can use their senses relay body language (Health Reports, 2012). Matthew was successful in his reading exercises when audio and visual equipment was utilized. The iPad proved to be useful to present pictures that matched words and for using audio books.

Finally, Matthew was most responsive when he was able to act independently. Children with autism often enjoy working and playing alone rather than with a group or assistance (Smith, 2012). There are so many choices that Matthew is not able to make for himself during the day, and so when he is able to complete an activity on his own, he is motivated and excited to do so. For example, when Matthew was able use the choice board to make decisions about the order of activities on his schedule (see Journal entry 11), he went through the non-preferred activities that lead to preferred activities with ease. Using these three techniques can greatly improve literacy support and attitudes about books and reading.

Incorporating Interests and Strengths

Children respond in a positive manner when the instructor plays on their interests and strengths (Autism Society, 2012). Once I discovered each of Matthew's many interests, I was able to construct lesson plans around his strengths. He loved to help me cook and bake in the kitchen, and so I gave him opportunities to read recipes using pictures and simple instructions (see Journal entry 13). I also took him to the library several times and found books about topics he was interested in (see Journal entry 4). The books that contained pictures and topics he was most interested in were the books he spent the most

time reading and looking through. These were also the books that I was able to

develop other lessons around.

Relationships

The final and possibly most important recommendation to be discussed

does not have to do with specific academic content. In order to most effectively

teach a child with ASD, there must be a personal and trusting relationship

between child and teacher. This relationship is essential to build and continually

reinforce with the child. It took nearly a month for me to even begin writing

about my progress and experiences (see Journal entry 1) working with Matthew

because it took some time for him to be able to trust me and be familiar enough

with me that he responded to what I was saying and doing. The progress that

Matthew displayed was very gradual and at times not always evident. I often

times felt frustrated, like I was backtracking instead of moving forward. These

challenges taught me that I needed to celebrate every small milestone that

Matthew achieved. Something as simple as recognizing me, and verbalizing my

name (see Journal entry 8) was important to pay attention to and view as

progress. Not only did Matthew grow as a person, but I also believe that I became

much more attentive and responsive to his needs and wants. He has his own

language that I am now able to understand, while someone who did not know

him would think he was just babbling.

These recommendations will only make a difference in the educational path of a child with ASD if the instructors are willing to put forth the effort to make them happen. The children themselves cannot create these appropriate environments, visual schedules, utilize communication systems, develop literacy, appeal to their interests and strengths, or develop relationships without the supplement of an instructor. This study supports my belief that Matthew, as well as other children with autism spectrum disorders, can develop literacy skills through the careful and attentive planning of lessons, as well as the creative and positive attitudes of their instructors.

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Appendix A

Caregiver Visual Schedule

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |

Appendix B

Choice Board

Appendix C

Recipe Card

1. Turn on the oven

2. Brownie Mix

3. Oil, Eggs, and Water: MIX

4. Timer and bake

5. Eat!