

Fall 11-12-2015

English Language Learners on the Autism Spectrum: Identifying Gaps in Learning

Jennifer Suzanne Reppond
Hamline University, jgarrison02@hamline.edu

Follow this and additional works at: https://digitalcommons.hamline.edu/hse_all



Part of the [Education Commons](#)

Recommended Citation

Reppond, Jennifer Suzanne, "English Language Learners on the Autism Spectrum: Identifying Gaps in Learning" (2015). *School of Education Student Capstone Theses and Dissertations*. 242.
https://digitalcommons.hamline.edu/hse_all/242

This Thesis is brought to you for free and open access by the School of Education at DigitalCommons@Hamline. It has been accepted for inclusion in School of Education Student Capstone Theses and Dissertations by an authorized administrator of DigitalCommons@Hamline. For more information, please contact digitalcommons@hamline.edu, lterveer01@hamline.edu.

Running Head: ENGLISH LANGUAGE LEARNERS ON THE AUTISM SPECTRUM

English Language Learners on the Autism Spectrum:
Identifying Gaps in Learning

by

Jennifer S. Reppond

A Capstone Project
submitted in partial fulfillment
of the requirements for the Degree of
Master of Arts in English as a Second Language

Hamline University

St. Paul, Minnesota

October 2015

Primary Advisor: Pam Telleen, MS. CCC, Speech Language Pathology
Secondary Advisor: Ann Mabbott, Ph.D., Second Language Teaching and Learning
Peer Reviewer: Leigh Ann Daniels, A.A. Computer Studies, Cert. IT
Peer Reviewer: Jean A. Samples, M.Ed., Second Language Education

TABLE OF CONTENTS

Chapter 1: Introduction	1
Opening	1
Descriptions and Definitions	4
English language learners	5
Autism Spectrum Disorder (ASD).....	7
Research Question	17
Chapter 2: Review of Literature	19
Presence of Immigrants with ASD	19
Misunderstandings	21
Moving to Cross-Educate	32
Chapter 3: Methodology	34
Research Method: Qualitative	34
Research Participants	35
Materials Used	36
Procedures	38
Summary	40
Chapter 4: Findings	41
Personal Experience	42
Student Oriented Questions	45
Assessments	49
District Questions	51
Professional Opinion	53
Language Questions	57
Chapter 5: Discussion	66
What is Working.....	66
The Gaps	67
Bridging the Gaps	75
Limitations	92
Conclusion	92
References.....	94
Appendices.....	102
<i>Appendix A: Email Correspondence for School District Superintendent</i>	102
<i>Appendix B: Individual Letter for Consent</i>	103

<i>Appendix C: Consent / Signature Page</i>	104
<i>Appendix D: Special Education (SPED) Educator's Questions</i>	105
<i>Appendix E: English as a Second Language (ESL) Educator Questionnaire</i>	107
<i>Appendix F: Private Therapy Speech Language Pathologist Questionnaire</i>	109

English Language Learners on the Autism Spectrum:

Identifying Gaps in Learning

Chapter One: Introduction

Opening

In choosing to write my capstone, I decided to select something that was close to my heart. I have an eleven-year-old son who was diagnosed on the autism spectrum when he was five years old, although I have been dealing with this disability since he was 15 months. Autism spectrum disorders (ASDs) are a group of developmental delays that can cause significant social, communication and behavioral changes. (Centers for Disease Control and Prevention [CDC], 2015). I researched therapies and various educational learning programs for a child on the spectrum, talked to doctors, therapists, educators, and other parents to figure out what I needed to do to ensure that my child had the best possible opportunity for a normal life. One of the main things that I learned was that I could not be hands-off. I had to pull up my sleeves and get in the trenches to advocate for my son if he was going to have a chance at success in life. In essence, I became a speech pathologist, an occupational therapist, a teacher of preschool, and a dietician among other things. He only went to see his therapists and educators part of the time, so it was my duty to fill in the gaps. Fortunately, one certainty for us was effective communication; English is our native language, the dominant language of the United States, so there was an understanding among us – me, my son, his doctors, his teachers, and his therapists.

I am an English as a second language (ESL) instructor. I have been teaching adults in the college environment for over ten years. During this time, I had the pleasure of instructing some

wonderful parents of children with autism who themselves were struggling with the language barrier which hindered their understanding of the diagnosis and/or treatment of autism. Once they discovered that I, also, had a child on the spectrum, we would hold conversation after conversation about how they could learn to better understand the doctors, the therapists, and teachers as well as their kids. They wanted to do more, but their children could not speak their native language and/or had no command of English either. Some parents were desperate to communicate with their child, and they knew that time was not on their side. Some even felt that they were on the verge of losing the bond with their child because they did not know how to communicate effectively enough to work with them.

These conversations with my adult ESL students who were also parents of children on the spectrum, coupled with the knowledge I had gained being the integral parent of a child on the spectrum, led me to think about the countless children whose families have come here to the United States seeking better opportunities and treatments for their child on the spectrum. With so much riding on a decision to move to another country with high hopes of helping their child, these parents wonder if the United States has the resources to help these children. Will their children be able to learn English and acquire their native language in such a way that everyone of influence in this child's life can contribute for a positive learning outcome? I again looked to my own situation with my son.

My son is half German on his father's side. So, naturally, I wanted to teach him to speak the language of his grandparents. As I began to think about this daunting task, I thought about whether or not he could even acquire a second language given his difficulty in understanding and acquiring his first language. After several weeks of reading article after article, I actually answered my first question: Can children on the autism spectrum acquire a second language?

Many articles unequivocally stated that children on the spectrum could, indeed, learn a second language provided a first language was acquired. My focus now turned to another question since the same theme overwhelmingly reappeared; therapists from varying backgrounds and expertise kept telling parents that they did not recommend teaching a second language to a child with autism. “Bilingual families of children with Autism Spectrum Disorder (ASD) are often advised by child development professionals to speak only one language to their child (Besnard, 2008; Kremer-Sadlik, 2005; Leadbitter, Hudry, & Temple, 2009)” (Petersen, 2010, p. 1).

This intrigued me; given my own situation, I wondered if I should pursue second language German learning for my son. The next question then became whether or not a second language should be taught to children on the autism spectrum. I discovered through reading several books and research projects, talking to my son’s therapists who also happen to be helping English language learners, and talking to educators in my circle of influence that there was great success in all aspects of the child’s learning when he/she was allowed to learn both their native language and English. They seemed to be happier, more well-rounded and interactive children who were able to communicate effectively with their parents, siblings, grandparents, or whoever lived in the home, and they could also progress well in their school situations, academically and socially.

My son’s success in life obviously does not hinge on whether or not he can learn German, but there are many children in school systems around the United States whereby learning that second language is imperative to their success in life. Our school systems are continuing to grow with students from around the globe. Is their success any less important than another child on the spectrum who does not have the language barrier? Why are more children in this situation being left behind instead of given the best of both their worlds which can

essentially lead to their success in academic learning as well as social interactions? More and more English language learners (ELLs) with this disability are entering into the public school system, and it is imperative that educators and therapists devise new plans to conquer this new challenge facing all of us.

My capstone questions is: How can certified English as a second language (ESL) and Special Education (SPED) teachers effectively work with each other and together with parents to ensure that a well-rounded learning environment is assured to English language learners (ELL) on the autism spectrum?

Descriptions and Definitions

Human communication and interaction is essential; we are social. “Communication is the process of acting on information; human communication is the process of making sense out of the world and attempting to share that sense with others by creating meaning through verbal and nonverbal messages” (Beebe, Beebe, & Ivy, 2004, p. 5). The messages being sent between humans should be understood, should achieve its intended effect, and should be ethical.

Effective communication occurs when the receiver understands the exact information or idea that the sender intended to transmit. Most of us are aware that communication is successful when two or more people send and/or receive messages in the intended manner of the information. Communication is always under the guise of context and much is lost when the context is unknown or unclear (DeVito, 2014).

Successful communication encompasses five principles and has several characteristics.

Principles

- Be aware of your communication with yourself and others;
- Effectively use and interpret verbal messages;

- Effectively use and interpret nonverbal messages;
- Listen and respond thoughtfully to others;
- Appropriately adapt messages to others.

Characteristics

- Inescapable: It is always present in our lives.
- Irreversible: Once said, or made known, it cannot be unsaid or made unknown.
- Complicated: It is not simple because of the number of variances that exists when people interact.
- Emphasizes content and relationships: The content is the new information received, and the relationship refers to the implied meaning using cues which gives a glimpse into emotions and attitudes.
- Governed by rules: There are explicit and implicit rules that we learn as we go by participating in communication. (Beebe, et. al., p. 4, & 15-18)

English Language Learners

According to research conducted by Carlyle (2013), a student whose first language is not English but who is in the process of learning English is known as an English language learner (ELL). She gives a quick overview of what an ELL student might look like below:

- A student who has just moved to America from a country that does not primarily speak English
- A student who was born in the United States, but has only spoken the parents' native tongue until they entered an American school

- A student with parents who do not speak English, but the student does. However, the student lacks the background knowledge from English-proficiency/cultural gap to be successful in school. Many students in the US immigrate to the US, and are unfamiliar with the English language. (Carlyle, 2013)

Struggles of the English Language Learner. Because of barriers to language and culture, these students have a hard time understanding what is going on around them, which can cause great confusion and frustration. Below is a list of issues that ELLs struggle with:

- The expectations of the class, project, or assignment
- The directions for an assignment
- The classroom schedule for the day, or even normal routine
- Pictures
- Content
- Background knowledge allowing the child to relate to the assignment, book, or discussion
- Social language or informal English
- Academic language or formal English
- Students will often struggle relating to other students and peers. ELLs tend to congregate with one another, or isolate themselves.
- Eating different food and dressing differently may seem like a minor difference between students, yet to ELLs and their peers it can be a barrier.

- ELLs will often have limited resources at home. Diverse areas with ELLs often coincide with low-income communities. Parents immigrating to the US may lack financial resources. Additionally, because of language and cultural gaps, parents may not be able to provide the academic support needed at home.
- ELLs often face feeling "dumb" or being labeled as so. Their academic abilities are influenced by their inability to understand the language used to administer the assignment or test. As a result, the students will produce a grade that is not truly reflective of their ability. (Carlyle, 2013)

In some cases, though, it is not that a person does not know how to speak words; it is that they cannot use language as a whole to effectively get their message across. This using of language is known as pragmatics, and pragmatics play a special role in language communication. “Communication systems must have a pragmatic function: that is, they must serve some useful purpose. Examples of functions that human language has include helping individuals to stay alive, influencing others’ behavior, and finding out more about the world” (The Ohio State University Department of Linguistics, 2007, p. 18).

Autism Spectrum Disorder

It is actually possible for someone to use words clearly with long, thoughtful sentences and even with correct grammar, but they can still have a communication problem. If a person has not mastered the rules for social language, which is known as social pragmatics, they will have difficulty communicating with others. There are three major communication skills associated with social pragmatics. It is very important to note that these examples can vary

across cultural boundaries, and it is very important to understand with whom the communicating partner is and customs they are used to:

- Using language for different purposes:
 - greetings (hello, goodbye)
 - informing (commenting, making suggestions, giving intent, asking questions for clarity)
 - demanding (telling what one will do or will have)
 - promising (giving intention to do something)
 - requesting (using polite questions to obtain something desired)
- Changing language (according to the needs of the listener or situation)
 - talking differently to a baby than an adult
 - giving background information to an unfamiliar listener
 - speaking differently in a classroom than on a playground
- Following rules (for conversations and storytelling)
 - turn taking in conversation
 - introducing topics into conversation
 - staying on topic
 - rephrasing when misunderstood
 - how to use verbal and nonverbal cues
 - how close to stand to someone when speaking
 - how to use facial expressions and eye contact. (American-Speech-Language-Hearing Association [ASHA], n.d., para. 3)

In being introduced to the autism circle over ten years ago, learning from doctors and therapists as well as meeting countless numbers of people from around the world who have children on the autism spectrum, I have learned many things about the disability itself. In my education and experience in both autism and English as a second language, a person having a social pragmatic disorder coupled with a language barrier has many more difficulties to overcome. They usually have a combination of other language problems such as the slow or difficult ability to develop vocabulary and grammar as well as a difficult time interpreting social cues and understanding correct and accepted behavior. Children and adults who have pragmatic problems seem to be viewed lower in the social chain, and their peers tend to avoid having any form of conversation or interaction with these individuals since communication takes a lot of effort on the part of the normal developed person. Someone who exhibits the following most likely has a problem with social pragmatics:

- “say inappropriate or unrelated things during a conversation
- tell stories in a disorganized way
- have little variety in language use” (Suffolk Center for Speech, 2015, para. 4).

One such disability that is prevalent in the United States and the rest of the world is the spectrum disabilities of autism. Autism is a very real, very socially debilitating disorder which renders one unable to communicate properly within his/her surroundings. Individuals with this disorder do not learn language within the conventional ways in which peers who are normally developing do. According to Elder, Seung, and Siddiqui (2006):

The prevalence of autism is estimated between 30 to 60 per 10,000 children based on recent surveys (Fombonne, 2003). Core clinical symptoms include deficits in verbal and nonverbal communication, socialization, and stereotypic or repetitive

behaviors. The deficit in communication, including delays in speech-language development (Lord & Paul, 1997; Rapin & Dunn, 2003), can pose special challenges for children with autism who reside in bilingual homes. (p. 53).

Autism spectrum disorders (ASDs) are a group of developmental disabilities that can cause significant social, communication and behavioral challenges. People with ASDs handle information in their brain differently than other people.

ASDs are *spectrum disorders*. That means ASDs affect each person in different ways and can range from very mild to severe. People with ASDs share some similar symptoms, such as problems with social interaction. But there are differences in when the symptoms start, how severe they are, and the exact nature of the symptoms. (CDC, 2015).

There are three different types of ASDs:

- Autistic Disorder (also called "classic" autism)

This is what most people think of when hearing the word "autism." People with autistic disorder usually have significant language delays, social and communication challenges, and unusual behaviors and interests. Many people with autistic disorder also have intellectual disability.

- Asperger Syndrome

People with Asperger syndrome usually have some milder symptoms of autistic disorder. They might have social challenges and unusual behaviors

and interests. However, they typically do not have problems with language or intellectual disability.

- Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS; also called "atypical autism")

People who meet some of the criteria for autistic disorder or Asperger syndrome, but not all, may be diagnosed with PDD-NOS. People with PDD-NOS usually have fewer and milder symptoms than those with autistic disorder. The symptoms might cause only social and communication challenges. (CDC, 2015)

Signs and Symptoms. ASDs begin before the age of 3 and last throughout a person's life, although symptoms may improve over time. Some children with an ASD show hints of future problems within the first few months of life. In others, symptoms might not show up until 24 months or later. Some children with an ASD seem to develop normally until around 18 to 24 months of age and then they stop gaining new skills, or they lose the skills they once had (CDC, 2015).

A person with an ASD might:

- Not respond to their name by 12 months
- Not point at objects to show interest (point at an airplane flying over) by 14 months
- Not play "pretend" games (pretend to "feed" a doll) by 18 months
- Avoid eye contact and want to be alone

- Have trouble understanding other people's feelings or talking about their own feelings
- Have delayed speech and language skills
- Repeat words or phrases over and over (echolalia)
- Give unrelated answers to questions
- Get upset by minor changes
- Have obsessive interests
- Flap their hands, rock their body, or spin in circles
- Have unusual reactions to the way things sound, smell, taste, look, or feel.

(CDC, 2015)

More recent information gathered from the CDC (2015) suggest that in the United States alone, on average, one in every 68 children are born with some sort of disability on the autism spectrum. The CDC (2015) also reports that ASDs do not have one particular race, economic, or ethnic background that tends to have more diagnosis than any other but rather reports that children born with ASD come from all areas; although, ASD is more prevalent in boys.

More people than ever before are being diagnosed with an ASD. It is unclear exactly how much of this increase is due to a broader definition of ASDs and better efforts in diagnosis. However, a true increase in the number of people with an ASD cannot be ruled out. We believe the increase in ASD diagnosis is likely due to a combination of these factors. (CDC, 2015)

Medical Recovery. For decades, the autism spectrum disorders have been a mystery. No one knows what the exact causes are, no one knows which people have the triggers that may

set this disorder in motion, and no one knows exactly what to do with these children. It has been proven through studies that the best and most effective treatments for children on the autism spectrum are to get as early a diagnosis as possible, and then begin interventions right away. According to Bock and Stauth (2007), the complexity of autism leads to not only one intervention but a myriad of interventions. *The Healing Program* presented by Bock and Stauth (2007) can create recovery by elimination, flushing, healing, and restoring of the body. It is defined as follows:

Nutritional Therapy: eating whole, organic, nutrient dense foods, determining any food allergies and avoiding them, understanding if a child has an issue with yeast and avoiding that, gluten and casein free foods must be eaten by those who have issues with wheat and dairy, and for some kids, carbohydrates must be eliminated.

Supplementation Therapy: Detoxifying supplements, metabolism-supporting supplements, energizing supplements, herbal supplements, probiotics, and brain-supporting supplements are essential.

Detoxification: In some more severe cases, chelation therapy (an FDA-approved procedure for removing some heavy metals), methylation (detoxification process responsible for removing mercury and other toxins), and stimulating the organs of detoxification and elimination is necessary.

Medication: In many cases, medications such as antifungals, antibiotics, antivirals, anti-inflammatories, and, in some cases, specialized and individualized medicines to assist in various patient issues (Bock & Stauth, 2007, p. 19-25).

As a parent with a child on the spectrum, I will vouch for this healing therapy. I have tried and am still doing many of the things talked about in this book. This book is fantastic for parents new to the disorder, and it gives information straight without using big academic words, so that any parent that reads this can get a good idea of what they are up against and where to even begin. The information in this book was invaluable to me until it came time to go to school. While this covered the medical side of things, it did not prepare me for what was ahead in the classroom.

And, yes, the medical side of autism is picking up steam and rolling fast, but the educational system, in my experience, is a step behind for two reasons: (1) the children had to get old enough to enter school, and, in the beginning, they were possibly deemed to need services for learning disabilities or labeled as a child with significant mental disability and put into an isolated class away from the normally developed students; (2) the federally mandated *No Child Left Behind Act (NCLB)* came about in 2001 which moved most special education students out from their isolated classrooms and into the regular class with their normally developing peers. Once there, the educators, not having taught this population of students, had to try and make up lost time.

The introduction of this new population of students into the regular classroom with other normal developing peers created a race to figure out how best to educate them in this setting. And since most educators have been dropped into this new role, the research question posed in this project is important because teachers need to know and understand the learning barriers as

well as the gaps that currently exist to the implementation of good curriculum, techniques, or tools to effectively teach this population of students.

Autism in Bilingual Communities. It is reported by Carlyle (2013) that ELLs and students with autism have more similarities in learning than not. Due to cultural, emotional, and cognitive barriers, which both groups lack in some or all, learning in the regular classroom setting is difficult for both these sets of learners. They both struggle considerably with varying parts of language; by obtaining only parts of the language, gaps and misunderstandings happen causing hindrances to their learning ability which affects the overall performance for these students.

- Some similarities concerning the appearances and needs of ELLs and students with autism
 - Difficulties interacting and relating to peers:
 - As a result, the student will often be alienated within the classroom, and especially outside of the classroom.
 - Trouble understanding language used within the classroom, leading to difficulties comprehending:
 - Directions
 - Literacy used in the classroom: connections to the outside world, other class material, or the student's personal life
 - Students struggle to keep up with the pace of the general classroom. Just as other students are finishing

the assignment or task, the student is just now understanding the responsibility. (Carlyle, 2013)

Being the mother of a child on the spectrum, I know firsthand what it takes to raise a child to be successful in learning how to communicate within our society; it takes hours, and days, and weeks, and months of repetition and using every minute of life as a teaching moment. The question, though, that comes to mind is regarding those families who immigrate here (1) for the purpose of getting their child with autism the best possible education and therapy, (2) who find themselves in the U.S. for personal reasons and they happen to bring a child who is on the spectrum, or (3) they have immigrated to the U.S. and have a child born to them who is then diagnosed with an ASD. It has been common practice for educators and practitioners to teach these immigrant children with an ASD in the language of the dominant country. In the case of the United States, English is the preferred language. But, many immigrant families do not speak fluent English. And even as their child is learning English, the families tend to learn English at a pace too slow to be of immediate help to the child. There is already a communication gap between parents and their child on the spectrum just due to the nature of the disability, but add to this a language barrier and more problems in successful pragmatic language learning will occur since an individual's family is a major component to learning these points of language. So, the issue that has been raised is what language should a non-native speaker on the autism spectrum be given therapy in, their native language or English? (Elder et al., 2006).

Research Question

Families with a child who has an ASD who is also an ELL and in need of medical, social, and educational interventions have to climb more hurdles than the monolingual child with an ASD. It is falling more and more on the shoulders of the public school educators to try and figure out the best ways to educate these children with these two distinct barriers. The research question at hand, given that the numbers of these students seem to be rising yearly, is

How can certified English as a second language (ESL) and Special Education (SPED) teachers effectively work with each other and together with parents to ensure that a well-rounded learning environment is assured to English language learners on the autism spectrum?

In summary, Chapter One introduces two separate hurdles that some people face when they try and learn academically, socially, and culturally. Described in these pages are the characteristics and signs of someone who is an ELL as well as the characteristics, signs, and symptoms of someone with an ASD. The reason the research question is being asked is because there are many children in the public school system that are classified as an ELL with an ASD, and as will be shown in subsequent chapters, there is not a good understanding between ESL departments and SPED departments nor between ESL, SPED, and the general education teacher.

In Chapter Two, some important research will be shown that has removed mysteries surrounding autism spectrum disorders and the ELL as well as uncovered new information as to how the environment is changing and more attention is being paid to better serve these children in a matter more fitting for successful learning. Chapter Three will outline the methods by which

the research was conducted along with who the participants are and what they were asked to do. Chapter four will follow showing the findings of the research conducted and giving the data for each of the questions posed to the participants.

To round out the Capstone, Chapter Five will discuss the main gaps that the participants of this research study felt were barriers to cross-educational learning for this population of students as well as the bridges that might close these gaps so that a better way to educate them can be discovered.

Chapter 2: Literature Review

In Chapter One, definitions and descriptions of what it is to be an English language learner (ELL) as well as having an autism spectrum disorder (ASD) were discussed. This chapter will highlight important research literature regarding students whose profile is that of an ELL and having an ASD. The question being raised follows.

How can certified English as a second language (ESL) and Special Education (SPED) teachers effectively work with each other and together with parents to ensure that a well-rounded learning environment is assured to English language learners on the autism spectrum?

Presence of Immigrants with ASD

As more and more children were being diagnosed, doctors and researchers began to notice that there was not really a pattern of who was most affected by this disorder with the exception that boys seemed to be affected by it more than girls; there was no color, no nationality, no economic status that was not touched (CDC, 2015).

The United States is an immigrant nation, and its success has been long dependent of the success of immigrant families. In November of 2014, the census bureau reported that “one in five Americans were either born in a foreign country or have a parent who was” (Weissbourd, 2014). Over the last several years, the movement of people from other countries to the USA has spiked. According to the Migration Policy Institute in 2013, approximately 41.3 million immigrants lived in the United States, an all-time high for a nation historically built on immigration. The United States remains a popular destination attracting about 20 percent of the world's international migrants. Immigrants accounted for 13 percent of the total 316 million U.S. residents; adding the U.S.-born children (of all ages) of immigrants means that approximately 80

million people, or one-quarter of the overall U.S. population, is either of the first or second generation (Zong & Batalova, 2015).

A report that was done by the University of Minnesota may give a small snapshot of what might be going on across the United States as a whole when it comes to ELL populations with ASDs. This report states that ASDs in the Minneapolis Somali community are more prevalent than in other minority groups. We know, according to the CDC, that ASDs do not discriminate, so looking at whether or not the Somali numbers are higher than other minorities is not what is important. What is important is that the numbers of all the minorities are almost equal to that of the Caucasian participants who are assumed to all be native speakers. It is also important to note that some of these in the minority category will not fall into the ELL category. What is worth noting, though, is that the Somali population and the Caucasian population both stand at .03 percent, the African American population stands at .02 percent, and the Hispanic population stands at .01 percent. These numbers could mean that an almost equal number of minorities and non-minorities have an ASD and that there will be a percentage of them that have a limited grasp on English. If taking this snapshot in one major city gives any indication of what is going on throughout the rest of the U.S. then there is approximately an equal number of non-native speakers living in the U.S. who have an ASD. This then, prompts more educators and therapists to have to face the reality that there will be an almost equal chance that they will be teaching/training non-native speakers on the autism spectrum as they teach native speakers. (Autism Speaks, 2013)

In a study conducted by Fountain and Bearman (2011) regarding autism in the Hispanic population of California, it was discussed that on the surface, there is a lower occurrence of autism in the Latino population, but as the research went on, many researchers came to the belief

that it was not the fact that the occurrence was lower but that Latino populations did not have access to sufficient health care, and, in many cases, if autism was diagnosed, it was at much older ages and under the umbrella of the public school system.

With the numbers of immigrants coming to the United States seemingly higher now than in the past, it lends to the notion that more children who cannot speak English will be entering into the public school system. These studies tend to show that, traditionally, immigrants lack access to good health care; therefore, the numbers of immigrant children being diagnosed with an ASD are being underrepresented. These children are possibly falling onto the shoulders of the public school system to diagnose. Since these studies seem to show that the numbers of immigrant children lacking English speaking ability could be matching the numbers of those children with an ASD who are native speakers, it is now up to the educators to figure out where to begin and decide what best practices need to be utilized.

Misunderstandings

The biggest misunderstanding is that the best possible way to educate an ELL on the spectrum is to pick one language and only one language to conduct education and therapy for students on the autism spectrum. The following studies have exposed validity of this misconception by the sheer nature of autism itself and how much intervention from all persons involved in a child's life is needed for a child on the spectrum to have a chance at the most normal life h/she can have on an academic, social, or cultural level.

Elder et al. (2006) conducted a 24 month case study of a child diagnosed with a language delay at age 3 followed by a diagnosis of autism at age 3 years and 6 months. The child was Korean and living in the United States; the main language at home was Korean, although the child's parents were considered to be good English speakers. The family's concern was that the

child be able to attain English so that he could be educated in the U.S. school system as they felt being bilingual would give better opportunities to their child.

The methods of this study consisted of two stages: Interventions addressing precursors of language development and Interventions addressing linguistic development. In the first stage, Elder et al. (2006) addressed Interventions including expectant waiting, imitating, promoting joint attention, introducing pretend play, and teaching gesture use.

- Expectant waiting

Allow ‘wait time’ (-be prepared to wait for a response, whether it is an action or answer). Avoid immediately repeating an instruction or inquiry. Sometimes it is helpful to think of a student with auditory processing challenges like a computer—when it is processing, hitting the command again does not make it go any faster, but rather sends it back to the beginning to start the processing all over again! (Autism Speaks, 2008)

- Imitating – Children on the autism spectrum being able to mimic both visual goals as well as the inferred means to the goals of another person.

Autistic children often display similar performance to neurotypical children when imitating actions that have a visual goal or meaning but are less able to imitate goal-less or meaningless actions (Rogers et al., 1996, 2010; Stone et al., 1997; Hobson and Lee, 1999; Williams et al., 2004; Hamilton et al., 2007a; Vanvuchelen et al., 2007; Hobson and Hobson, 2008; Cossu et al., 2012). (Gowen, 2012, para. 2)

- Promoting joint attention - “Joint attention is defined as visually coordinating attention with a partner to an external focus, showing social engagement and an

awareness of the partner's mutual interest for the purpose of 'commenting' rather than 'requesting' (Carpenter & Tomasello, 2000; Mundy & Stella, 2000; Schertz, 2005b)" (Schertz & Odom, 2007, 1562).

- Introducing pretend play - "Pretend Play: 'acting as if something is when it is not.' (Rutherford, Young, Hepburn & Rogers, 2007, p. 1025)" (Sussman, 2012).
- Teaching gesture use – Gesture: "A movement of part of the body, especially a hand or the head, to express an idea or meaning" (Gesture [Def. 1], n.d.).

In the second stage, the following interventions were addressed: Vocabulary (introducing single words, using 2-word combinations), and Pragmatic Skills (Transitioning from task to task, Social greetings, Verbal requests, Turn-taking) (Elder et al., (2006), p. 55-58).

The following instruments were used to measure the child's progress during the study: CDI: Words and Sentences, this is a parent report of the child's vocabulary production; PPVT-III, this evaluates receptive single word vocabulary skills; EVT, this evaluates expressive vocabulary development; Reynell Developmental Language Scales, evaluates overall receptive and expressive language development beyond single word level; Parenting Stress Index (PSI) examines the family as a system and consists of a child domain and a parent domain (Elder et al., (2006), p. 58).

[The child] "...received speech-language intervention twice weekly for 30 minutes...which was increased to 45 minutes...[his] progress in language development and functional communication development was evaluated every 6 months for 24 months...after his first speech-language evaluation at age 3" (Elder et al., (2006), p. 58).

By the end of the intervention study, the child was able to do many new things in combination with his newly found receptive and expressive skills. By using both the child's

native language in conjunction with the second language (English) the child was actually able to strengthen both languages concurrently; as his native language skills increased, the second language actually emerged. It was also discovered that vocabulary development is a valid measurement for the intervention of children on the autism spectrum; it would seem that the first language vocabulary gains aided in the second language vocabulary gains. The Parenting Stress Index (PSI) administered to the parents at age 4 years 6 months and again at age 5 years showed how much stress a child with autism can have on a family. The results of the second PSI showed that the level of stress decreased dramatically with the onset of both the native language and the secondary language. So, there was definitely a positive effect on the stress levels the parents were feeling when the child began to learn and use his language skills, Korean at home and English outside the home (Elder et al., (2006), p. 61 – 62).

Another study conducted by Kremer-Sadlik (2005) takes a look at two aspects:

...whether there is support for the claim that exposure to multiple languages can further hinder language acquisition in language impaired/delayed children; and the ramifications of the clinicians' recommendations to use English only for HFA (high functioning autism) children and their families. (p. 1226)

She stated that it was not feasible for families of the world to be advised by their clinicians and doctors to just teach their HFA child one language when over 50% of the world speaks more than one language and "...that in many places bilingualism is not only the norm but also a necessity" (p. 1226). It would seem that the notion the clinicians are taking their cues from is sorely outdated and must be revisited in our smaller, more global world civilization.

A study from 1979 is quoted as the basis for this argument. This study mentioned by Kremer-Sadlik (2005) was conducted by Jim Cummins in 1979 at the Ontario Institute for

Studies in Education of the University of Toronto, and it basically states this: when a child has a delay or problems in proficiently acquiring his/her first language, then it sets for difficulty in successfully acquiring a second language. So, if they cannot be proficient in their first language (L1) it was determined that they would not be able to acquire (or successfully acquire) a second language (L2) due to the fact that if they have low skills in the (L1) then they are bound to have low skills in the (L2) which will cause cognitive problems not only in the second language but also the first; thereby, making it very difficult for the child to speak in either language successfully. So, it is stated that because of this cognitive issue, clinicians will recommend one language only to avoid putting any further stress on the child's learning. Therefore, many clinicians do not encourage dual language learning for autistic children. This poses a problem for those families who are bilingual and where English is not their native tongue (Kremer-Sadlik, 2005, p. 1226).

In recent years, though, there has been a small contingent of studies to the contrary. These studies showed that even with a low level of acquisition of the (L1), the children are having success in acquiring a second language without the dire cognitive consequences mentioned in the 1979 study. Kremer-Sadlik (2005) also mentioned studies by Bruck in 1982 and Crutcheley et al. in 1997.

In discussing Bruck's work, Kremer-Sadlik (2005) says that a study was conducted where Canadian students with language impairments and low L1 proficiencies were educated in a bilingual setting, French immersion in an English dominate culture. After studying the subjects, he discovered that the language impaired children learning in the French immersion classes had acquired a level of French that was on par to that of other children of that same grade level. His conclusion was that the language impaired children with low L1 proficiencies were

able to gather grade level proficiencies in another language without “any interference to their first language development, academic progress, or cognitive skills” (p. 1226).

In discussing Crutcheley et al.’s work, Kremer-Sadlik (2005) says that “bilingual children with Semantic Pragmatic difficulties (SPD)...score the same or better on language tests than monolingual SPD children” (p. 1226). Semantic pragmatic disorder affects the use of language in a social context [knowing what to say and when to say it] (The National Autistic Society, n.d.). Kremer-Sadlik (2005) also holds that the Crutchley et al. study is particularly interesting because high functioning autistic (HFA) children typically suffer from linguistic pragmatic deficits (p. 1226).

According to Kremer-Sadlik (2005), these two studies “offer the possibility that under certain circumstances bilingualism does not further impede language learning among children with language disability” (p. 1226).

Kremer-Sadlik (2005) moved on to discuss how language and cultural socialization are linked. She created her perspective based on the “language socialization paradigm” from work by Ochs and Schieffelin in 1984, stating that “The process of language acquisition and the process of socialization are integrated” (p. 1227). What she breaks it down into is this, “a child is not only socialized to use language, but is also socialized through language” (p. 1227). The major component of social learning is through the family where people learn to be “communicatively competent members of society” (p. 1227). So, in looking at this, it is understood that children must learn and understand and speak the language used in their homes. On the same lines, it is thought that if a child cannot understand the language spoken by their family environment, then they will be negatively affected socially as their socialization process

will be interrupted; this could take place when a breakdown occurs, and there is a failure to communicate.

Kremer-Sadlik (2005) went on to look at three more studies; these studies outlined the negative effects which were witnessed by Filmore in 1989, Tseng and Fuligni in 2000, and Wharton et al. in 2000. While the subjects varied in age, the agreement was that when there was a breakdown in communication because the high functioning autism (HFA) child could not communicate with their families, then the children became increasingly isolated and this greatly affected the child's relationship with their parents; less and less conversation was had thereby limiting social interaction which lessened the children's opportunities to engage in and learn proper social behavior. Kremer-Sadlik (2005) points out that Wharton et al. actually showed in their 2000 study that when the native language was introduced to the HFA child, the parents were much more engaging and the relationship soared (p. 1227).

One main reason that using the mother tongue for many bilingual families is so important is the simple fact that the parents often find themselves in the role of the therapist. They are with their child more than anyone else, and in order for the child to grow, families cannot expect a few hours of therapy a week with no extra, outside help to miraculously teach their child. So, the parents take over that role the rest of the time. The question is posed as such: Which language will parents be more confident in using when teaching and training their HFA child? Their (L1) or their (L2); it is obvious that, for the most part, parents are going to be more comfortable and effective if they can use their native language to help their child.

As more studies are being conducted regarding the use of multi-language teaching to HFA children, it is being shown that there does not seem to be any real adverse effects by allowing the child to converse with their families in their native language. The biggest

proponent for actually allowing them to learn their native tongue along with English is the fact that children on the spectrum do not learn social behaviors instinctively as a normal developing child does. So, the parents and family members must step in to help teach and guide these children. If the parents lack the language skills in English, for example, they will have a very hard time trying to set up and model social situations so that their HFA child can understand. So, why not let the parents and families become better teachers and therapists by allowing them to use their proficient language thereby not handicapping both the parents and the child.

In yet another study, Petersen (2010) sets out to conduct and present a study that she felt would show evidence to the contrary of the claim that “bilingual families with children with an ASD should limit linguistic input to one language” (p. 20). Her study sought to answer the following questions:

- Do the English lexical skills of bilingual preschool-age children with ASD differ from those of monolingual preschool-age children with ADS?
 - Is the number of lexemes different for those two groups (when their two vocabularies are added together and translation equivalents are counted only once)?
 - Do bilingual English-Chinese preschool-age children with ASD develop a different number of nouns and verbs than English monolingual children with ASD?
 - Are there more mental state words in Chinese than in English for bilingual English-Chinese with ASD? Is the number of English mental state words different for bilingual vs. monolingual children with ASD? (Petersen, 2010, p. 20).

In these questions, lexical knowledge encompasses all the information that is known about words and the relationship among them (O'Hara, 2005), and lexeme is “a meaningful linguistic unit that is an item in the vocabulary of a language” (Lexeme, [Def.], n.d.).

What Petersen (2010) discovered through her study was that “this study found no difference in the English CDI scores of monolingual English children with ASD and bilingual English-Chinese children with ASD” (p. 40). She did find out, though, that the bilingual participants had “...larger conceptual vocabulary scores and total vocabulary scores than the monolingual participants” (p. 40). The groups did not differ and were found to have higher English scores on standardized language tests (p. 40).

Petersen (2010) goes on to discuss each of the individual areas that her initial research questions raised and focuses on each category individually: Lexical Scores, Mental-State Vocabulary, and Nouns and Verbs. She summarizes her discussion of these areas as follows: due to the findings, “the English production vocabularies of the bilingual participants were not significantly different than those of the monolingual participants and their conceptual production vocabulary was larger than the monolinguals...” (p. 40). She writes that her hypothesis is supported in that “bilingual English-Chinese children with ASD, learning two languages does not negatively affect language development” (p. 45).

Petersen (2010) went on to write that this study shows that children on the spectrum do have the potential to be bilingual without any negative aspects to their learning, and, in some cases, the bilingual child has some language advantages when two languages are allowed. Learning a second language with an ASD should not be considered a disadvantage. She also

goes on to say that families should not have to rearrange everything at home to accommodate only one language for their ASD child if another language is spoken inside the home (p. 45).

All of these studies make it very clear that children with an ASD are very capable of learning a second language successfully when someone takes the time to lay out a plan for the child and the parents to adhere to. When the child's native language is other than the dominate language, it would seem that it is imperative that the child be allowed to learn their native language along with the dominate language to aid in their therapeutic learning since so much of what an ASD child learns must be taught to them, especially those things dealing with social ability. From my personal experience, so much social ability is learned by interaction from the family, and if caregivers cannot communicate with their ASD child, how can real social interaction occur?

From my research and understanding of the hardships of teaching a child on the spectrum, professionals in the ASD community, by adhering to the old standard, are actually hurting their clients on the spectrum by limiting the amount of social interaction they have because they are recommending that only the dominate language be taught. If these children do not have the repetitive, rote teachings from both their therapists and their families together, then the child will miss out on key lessons along the way. If they miss out on these key lessons, then the child might not have any chance of becoming a successful participant in their social environment.

One thing that these studies reinforced, and that I have experienced personally, is that children, no matter what their background, need their parents and families to be fully on board with getting them functional. Every person that has a direct link to the child must, and I stress MUST, be on board with the heavy load of therapy that the child must undergo if he/she is to

ever overcome any or some of the disability's life limiting symptoms. When the child is learning in the country of his/her birth sharing the dominate language as their first, there is less of an issue, but when the child with autism is being treated where the dominate language is not spoken in their home, many problems can arise. Mainly, if the child is being taught one language and the caregivers speak another language, the child cannot possibly receive the support and nurture that it takes to raise and care for a child on the autism spectrum just due to the lack of communication.

Each of these studies point out that when a child is not taught to speak in their home language, the child and the parents (or caregivers) become frustrated. The child's therapy at home becomes less and less, he or she tends to get left out of family interactions, he or she usually disassociates them self completely with his/her ethnic group, and, increasingly, he or she pulls away from their parents and no parent/child bond occurs.

For the parents, there is an equally detrimental thing happening; the parents give up on the child's therapy at home because it becomes too burdensome as they are trying to become proficient in a different language and then trying to use that language to help their disabled child. The whole process overwhelms them, and they almost just completely stop therapy at home. This leaves the child with only his/her therapists to do the work. From personal experience, this is not nearly enough practice for the child.

The parents usually end up speaking to all the other family members in their native language, but when addressing the ASD child, they use the language that this child speaks in the school setting. The issue that usually arises, though, is that parents then become less and less involved with the child and only interact with him/her to make sure their needs are met. This tends to spill over into their learning environment outside the home, and the therapists begin to

notice that progress slows or even stalls. The sad thing is that these parents know that their child is being left out and falling behind, but they do not know what to do to stop this downward spiral.

These studies are, by far, not the end of the discussion. Each study indicated that much more research needs to be done in this area since second language learning in autistic children is such a new field of study. But, with the numbers seemingly rising each year from all around the world and autism hitting every country and background, it can no longer be ignored. While it may be important for them to learn English when they are living in an English dominated society, it is equally important for them on a social level to learn to speak their native language. Without the social interaction that language brings to a person, many lessons dealing with social ability will be lost and once the window of opportunity closes, a child with an ASD might not be able to gain that lesson back again.

From the viewpoint of a parent with a child on the spectrum, it is in my experience that a child on the spectrum needs to be led down the easiest path possible to attain whatever success that child is going to attain. The literature reviewed in this chapter suggests that learning two languages can have favorable outcomes with all parts of the language both verbally and non-verbally.

Moving to Cross-Educate

According to Szymkowiak (2013), many gaps have been uncovered in between the fields of ASDs and ESL. These gaps are hurting those students that fall into the category of being an ELL with an ASD since most teachers have been instructed to teach these students in the dominant language versus the student's native language even though there are no known negative effects of teaching these students in their native language. Not being prepared or

trained for this influx of students who are categorized as ELL with an ASD, teachers are finding that they are at a loss and struggling to give the right aid to these students.

Several studies have made the case that ELLs on the autism spectrum are capable of acquiring another language, and, in most cases, it is beneficial to do so. Other studies have attempted to research and write about possible implementable curriculum. My concern, being a parent of a child on the spectrum as well as being involved with ELLs, was to look at the current environment in which these children are being taught. The environment, while making strides, is not fully ready for set curriculum due to gaps between the fields of ESL and SPED, specifically autism education. If the environment is a hindrance to the successful implementation of said curriculum, then a look into the environment needs to be taken in order to locate gaps and attitudes that are hindering a successful cross-learning educational experience. The following research question will be addressed:

How can certified English as a second language (ESL) and Special Education (SPED) teachers effectively work with each other and together with parents to ensure that a well-rounded learning environment is assured to English Language Learners on the autism spectrum?

This chapter looked at literature regarding the environment surrounding the ELL with an ASD. The upcoming chapter will go through the procedures of the research project itself which gives some good insight into what is happening in the schools currently revolving around the education of an ELL with an ASD.

Chapter Three: Methodology

Chapter Two gave information regarding previous studies which have been conducted over the last several years to give a better picture of the uphill battle that an English language learner (ELL) with an autism spectrum disorder (ASD) has to face. The information presented in this chapter gives the method by which the research was conducted for this project in order to obtain the answer to the research question: How can certified English as a second language (ESL) and Special Education (SPED) teachers effectively work with each other and together with parents to ensure that a well-rounded learning environment is assured to English language learners on the autism spectrum? Each section of this chapter will describe the chosen research method, participants, materials used, and the procedures employed to administer the information.

Research Method: Qualitative

I chose the qualitative approach because the field of education is ever changing due to new developments in teaching techniques, changing dynamics within the environment and demographics, and the legal system creating new laws and regulations which school systems are required to abide by. According to Mackey and Gass (2005), qualitative studies are not like a scientific experiment where the data is quantitative and/or statistical in nature but rather uses data which is subject to interpretation (p.2). Qualitative research ultimately gave me a richer pool of resources to pull from because it encompasses so many variables (Jacob, 1988).

A qualitative approach allowed me to ask questions and find answers from the teachers, therapists, and administrators at the heart of every school. I needed to know more than just statistics; I needed to know what was going on in the classroom beyond the hows, the how-often, and the how-manys. I needed to know and understand opinions, feelings, and, most importantly, the experiences of the teachers currently in the classroom. Going directly to the

source was the best way for me to gather a more holistic look at things. Using an open-ended format questionnaire was the best way, in my experience, to extract the most natural, real information currently being used in classrooms now. Due to the fact that I wanted a diverse group of participants from different school districts and private entities, I wanted the flexibility that dispersing a questionnaire would give. Questionnaires helped to get the participants to give information in their experience over long periods of time but gather that information in a short amount of time. The questions also allowed the participants to give their experience in their own words as well as allowed for the information to be seen as comparable or differing among the participants. Using a questionnaire format also allowed the variety of using different means to disseminate the information which was most convenient to the participants (Mackey & Gass, 2005).

Research Participants

Participants for this study consist of eight certified educators/therapists: five Special Education (SPED) Teachers, two English as second language (ESL) Teachers, and one Speech Language Pathologist (SLP). The method used for the selection process was a random surveying of professionals with college degrees and certified public school teachers with varying levels of years of experience in the areas of ESL and SPED as well as private and public speech language pathologists.

Special Education Teachers (SPED) will comprise participants 4 through 8 throughout the findings. The SPED teachers came from three public independent school districts. The average years taught is 14.8 years with the shortest time frame being eight years and the longest time frame being twenty years. The SPED participants range in specialties consisting of autism, dyslexia, attention deficit disorder (ADD), attention deficit hyperactivity disorder (ADHD),

behavior modification, emotionally disturbed, adaptive behavior, resource and inclusion, diagnostician, and teachers of bilingual SPED populations. These participants come from varying teaching experiences from pre-school through high school and adults. They have all had experiences with children on the spectrum and also with those children who are English language learners (ELL) and on the autism spectrum.

English as second language teachers (ESL) will comprise participants 1 and 2 throughout the findings. The ESL teachers come from two different public independent school districts. The average years of teaching between them is eighteen years. One ESL participant has a college degree in bilingual studies with an advanced degree as a SPED diagnostician while the other has a college degree in education with certification to teach ELL as well as an advanced degree in education.

The Speech Language Pathologist (SLP) will comprise participant number 3 throughout the findings. The SLP has a degree in psychology, minor in cultural anthropology, and an advanced degree in speech language pathology. This participant has worked in the private sector for two years and has many years of volunteer service work in her field. Being an ELL, herself, she also has vast experience in the bilingual community doing research, assisting with social services, and in educational settings. Other experiences for this participant consist of bilingual speech services and speech services for people of all ages with communication disorder in receptive/expressive language, articulation, feeding/swallowing, cognition, fluency, autism, oral-motor functioning, Alzheimer's, and a variety of neurological diagnosis.

Materials Used

Each participant was given a questionnaire regarding their experiences in dealing with children on the autism spectrum who also come from a home where English is not the primary

language. The questionnaires were tailored to each group whether they were ESL, SPED or SLP specifically. The questionnaires are broken down into several parts, a sampling of each section's questions provided (for full questionnaires, see appendices D, E, F):

- Personal Experience/ Education Questions
 - How long have you been an educator?
 - What is your specialty within...?
 - Have you ever worked with a student who has a disability?
 - Were you exposed to English language learners (ELL's) during your studies or on the job?
- Student Oriented Questions
 - What experience do you have with ELL students with disabilities?
 - How do you (can you) engage an ELL student with disabilities in teaching/learning?
 - What materials (curriculum, techniques) have you found most effective when teaching ELL students with a disability? Please name what you use.
- Assessment/Parent Involvement Questions
 - How do you (can you) assess whether it is a student's disability or lack of language skills in the student's ability to learn?
 - How have you encouraged parental involvement in student learning?
 - How have you dealt with parents of ELL students when they can't speak English?
- District Questions (if applicable)
 - Are there any restrictions on a student getting ELL and SPED services simultaneously?
 - What would you change up in the classroom, given that you had no restrictions, to be more productive with ELL/SPED students?
- Professional Opinion
 - What experience can you speak about for the feasibility for SPED, ELL, General Education, and Speech Pathologists to collaborate to best accommodate this special population of student?
- Language
 - (1) Please give your professional opinion on the language being used to teach an ELL student with disabilities:

- (A) What is your professional opinion as to what language parents should speak to their ELL student with disabilities?

Open ended questions were asked of the participants so that they could reflect on their education careers as well as experiences in dealing with this special population of students. Of my own knowledge, experiences and education, having been part of studies in the past as well as helping in corporate training studies, choosing open ended questions would yield a more comprehensive, all-encompassing answer. Using open ended questions gave each participant the opportunity to share, in their own words, knowledge gained through their experiences, thoughts about certain aspects of their careers, opinions on certain topics, and suggestions about how they felt the best way to go about giving this special population of children a better cross-educational learning experience.

Procedures

Each participant was asked to complete a set of questions which gave information regarding their background as a teacher (therapist) in their specific field, their experience with bilingual children, and their experience with a child on the autism spectrum from a bilingual background. The survey also asked them about what current things are going well within the cross-teaching of this special population (i.e.: lessons, techniques, best practices). It also delved into where these participants find areas that are lacking within the cross-teaching of this special population, and the importance of a parent's involvement in the overall success of an ELL with an ASD. A main piece of information hoped to be gained concerns how these educators and therapists feel that gains and improvements can be made in the classroom as well as with collaborations between parents and educators to make for a better, more successful learning environment for this special population of students.

Step 1: Beginning after February 25, 2015, twenty-five educators and/or therapists were contacted in order to ascertain if they would be interested in participating in an anonymous questionnaire survey regarding their experiences with students having ELL as well as SPED, specifically autism, needs. The scope of the research was indicated and the means of administering the research was given. The participants were then given contact information if they decided that they would like to assist in the research. Some participants were sent email correspondence and others received information at a scheduled teachers meeting I was invited to attend at a local school. (See Appendix A, B).

Step 2: When a participant contacted me about participating, the consent letter and consent signature page was sent to them to read over, sign, and return. After receiving a participant's consent signature, I sent them the appropriate questionnaire survey according to their specialty, ESL, SPED, or SLP. I created a PDF fill-in form to make the survey easier to fill out and transmit through electronic means. Each participant was asked to return the form within two weeks. (See Appendix C).

Step 3: Participants began to return the completed surveys shortly after receiving them. As no names or markings indicating which survey belonged to whom, they were all stored in a folder so that none were distinguishable from the other. (See Appendix D, E, F).

Step 4: Surveys were gathered into groups according to their specialty, ESL, SPED, and SLP. All surveys were analyzed for similarities and differences in opinion in each section of the questionnaire, and noted. Gaps in learning and gains for improvements were also analyzed, and noted. The findings of this analysis can be read in depth in the following chapter.

Summary

The overall goal of using a qualitative questionnaire with open-ended questions was to obtain, in real-live data, information and find notable gaps and gains in learning for an ELL on the autism spectrum. According to Mackey and Gass (2005), “open-ended questions allow respondents to answer in any manner they see fit,” in doing so, “allow respondents to express their own thoughts and ideas...and thus may result in more unexpected and insightful data” (p. 93). The reason for choosing current in-the-classroom educators as well as therapists to participate was to gain knowledge, suggestions and opinions from the people on the front lines of education. They see these children every day and work with them day in and day out trying to find the best fitted learning model for each child.

In the upcoming chapter, the information gathered from the survey questionnaire is chronicled. It gives insight into what educators currently working in the field have to say about many aspects of the environment surrounding English language learners (ELLs) who also have an autism spectrum disorder (ASD).

Chapter 4: Findings

In the previous chapter, the methods for conducting the research to answer the Capstone question were given. Question: How can certified English as a second language (ESL) and Special Education (SPED) teachers effectively work with each other and together with parents to ensure that a well-rounded learning environment is assured to English language learners on the autism spectrum? This chapter will recap the answers given by the participants.

For this research, I created an open-ended questionnaire of a qualitative nature; see appendices D, E, & F. Three versions of the questionnaires tailored to three different educator groups were given to twenty-five educators, currently teaching, in English as a second language (ESL), Special Education (SPED), and Speech Language Pathology (SLP).

For the purposes of identifying participant's information, I will be using the following format:

- Participants 1 & 2 are ESL teachers
- Participant 3 is an SLP
- Participants 4 through 8 are SPED teachers.

The data acquired from this questionnaire study is presented in isolated questionnaire sections given as follows: (1) Personal Experience/Education, (2) Student Oriented Questions, (3) Student Assessment, (4) District Questions, (5) Professional Opinion, and (6) Language Questions. Each section will show participants' opinions and attitudes as well as where there is agreement/disagreement. Rounding out this section will be gaps identified in educational learning as well as the ideas and opinions about how best to fill the identified gaps.

Personal Experience/Education

Knowledge of Second Language Acquisition. Three participants are from a bilingual background whereby English is their second language; of these, one of them received formal education in bilingual education. One participant has no formal experience in second language acquisition. Four others have been certified to teach English as a second language.

All participants agreed that second language acquisition is a long, developmental process. Participant 6 stated, “While basic interpersonal communication skills can be obtained from 1 – 3 years, students are not proficient when it comes to cognitive academic language proficiency;” according to this participant, not only in her experience but also in research studied across the field of ESL, “It takes anywhere from 7 – 10 years to effectively acquire a second language.” She also added, “...the second language needs to be directly taught, and they need access to the new language.” Participant 8 stated, “Research has revealed that first language development provides crucial support for second language development.” Given more positive opportunities for the first language development, the better the students will succeed academically in their second language.

Exposure to English Language Learners and Ethnic Diversity. All participants were exposed to English language learners on the job while two were bilingual learners, themselves, and one also had formal studies in bilingual education. They have all worked with ethnic diversity, and most have attended workshops on teaching in a diverse environment. All participants have experienced teaching in a predominately Hispanic environment where Spanish was used alongside English, but all stated that they were also exposed to the Asian, Indian, and Middle Eastern cultures. Participant 5 shared that she did work study in college and has worked

for many Title One schools that offered her the experience of low income and high bilingual populations.

Professional Development in dealing with ELLs and SPED issues. The ESL participants and the bilingual SLP stated that they took courses with their studies as well as trainings and workshops through the years to help learn new and better ways to help their ELLs with disabilities. Within the SPED participant group, participants 4 and 8 had courses in teaching ELLs with disabilities, with participant 4 having been trained in the Sheltered Instruction Observation Protocol (SIOP). According to the Center for Applied Linguistics (CAL) (2014), this is a research based and validated instructional model that has proven effective in addressing the academic needs of ELLs in the US. The model consists of eight interrelated components: Lesson Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice/Application, Lesson Delivery, and Review and Assessment. All participants agreed that their hands-on, personal experiences have taught them the most.

Co-Teaching. All participants agreed on the definition of co-teach, and all had experienced it in their classrooms on varying occasions. The consensus was that a class will have two certified teachers that are in the same classroom collaborating together to bring the best experiences/knowledge to benefit the students. Participant 5 went a little further in the definition to add, “There are several modes I’ve used: co-teach simultaneous – where both teachers teach the content area while students are split into small groups where one teacher is over one group and the other teacher over the other.” The other form of co-teach she has encountered is this: one teacher teaches the entire class the lesson, and the second teacher goes back afterwards and re-teaches the content area in places where the students are having a hard time understanding.

Collaboration Issues Between ESL / SPED. The overwhelming tone of this question for all participants was that there is not enough time for collaboration between ESL, SPED, general education, speech, and anyone else involved, and this leads to a very large communication gap. Non-ESL/SPED departments do not always follow up with ESL/SPED needs of students, and the support they need is sometimes overlooked.

Participant 2 brought up the “mainstream environment” in stating that ELL/SPED students’ needs are not being met in this environment. They need more individualized attention than what a general education teacher collaborating with ESL/SPED can give.

Understanding the needs was another big concern had by all participants. They were all in agreement that not enough understanding of ELL/SPED needs was being grasped; ESL teachers do not know enough about SPED and vice versa, and the general education teacher does not know enough about either ESL or SPED techniques and tools. About one-half of the participants felt that focusing on the needs of individual students is very difficult in a mainstream environment where they are limited by the numbers of students in their classrooms. A gross misunderstanding by the education establishment, overall, is that a child with ESL and SPED needs can cope with their disabilities and language issues and be able to perform at the same level with regular education peers. The final thought provided by participant 6 is that it is difficult because so many considerations are associated with any one given student: general education, SPED, ESL, and others, if a student has additional needs. There needs to be uninterrupted time to plan and communicate, teach colleagues if necessary, amongst all involved.

How Can Collaboration Best Be Achieved? All participants have worked in collaborative models of teaching with SPED/ESL trying as best as possible to have open discussions about students’ needs. Participant 7 stated that it was a priority to get together with

educators involved with her students at the end of each day or during conference time to discuss problems such as what is working, what is not working, and what changes should be made.

Participant 8 collaborates with both general education teachers and ESL teachers in planning students' Individual Education Plans (IEPs), monitors students' grades, behaviors, and academic progress. She also analyzes testing data of her students to determine academic growth over time.

Participant 5 feels that SPED/ESL are actually quite similar. The students need accommodations and modifications to adapt teaching to their personal needs. Being a diagnostician, she feels that "SPED/ESL/general education teachers are not talking to the diagnostician to see if it is a disability affecting the language or the language affecting the disability." They were all in agreement that primarily what needs to be happening is that knowledge and strategies of ESL/SPED teachers should be shared amongst each other and with the general education teacher for the betterment of the students.

Student Oriented Questions

Experiences with ELLs with Disabilities. As per the nature of the job, the participants specializing in ESL work with ELL students as does the bilingual SLP. This group of educators has also worked extensively with disabilities, including those on the autism spectrum. There are varying experiences with those participants specializing in SPED, but all have taught directly or work with ELLs with disabilities, including those on the spectrum.

How is it Determined if SPED is Needed? According to the participants, it is sometimes difficult to assess whether a child has a disability in learning or in language when that child is an ELL. If a child does not come to the new school with documentation, and has no evidence or observation, SPED services cannot be directly accessed. A commonplace protocol is to put an ELL into ESL services if they cannot speak the dominant language. It is then the job of

the ESL teachers to assess and observe students. Participants 1 and 2, both specializing in ESL, made comments to the effect that every ELL is evaluated on a case by case basis. They both agreed that there are many things to consider before they would recommend a student to SPED. The teachers stated they would not want to erroneously send a student through the rigors of a SPED evaluation potentially wasting the student and parent's time as well as wasting valuable educational resources. Things they both expressed as considerations would be time of exposure to the new language, whether or not they had trouble in their native language, whether or not a student is progressing, even slowly, or not retaining even after a lot of repetition with little or no success. Both teachers utilize the Response to Intervention (RTI) approach which is best described by Fuchs and Fuchs (2006) as an educational approach to intervening in academic and behavioral matters used in the U.S. to give early and appropriate intensive assistance to children who are deemed at risk. RTI helps educators to try and assist in preventing academic and behavioral failure through early intervention of learning techniques geared towards a student's ability. Students are closely monitored, and the level of intensity increases as is seen by the progress of the student or lack thereof. Once a sufficient amount of time has passed (this varies with students) if a student is still not successful, then recommendations for SPED evaluations are sent (Fuchs & Fuchs, 2006).

Engaging Students. Once a student has been identified as needing special education services along with their ESL needs, the SPED teachers must determine the best way to engage that student. All of the SPED teachers overwhelmingly stated that one to one and hands-on learning for an ELL on the spectrum, or with any disability, is the most effective way to teach these students. They also agreed that emphasis be given to teaching vocabulary in the new language to help them better achieve command of the new language, provided that they had a

grasp of their native language. Participants 5 and 8 mentioned figuring out the way each child learns best – be that visual, tactile, and/or auditory as this is very effective since most children on the spectrum are visual and tactile learners due to their inability to focus for any length of time. Participant 8 went on to share something she uses called the Think-Pair-Share discussions. According to Brown University (n.d.), the think-pair-share approach first asks students to consider a question on their own, provides an opportunity for students to discuss it in pairs, and finally together with the whole class.

Materials. One encompassing agreement is that all students identified as having autism and who are ELL need hands-on teaching above all else, and no one set curriculum will do. These participants all use varying strategies, techniques, and a loose curriculum. Graphic organizers seem to be very popular amongst the participants in this study along with using prior experiences, pre-teaching vocabulary, word walls, and involving students in their own learning. Participants 1 and 6 also spoke of using realia which they both describe as, “use of real objects and/or pictures if real objects are not available.” Participant 4, while not using any specific curriculum, “uses varying techniques including SIOP and directly teaches the English Language Proficiency Standards (ELPS) as well as new information to students.” The ELPS, according to the Texas Education Agency, states:

The English language proficiency standards in this section outline English language proficiency level descriptors and student expectations for English language learners (ELLs). School districts shall implement this section as an integral part of each subject in the required curriculum. The English language proficiency standards are to be published along with the Texas Essential

Knowledge and Skills (TEKS) for each subject in the required curriculum. (Texas Education Agency [TEA], 2015, para. 8).

Multi-sensory teaching is also popular with this group of participants. Participant 2 explains that in her experience, the Wilson Reading system designed for students with language disabilities is very beneficial for ELL/SPED students. Finally, participant 8 combines hands-on teaching with visuals of content vocabulary, Think-Pair-Share, and Think-Write-Pair-Share discussions are very effective. All agree that consistency is the key especially in the absence of a set curriculum since each of their students have individual needs unlike their peers, and what seems to work best is a combination of curriculum tailored to their students.

Which Support is Best? Through this process of research, I have learned that there is no one right way to educate this special population of students, but rather a trial and error sort of approach. Everyone is in agreement that communication among all educators involved is the absolute key. Knowing and understanding a child's disability as well as their background is crucial, and engaging and involving parents is essential in coming up with the best support for any given child.

Parental Involvement. All the participants agreed that involving the parents of an ELL with a disability is a key component of the child's overall success. All participants expressed meeting with parents regularly, some even weekly, to keep them informed of what their child is doing. Some participants use a 'take-home' folder that goes back-and-forth each night where the teacher can put in correspondence and the parents can correspond in return. Participants 1, 2, and 7 have all taught at schools where they held special nights for the parents of this special population where the parents could learn how to help their child with schoolwork, learn basic English skills, and, overall, learn how to support their child. These special nights, though, do not

seem to be the norm. All expressed that they have an open-door policy with all their parents and encourage interaction, and all try to show the importance of the parents becoming involved in their child's education. In the case of parents that do not speak English, all participants, if they were not bilingual in the language of the parents, will get interpreters to assist in making parents feel comfortable with engaging in a dialogue with them.

One topic that comes up when discussing disabilities is how a disability is viewed by the child's family. Some cultures may view having a disability as shameful, and, therefore, the parents will not acknowledge it. What all the participants expressed was that while, yes, there have been those parents who refused to accept their child's disability, they found that the majority of parents, regardless of culture, all want what is best for their child and will do whatever it takes to give their child success. Participant 6 stated that she felt very prepared to tackle this issue as she was from a different country and culture, and English was her second language. She took it upon herself to take several courses to better understand these aspects from different cultural points of view.

Assessments

Student Disability or ELL Issues? All participants agreed that a student must be analyzed on varying levels. All took into account a student's test scores, but they all agreed that observation and taking care to note progresses in the student's learning was crucial. Participants 4 and 5 test their students in both English and their native language; they stated it was to determine which language was stronger. Then they observe and note strengths and weaknesses to determine further if it is a language issue or something more. Participant 6 goes into the greatest detail by using the Culture Language Interpretive Matrix (C-LIM) to determine the influence of culture and language in the cognitive assessment results as well as using all the

parental information, Language Proficiency Assessment Committee (LPAC) information, and informal observations (TEA, n.d.).

ESL Refer to SPED. All participants agreed that ESL teachers as well as any school professional that identifies characteristics of an educational need is obligated to refer a child for evaluation to determine if there are SPED needs.

ESL Teachers Involvement in SPED Diagnosis. All participants agreed that ESL teachers are a key component of an ELLs education and should be involved in a SPED diagnosis. The SPED department participants pointed out that the ESL teacher's data concerning the student's academic progress as related to the native language is very important. RTI was mentioned several times. Progress under this model is closely monitored to assess both the learning rate and level of performance of individual students. For RTI to work well, the following components must be implemented with fidelity and in a rigorous manner: high quality, scientifically based classroom instruction, ongoing student assessment, tiered instruction, and parent involvement (Response to Intervention [RTI] Action Network, n.d.).

Once language issues have been ruled out, then the student can be referred to SPED for further testing. None of the participants mentioned issuing any of these tests using interpreters, so it is assumed that all tests were given in English and then the results were interpreted. Some of the SPED participants reported using Stanford Binet which is a standardized test measuring intelligence and cognitive abilities from the age of two through mature adulthood (Marom, 2003). Others use the Woodcock Johnson which utilizes several tests measuring skills in reading, mathematics, writing, oral language abilities, and academic knowledge. Some of the participants use this to assist in developing instructional interventions (Wendling, Schrank, & Schmitt, 2007). The Kaufman Test of Education Achievement (KTEA), the Kaufman

Assessment Battery for Children (KABC), Kaufman Brief Intelligence Test (KBIT) are used by some. These tests are part of 11 cognitive, achievement, and neuropsychological tests created by Alan S. Kaufman, Ph.D of Psychology at the Yale Child Study Center at the Yale University School of Medicine (Yale School of Medicine, n.d.). Another set of tests being used are the Naglieri Cognitive Assessment System (CAS). The CAS is a well-researched cognitive/neuropsychological theory called PASS (Planning, Attention, Simultaneous, and Successive.) It measures cognitive processing abilities. This test provides its users with valid and reliable tools to evaluate a child's strengths and weaknesses in areas of cognitive processing (Nalglieri, n.d.).

District Questions

State Requirements. All states are bound by the No Child Left Behind Act enacted in 2002. According to this act, all students are held to the same standard including ELLs and students with special needs (U.S. Department of Education, 2010). The state of Texas does not allow teachers to pick which is more pressing, i.e.: the language issue or the SPED issue. The state does not allow teachers to ignore the fact that the student belongs to both special areas: ELL/SPED. The state also requires that this special student population is to be included with all of their typically developing peers; students are not to be secluded.

All participants are in agreement that the state requires all students with special needs be served according to their specific needs regardless of language classification; students with language needs are to be served both for their language and SPED goals which are determined by the Individual Education Plan (IEP). Collaboration between the Admission, Review, Dismissal (ARD) committee and the Language Proficiency Assessment Committee (LPAC) is the law.

Participant 5 supplied The Legal Framework Website that most all teachers in Texas refer to when they have questions: <http://framework.esc18.net/display/webforms/landingpage.aspx/>.

Restrictions within the District. According to all the participants, none of them were aware of any restrictions that prohibit a student from getting services within ESL and SPED when the need has been documented and approved. Participant 6 pointed out that the biggest obstacle to services for these students is not restrictions, per se, but lack of good, quality bilingual SPED personnel and the budget to hire someone of this specialty.

Are there things districts should do to further assist an ELL with disabilities?

The number one thing that all participants agreed upon was to find the funds to give its educators more training, more workshops, and more in-service learning about this population of students and their special needs. Participant 2 felt very strongly about bilingual education if a district has a population that supports it. She feels that the district needs to come to a decision to allow these students to learn concepts in their native language WHILE learning English. She feels that as they learn and grown then a reduction of their lessons in their native language can make way for a stronger over all learning experience in English. She also advocates for removing them from the mainstream in the beginning and integrating them gradually. In her experience, it is not fair to expose these children to English only classrooms when they first come into the country. If they happen to have a learning disability, that just adds to everyone's frustration. She feels that one teacher cannot possibly meet such diverse needs.

Changes to be made, if a teacher had no restrictions, including budget. The participants all had varying things that they felt would make a big difference for their students if they could do whatever they felt was best for their student with no limitations to their imaginations. All participants, though, brought up this one important thing that they all felt was

very important: TIME. All of them wish that there were no time constraints put on them so that they could take their time, collaborate with others, research new methods, and have time for trials and errors. Another point that was mentioned was that these students need to be allowed to learn at their own pace. Participant 5 felt that educators should not be required to pass students based on time lines set by others. The other point she makes is that these populations of students usually do not test well on the state issued standardized tests; therefore, the state test results should not be a requirement for tracking a student's progress. Participant 1, 2, and 8 are in agreement that ELL students, especially with learning difficulties, should begin their studies in a bilingual classroom to promote mastery of content along with language acquisition. At a later time, transition the student into the general education situation with support in place, i.e.: a Co-Teach Scenario.

Professional Opinion

Feasibility of SPED, ESL, SLP, General Education., to collaborate. All participants stated that it is feasible but not as easy as it sounds to collaborate. Time seems to be the biggest drawback when working with this special population of students. All participants agree that there is not enough time for them to work on what they need to do and have conversations with the other parties involved with any one given student. Collaboration is therefore hard to access since educators are rarely at the same places at the same time. Participant 5 explained that she is in charge of 3 elementary school campuses. She houses her office at one, but is rarely ever there. She spends most of her time shuttling in between her assigned schools. This is the sentiment of all the diagnosticians and SPED case managers who participated. Participant 8 stated that one way her department has tried to make collaboration more attainable is by using Google Drive. By utilizing this program, she stated that they can share important information and offer

suggestions as related to the student's needs. All in all, while they agree it is feasible for everyone to work better, they agree that everyone has to work smarter so that a better system of communication can be found.

Participant 3, an SLP outside of the school district, has not been asked to work with any student's public school educators, but she stated that she always extends her contact information if the parents have a desire for her to communicate with their child's academic staff. But, if she were to be involved with educators of one of her students, she would recommend that they use redundancy techniques in presenting information (written, spoken, or tactile means); pre-teaching techniques for concepts and vocabulary; using a buddy system to facilitate co-teaching; and most important, the use of individualized curriculum modifications to current level of performance and specific articulation and language goals. A final thought she added was that, in the resounding theme of collaboration, everyone must collaborate with each other; teachers, parents, therapists (both public and private) in order to help a child in this situation.

SPED and ESL working together. The number one thing that all these participants are saying is that SPED and ESL can work together, but it will take some planning. Communication is the overall theme, and although everyone's time is limited, it is crucial to put aside time for SPED, ESL, and General Education to talk. Participants 6, 4, and 2 feel very strongly about information sharing/modeling. They feel that planning together can help make sure that all are made aware of various aspects about a student. Participant 7 feels strongly about making sure that everyone involved understands the disability a student has. All agree that taking and keeping good notes on a student will be very beneficial when the time comes when a meeting just is not possible. One final thought was that it should be more obvious when an ESL teacher

has a student being referred for a SPED evaluation that the ESL teacher be involved in the IEP planning.

Primary Responsibilities Involved. All participants were asked their opinion given their experience concerning where responsibility lay when it came to an ELL with a disability. Their responses follow. (*see table 4.1*).

Participants	General Education	Special Education	English as a Second Language	Parents	Speech Language Pathologist
Participant 1	Provide students with what is documented in the IEP.	Implement & monitor IEP	Support the English language development in supporting the IEP	Support the student	Support the development of language, in general
Participant 2	Oversee, monitor, & teach total overall	Modify & make accommodations; work one on one with student	Support with language understanding	Emotional support; nurture the whole child (not just academics); support the teachers	Provide real therapy; one to one; small groups
Participant 3	No Comment	No comment	No Comment	No Comment	No Comment
Participant 4	Look at curriculum & follow the ELPS when planning	Look at curriculum & follow the ELPS when planning	Provide support for language & ensure accommodations are given	Stay informed of progress and reinforce as much as they can	Reinforce academic language as well as dialogue
Participant 5	No Comment	No Comment	No Comment	No Comment	No Comment
Participant 6	Support all aspects of a child's learning	Support the IEP taking into consideration the ELL aspect and ask for support from experts	Support language development in accordance to student's IEP	Advocate for their child, support programs	Language development
Participant 7	Accept these students in your class	Assist general education teachers with modifications and accommodations	Interpret	Need to participate in the child's learning	Encourage students and almost insist they learn English
Participant 8	Provide instruction that the state deems necessary for the grade level; monitor student progress; collaborate with SPED, ESL, parents, & SLP to plan for individual needs.	Help to develop the IEP for the student monitors progress of IEP goals, objectives, behavior intervention plan; update progress & weaknesses; provide intervention and /or instruction within the classroom to encourage academic success (co-teach); collaborate with ESL teacher, general education teacher, parents, & SLP to further individual success	Collaborate with general education teacher, SPED, parents & SLP to meet needs of student. Provide an active learning environment for students by utilizing a discovery – oriented approach to learning; develop a community of learners in the classroom.	Collaborate with teachers and offer support at home for academic success for their child; communicate with the teachers	Assess the ability of the student to speak; offer suggestions for teachers working with student; give speech instruction if needed.

Source: ESL, SPED, & SLP Questionnaire

Language Questions

The following section pertains to several questions regarding professional opinion on what each participant feels is the best way to go about language with ELL students with disabilities. Participants were asked their professional opinion; (*see tables 4.2 -4.9*) their answers are as follows:

Table 4.2: Language Professional Opinion

Participants	What language should a parent speak to their ELL with disabilities
Participant 1	Parents should speak to the child in the language they choose, and that they are better speaking. Parents should support the development of the home language.
Participant 2	Parents should speak to them in their native language as much as possible while supporting them in learning English and parents should make a point to learn English along with them in order to better communicate with the school.
Participant 3	No Comment
Participant 4	Both English and their native language
Participant 5	The students should be taught and spoken to at home in the same language. With ELL and SPED, a lot of confusion can occur depending on the deficits of the student.
Participant 6	Parents should speak the language they feel better in and that can be supported at home.
Participant 7	Child should be spoken to in English.
Participant 8	Parents should speak their native language to the ELL with disabilities. Once the child has learned the native language, the parents should transition to using both languages, depending on the specific situations.

Source: ESL, SPED, & SLP Questionnaire

Table 4.3: Language Professional Opinion

Participants	Should a student only be taught in the dominant language (i.e.: English)?
Participant 1	No. Both languages should be used but at intervals. The language they use should be the one they better produce and understand, so they can transition into the second.
Participant 2	No, not at first. They will be more comfortable and have less disruption of learning if they continue in the native language while also learning English. It should be a gradual process so they can still learn grade level content.
Participant 3	No Comment
Participant 4	No. They should be taught in both and gradually reduce their native language until they are learning entirely in English.
Participant 5	Depends on the level of cognitive ability/strength and weaknesses. Some handle dual languages, but others would fall behind as it causes more confusion.
Participant 6	Dual language model (Native and English)
Participant 7	Yes, English. It is what is spoken here in this country.
Participant 8	Yes, English. The dominant language should be learned to communicate effectively as well as for job purposes later in life.

Source: ESL, SPED, & SLP Questionnaire

Table 4.4: Language Professional Opinion

Participants	Should a student only be taught in the native language? (i.e.: native)?
Participant 1	Yes, they should have their right to do so. Unfortunately, in Texas, there are few bilingual classes offering opportunities for languages other than Spanish. The law plays an important role in all this because if a school district has more than 20 students in the same grade level that speak the same language, they MUST offer bilingual education in the language and in English.
Participant 2	No. They won't learn English if they are only taught in the native language.
Participant 3	No Comment
Participant 4	No Comment
Participant 5	No Comment
Participant 6	No. Native and English. Dual language model is by far the best way to educate.
Participant 7	No. If they are going to live in the US, they need to speak English. There are too many languages to accommodate and there needs to be one common language everyone can communicate by.
Participant 8	I think students should learn their native language and understand its structure, but need to transition to learning the second language.

Source: ESL, SPED, & SLP Questionnaire

Table 4.5: Language Professional Opinion

Participants	Should a student be taught in both languages simultaneously?
Participant 1	Depends on the child's ability and situation.
Participant 2	Yes. It should be a natural progression towards English. This helps them to assimilate into the culture with less stress and allows them to keep up with grade level content.
Participant 3	No. Teach in their dominant language for context. Simultaneously specific tasks, i.e.: native language at home, English for academic purposes.
Participant 4	At first.
Participant 5	No Comment
Participant 6	Yes. Dual language is ideal. Develops the brain in a better way; it is supported by research studies across the world.
Participant 7	No Comment
Participant 8	No. I think students must learn language by a whole language approach. Whole language approaches, proceeding from whole to part, focus on the use of authentic language that is meaningful. Whole language approaches focus on meaning first, and expose students to writing at an early age, while encouraging students to become readers.

Source: ESL, SPED, & SLP Questionnaire

Table 4.6: Language Professional Opinion

Participants	Should a student be taught in the dominant language first followed by, at a later time, their native language?
Participant 1	Yes
Participant 2	No Comment
Participant 3	No Comment
Participant 4	Yes, but reinforcements need to be made with their native language to check for understanding.
Participant 5	No comment
Participant 6	Yes
Participant 7	No Comment
Participant 8	No. Native language first, then focus on the dominant language. Learning the native language is a developmental process that is also evident in second language acquisition. Research reveals that the first language development provides crucial support for second language development. Given more positive opportunities for the first language development, the better the students will succeed academically in the second language.

Source: ESL, SPED, & SLP Questionnaire

Table 4.7: Language Professional Opinion

Participants	Should a student be taught in their native language first followed by, at a later time, with the dominant language?
Participant 1	No
Participant 2	Yes. It should be a natural progression to English from the native language.
Participant 3	No Comment
Participant 4	No. But, reinforce learning in the native language to check for understanding.
Participant 5	No Comment
Participant 6	Yes. Studies show a strong correlation with these students who are strong in their native language; they will transfer skills to English better.
Participant 7	No Comment
Participant 8	Yes. Reason given in previous question.

Source: ESL, SPED, & SLP Questionnaire

Table 4.8: Language Professional Opinion

Participants	Where do you feel gaps exist?
Participant 1	Lack of prepared personnel in both areas, lack of materials, lack of opportunities for students and parents, lack of open-minded educators.
Participant 2	Gaps easily occur when these students are mainstreamed. It's impossible for a general education teacher to meet their needs along with twenty (+) students in the class. Curriculum should be modified and these students allowed to work at their own pace rather than being forced to try and keep up with the masses.
Participant 3	Knowledge of the native language influenced English errors, developmental morph syntactic acquisition, differences versus disorder/delay
Participant 4	I feel like language should constantly be being taught and integrated into every lesson, not just direct instruction. Students should be given many opportunities to talk.
Participant 5	Communication and Training
Participant 6	Lack of training and preparation by the teachers working with ELLs; language exposure; exposure in general to all aspects of life; poverty in many cases
Participant 7	Language barriers
Participant 8	Gaps exist when general education teachers do not understand how to implement the IEP in the classroom. There are also gaps when completing paperwork to give to the SPED teacher. Many times the general education teachers don't understand what is needed in regards to SPED data as related to goals, objectives, modifications, and accommodations of the SPED/ELL student. When working on paperwork for an annual ARD meeting, there are times when the general education teachers fail to provide the necessary data in order for SPED teachers to create the IEP paperwork for the annual meetings. I feel that more training is needed in this area at the campus level.

Source: ESL, SPED, & SLP Questionnaire

Table 4.9: Language Professional Opinion

Participants	Where do you feel we can bridge those gaps and make for a better learning environment for these students?
Participant 1	Train teachers, provide better and more opportunities for education of ELLs and their parents.
Participant 2	Their [ELL students with disabilities] education has got to become more individualized. This is only possible with pull-out programs and technology. Mainstream inclusion is not the answer. I have seen pull-out and bilingual programs be very successful in helping these students excel and thrive at their own pace. When placed in regular classrooms, their needs are simply not met. Ultimately, though, the child's education is the PARENTS responsibility. If the school isn't meeting their child's needs, the parent must fight for the changes that need to be made. And many ELL parents are not proactive in this area. Their culture teaches them to respect the teacher and the school. They often don't know their rights. And, many teachers feel their hands are tied in getting these children the assistance they need.
Participant 3	Provide services that incorporate research on bilingual and ELL speech and language acquisition, train on how to assess bilingual acquisition, etc. If a child is within normal limits for speech and language goals in their bilingual evaluation – but are assessed and more language deficits are discovered, most times, funding limitations on what schools can do academically with a child that is struggling – but passing – are usually passed over for services – even if a child needs help in their L1 and articulation. Working on better funding would be a good place to begin.
Participant 4	ELPS should be focused on just as much as the TEKS we are teaching. All students can benefit from the ELPS, not just ELL students.
Participant 5	All learning begins in the home from birth. The people at the top need to communicate better with the people at the bottom. Parents need to take a more active role in the education of their child. And, people making educational decisions need to understand how the educational system is working and not how it should work. Furthermore, a lot of families who are bilingual are economically disadvantaged. So, I think the best thing to do is raise awareness, and find new and innovative ways to educate the parents.
Participant 6	Early intervention and Parent training
Participant 7	Teach the parents English so they can get involved
Participant 8	Professional development courses and trainings can help bridge the gaps and enhance the learning environment for SPED/ELL students. Giving teachers specific resources in make-n-take professional development courses/trainings allows the teacher to immediately utilize the materials in the classroom depending on the needs of the students.

Source: ESL, SPED, & SLP Questionnaire

In summary, the participants were quite thorough and forthcoming about their experiences in dealing with the various ELLs with not only autism but all disabilities. Much of the time they agreed on the problems, but some of the answers to the problems varied depending on the person's background, education, and experiences. The final chapter of this research project will look into the main gaps that the participants felt were the greatest hindrance to educating ELL students with an autism spectrum disorder as well as some problems faced by ELLs with any disability followed by suggestions to fill those gaps for a well-rounded learning environment for this special population of students.

Chapter 5: Discussion

Questionnaire

The main goal of this study was to help locate gaps in the current learning environment of the ELL who also has an autism spectrum disorder. The previous chapters gave the definitions and descriptions of the student population in question, literature reviewing various research studies conducted to learn how best this population learns, and the aim of this research project. The research inquired as to whether or not ELLs on the autism spectrum were getting the best cross-educational experience to be successful academically, and, ultimately, might lead to success in life. The questionnaires created for this research sought to find answers to the question posed: How can certified English as a second language (ESL) and Special Education (SPED) teachers effectively work with each other and together with parents to ensure that a well-rounded learning environment is assured to English language learners on the autism spectrum? The questionnaire being answered by teachers currently working in the classroom and/or in the private sector brought to light some of the changes that are occurring in the field of teaching as well as the view of the teachers on what is working and what is not working. This research did not aim to give specific curriculum ideas but rather to see where the barriers are to finding the right environment for these children to get an effective and positive learning experience.

What is Working.

What I have discovered is that the intent of the No Child Left Behind Act, while many are arguing its validity, was true (Indiana University, 2006). The main thing I feel has happened is that this act has put the spotlight on the areas of SPED and ESL. It has shown the education establishment just how far behind it is in finding the best ways to educate many of its students. It brings to light the places where the education system has been failing students and shows the

areas where many students have been slipping through the cracks. While this act does have its problems, I feel that wanting better standards for all students has created a new path which can truly find better ways to educate than relying on what has been done in the past. Since the No Child Left Behind Act has been implemented, it has spotlighted where the public school system has been failing all students but moreover students with learning disabilities and language barriers. This exposure to the problems within the school system is now leading to better ways to educate students who are not considered in the mainstream (Indiana University, 2006). Even though this crossing of the fields is fairly new, it is refreshing to know that people are coming around to the idea that a one size fits all approach has not worked, and educators are willing to move into uncharted areas in order to reach these children and tap their potential.

The Gaps

What I discovered from the participants is that there are gaps within the learning environment of an ELL with an ASD. According to Szymkowiak (2013):

...the diagnoses of children with ASD have only increased over the past few decades (Autism Society, 2006). Additionally, the increase of the immigrant population into the United States has brought with it a plethora of ELLs (Migrant Policy Institute, 2010), who may also be students who end up diagnosed as having ASD. (p. 2).

Her project sought to actually give educators a few tools to close the gap in the learning for the ELL on the autism spectrum. I felt before curriculum tools could be used, the gaps and attitudes leading to some of these gaps needed to be identified. Therefore, this study aimed at looking at where these gaps were inhibiting the learning of this population of students. In being the parent of a child on the spectrum, I have been exposed to many tools, techniques, curriculum,

accommodations, modifications, therapies, and/or interventions that have been discovered to help a child overcome some of the hurdles of autism. As an educator of ESL, I have been exposed to the tools, techniques, curriculum, and best practices of acquiring a new language. The biggest gap that I see, per my experience, is that these two lines of education parallel each other, but they do not cross, wherein lies the problem.

ELL students on the autism spectrum need to be educated by the easiest path possible; the education system needs to look at how they are mirroring how the child is learning at home just as the education system asks parents to mirror what they are doing in the classroom; this is a two way street. In my experience, when I am mirroring how my son is learning at school, his learning progresses; common sense would then tell us that when the scenario is reversed the same progression occurs. It is equally important that parents and teachers are emulating the same thing in both the classroom and in the home. Therefore, a closer look at what is going on inside the classroom environment to determine what is hindering an ELL with an ASD is important.

Lack of Communication. The main thing that stood out according to the participants of this questionnaire, as being barriers to good intervention for these students were, first and foremost, not enough communication was happening between all involved parties. Every single participant, whether they were ESL, SPED, or SLP, had been discouraged due to the lack of communication between all the people that had to be involved with one student as well as with the lack of collaboration between the parents with any of the educators responsible for working with their child. Add to that a case load of students, and the system gets bogged down.

Lack of Training, Education, Materials, and Open-Minded Educators. The second point was that the participants felt that there was an overwhelming lack of training, materials,

and open-minded educators. In my experience, the lack of experienced autism specialists as well as bilingual educators poses the most issues when trying to plan out an education plan for an ELL on the spectrum. If a child is in need of bilingual services, then they have an ESL teacher who knows how to alter his/her teaching techniques to accommodate the learning of their students. The same can be expected from the SPED teacher for a child with a disability. But now you have a cross in education specialties, and the ESL teacher did not take SPED classes in university studies and vice versa. So, trying to educate this special child, with one side or the other is like trying to clap your hands using only one hand or the other. Common sense tells us that you have to have two hands to achieve a clap, otherwise you are hitting at the air, but when both hands are engaged, the clap is successful.

With necessary training then come necessary materials. Educators are left to their own devices to try and come up with original material to educate these children. There just have not been enough studies nor curriculum researched to pull information from, which makes resources scarce. And due to the nature of autism, as each child is different, what works for one child may not work for another child.

The final thing lacking is that of more open-minded educators. There were actually two participants that just did not like the idea that these children should have the opportunity to learn in their native language and progress from there. I speculate that these participants did not feel it the responsibility of the public education system to offer bilingual services not only to children on the autism spectrum, but probably the rest of the bilingual population as well. They were very adamant about making it mandatory that bilinguals learn English since it was the dominant language of the country, and they be taught in English. This is very much in keeping with Thordardottir's (2006) comments about how those from a monolingual culture have trouble

identifying with the alternative multilingual culture environment. To further the point, as Park (2014) points out, not raising a child bilingually will deny the child all of the benefits of being bilingual.

In my own experience as a parent of a child on the spectrum, it is best to educate them with the easiest path possible. That path is going to be different for each family. I, personally, know what it takes to raise a child on the spectrum. I know that in order for my child to be the best he can be, I have to put him on a path that makes goals and objectives attainable for him. I have learned through the years that a child on the autism spectrum does not learn in conventional ways; they do not pick things up. They do not understand cues. They have to be taught every single lesson that they learn, and transfer of learning is very difficult to non-existent for a child on the spectrum. If a parent cannot be that involved with a child because they, themselves, do not have the same language as the child is being advised to be taught, that child, who already has an uphill battle with autism, now has a double-uphill battle with the language issues. So the mindset of the people in predominately monolingual societies need to be opened to the reality of what is a bilingual world.

Lack of Qualified Personnel and Understanding. A widely known fact, as also pointed out by the participants, is that there are not enough qualified personnel in the fields of autism, ESL, and specifically ESL qualified educators with special education training. General education teachers are not given much of a glimpse into special education as way of required course; it is comforting to know that ESL and autism are now making a small presence in the K-12 teacher education programs in Texas. According to Texas A&M University (2014), K-12 requires one overview class, INST 463, English as a Second Language Methods, in the junior

year of studies (p. 324). According to the 2014-2015 undergraduate catalog, this class teaches the following:

“Strategies and techniques for teaching English language learners; curriculum design, and material development, instruction of ELL, content area instruction, language assessment instruments, historical perspective of education of ELLs in U.S. schools” (p. 727).

Also, according to Texas A&M University (2014), Special Education degrees only require one overview class, SPED 414, Methods and Issues in Low-Incidence Disabilities, dealing with autism, but not specifically (p. 305); this class teaches the following: “Overview learning and behavioral characteristics of individuals with low incidence disabilities such as intellectual disability, autism, physical disabilities, traumatic brain injury, sensory impairment, and multiple disabilities...” (p. 817).

At Hamline University, I was very pleased to learn that they have a full certificate giving full time focus to the education of children on the autism spectrum, as I took the first class to this certificate with full intentions of finishing the certificate offered. And while this does not combine specifically ESL education with it, I believe this is a step in the right direction.

An article from the *Houston Chronicle* regarding this issue, from the woes of Houston Independent School District (HISD), the largest school district in Texas with well over 203,000 students (Houston Independent School District [HISD], 2013), states it plainly: “HISD struggles with lack of bilingual special-ed teachers” (Mellon, 2012). Sowmya Kumar, overseer of special education for HISD, addressed the school board in detailing how HISD is struggling to find good, qualified, and experienced teachers to meet the academic needs of an ever growing number of students who have not only poor English skills but also struggle with learning disabilities.

She states that schools, unfortunately, have to make the choice between language and special education. This problem does not seem to be a problem HISD faces alone (Mellon, 2012).

Time. A common complaint from all the participants was that there just was not enough time for all the planning, collaboration, training, education, and/ or workshops that needed to go into creating the best education plan for each student. With more students entering into the school system every year who need specified assistance, the general education teachers have to learn on-the-go as well as handle their normal load with the other 20 – 25 students per class. They also have the demands of the federal and state governments who keep implementing more mandates to be followed. Teachers and administrators are trying to find new ways to educate and create understanding of this population of students' needs with all involved parties so that each student gets the learning that they need to be successful.

Mainstreaming. Sandi Cole of the Indiana Institute on Disability and Community, in an interview with the Indiana University News Room, regarding a report issued by the Center for Evaluation and Education Policy (CEEP) and the Indiana Institute on Disability and Community (IIDC), discussed the conflict between the No Child Left Behind Act, 2001 (NCLB) and the Individuals with Disabilities Education Improvement Act 1997 (IDEIA). IDEIA sets to look at individualizing curriculum and assessments which will tell of success based on the growth and improvement of the student each year. The NCLB, on the other hand, measure all students by the same markers which are not based on individual improvement but by establishing proficiency in math and reading. This conflict has put pressure on the school system to figure out whether the best placement for a special education student should be in the mainstream classroom or separated out. Some students need to be measured over a longer period of time instead of score from a test at one point in time (Indiana University, 2006).

The information presented in this article gives the sentiment of many of the participants of this study. The standards that the special education and bilingual populations must adhere to are much too stringent given the nature of learning styles of SPED and ESL. It seems that each child's learning style is not taken into consideration. A person's learning style is a means by which someone learns to gain knowledge around them. Some people learn through seeing, some through hearing, some through a hands-on means such as touching or using an object, or a combination of the three. According to Edelson (n.d.), it is very important for children on the autism spectrum to be identified under the style of learning that suits them best. If a child is a learner of one style yet the teacher uses a style which is not indicative of that child's learning, then the child is being set up for failure. So, it is important that teachers understand the concept of learning styles so that a child on the spectrum can gain the knowledge being taught to them in the easiest most efficient manner possible. This will give them a greater chance for academic success (Edelson, n.d.).

According to a few of the participants, not being able to assist the child with autism, and especially those with the added issue of language, in a one-to-one setting on their own terms of learning is hindering the teacher's ability to teach. Not having the option of separating them out from the main population of students is proving to be a hindrance more than a help, and it is putting pressure on the students and the educators. There has to be a middle ground that these students can fall in to. There has to be a system whereby if a student can handle full-mainstream learning with little assistance, then let that student be mainstreamed, but if a student cannot handle learning in the mainstream environment, there needs to be a parallel learning environment that takes into consideration what each individual needs outside the mainstream environment.

Parental Involvement. Research data shows that when a parent of an ELL does not speak English at home, it is less likely that they will participate in the child's day to day activities involving the school. Language and cultural differences can actually hinder communication between the families of the EL student and the school teachers and administrators (U.S. Department of Education, 1997).

The participants of this study were all in agreement that the learning of a child has to begin at home, and that the parents must be an active participant if the child is to be successful. According to several studies overviewed by Carter (2002), of the Consortium for Appropriate Dispute Resolution in Special Education, parent involvement has a positive impact on how the student performs in school throughout all grades from kindergarten through 12th grade.

In Table 4.1: Primary Responsibilities, located in Chapter 4, six of the eight participants all felt that parents should support the child academically but also should support the overall being of the child. They agreed that parents needed to be involved and participate in their child's learning. They needed to advocate for their child especially when a parent felt that their child's learning was not progressing. Parents needed to collaborate with all educators, but at the very least the general education teacher on a regular basis. In my experience, it is very important that parents stay informed of what is going on at school, what tools, techniques, and/or interventions the teachers are using, so that parents can emulate these at home for a more seamless transition to learning; this helps to avoid confusion for the child. Unfortunately, I know that many parents, even monolingual ones, do not get involved, and if there is a language barrier, per surveys, studies and personal experience, they will not reach out to the educators. Another barrier to communication is legal status of immigrants, even if the child is legal. According to Semple (2011), students are still hindered even if they have citizenship because the parents of these

students tend to live their lives in the shadows, especially if the parent is undocumented. He states that by bringing these families out of the shadows and removing the stigma they carry, we, as a nation, can give the children of these immigrants a better chance at success not only through school but beyond (Semple, 2011).

In summary, I discovered some of the barriers to moving forward to finding solutions that will better the learning environment for ELLs not only on the autism spectrum but, likely, for disabilities overall. And while there are probably more than the ones mentioned here. These six areas: Lack of Communication, Lack of Training, Education, Materials, and Open-Minded Educators, Lack of Qualified Personnel and Understanding, Lack of Time, the Mainstream environment, and Parental Involvement are a very good starting place to focus our energy.

Bridging the Gaps

In the aforementioned section, the most important gaps as outlined by the participants of this study were given. Along with those gaps, these participants had some good ideas on how to bridge those gaps so that a better cross-education learning environment could be created for this special population of students. Each of the following sections will attempt to tackle the tasks and make suggestions on how each of the gaps can be made smaller or even overcome.

Lack of Communication. The overall tone of the participants was that communication was an essential key to the success of the ELL on the autism spectrum or any disability; they also all agreed that while communication was happening, it was haphazard in many cases as each individual involved with any given student was also working on other student cases and teaching. The SPED diagnosticians, certified SPED educators who have attained a Master's degree of SPED diagnostician, that participated felt they were the best resource for all the educators involved, yet many of the teachers did not utilize their expertise.

One recommendation is that the SPED diagnostician should be the focal point for any student in SPED whether that child is ELL or not. The SPED diagnostician, not having classes to teach, has a lot more time to evaluate and contemplate best practices for learning for the students under the SPED umbrella. Even if educators cannot find the optimal means to communicate, a system of having a focal point, such as the SPED diagnostician, could be put in place; this way, each educator could get vital information relayed to the other teachers involved by getting that information to the diagnostician, who could then disseminate the information to the appropriate parties involved. Along with appointing a designated focal point of contact, the use of technology might be helpful in facilitating the movement of information between all parties, possibly including the student's parents. Another thing that technology might assist in is the means to meet virtually whenever face-to-face meetings are not possible between all educators and the parents.

Co-Teaching was another thing that all of the participants mentioned as being a communication tool. They had all participated in co-teach at one time or another, and they all felt that being in the classroom with the general education teacher helped them to make assessment on best practices for teaching the ELL on the autism spectrum. This opportunity also gives the ESL and SPED educators the opportunity to share and model their experiences in teaching this population of students.

Lack of Training, Education, Materials, and Open-Minded Educators. An overall complaint of the participants was that there is not enough training and education for educators regarding this special population of students. As noted in the gaps section above, teachers coming fresh out of college do not have enough education and training about the students they are being asked to teach; they get into the classroom and are asked to teach while learning on-

the-go. While their efforts are appreciated, the children being taught in this manner are not getting the education they require.

Professional development was the number one suggestion of the participants in this survey. There needs to be training, development courses, and hands-on workshops whereby the teachers can go and learn and then bring back things they can use immediately in their classrooms. Professionals in the fields of ESL, autism, and SPED need to be sought after to conduct seminars and/or teachers need to be sent to such seminars. Either way, it is imperative that the teachers get the education and knowledge they need in order to effectively teach their ELL on the spectrum.

There are many places that districts can look to for the most up-to-date information about this special population of students:

The International Society for Autism Research (INSAR) (2015) is a very good source of information. This is a global organization that has researchers from all over the world working on various aspects of autism, including education. I discovered that much of the research is not solely medical, but education for people with autism in any country. Each year they hold a global conference which showcases all of the research from around the globe done this past year.

Autism Speaks (2015) is another resource organization. They too have researchers from all over reporting their research and findings. They hold seminars and conferences all around the United States and have a vast amount of information about many topics dealing with autism from medical to social to educational.

Teachers of English Speakers of Other Languages (TESOL) (2015) is also another good resource. While it does not specifically tackle autism, it showcases lots of professionals who

have a wide range of expertise including neurologists such as Zadina, Hernandez, and Kraus (2013), who wrote *Harmonizing EFL Practices: Neuroscience Research*.

These are, by far, not the only sources out there, so schools and educators need to do their due diligence and locate the best organizations that can assist in their needs.

Another issue that plagues the school system is opening up closed minds to new ways of doing things. It is proven time and time again that once human beings are set in their ways, it is very hard to make them change. With the onset of this new and global community we live in, typically monolingual countries are now mingling with countries that use more than one language within their borders. And yes, English is the dominant language in the U.S., but when it comes to children with autism, I have learned with my son that the best path to success is teaching them in the easiest manner for them to learn; add to that a bilingual child, and the path that makes most sense is to allow them to learn their basic skills and knowledge through what is most familiar to them. If their family is to be their support, then whatever language the child is accustomed to, let them learn in that manner until their language skills are high enough to engage in the next language.

In the past few years, companies and organizations in this country have been going through diversity training, and while this diversity training has more been aimed at the employees and working environments, school districts have to take it a step further and educate and make sensitive its employees to the needs of the students and their families. This could be training in culture, whatever culture is dominant, training in all kinds of special education needs, training in understanding of culture shock, training to deal with students in under privileged households, and training in learning what students from other countries go through, especially when their families are split between countries. And we must remember that it is not only the

new immigrant, it is also important to understand the plight of the first generation of students here and what difficulties they go through.

Another thought to keep in mind is that the school also needs to be sensitive to those who are undocumented regardless of political affiliations; I believe that we cannot make our country strong by allowing the children, especially those with a disability, to slip through the cracks due to bias and misunderstanding. Of the parents I have had the privilege to meet, as well as many of the participants of this survey, the underlying goal of all parents is to help their child with the best of their ability no matter what. If we can get that spirit to emulate across our school campuses by engaging these students and their families in meaningful and cross-cultural ways, I think that changing the mindset of people could happen

Lack of Qualified Personnel and Understanding

Finding Qualified Personnel. All the participants agreed that there are not enough qualified people to do the job at hand. It is a bit trickier to find solutions for this since schools will have to seek out those people who have the education and training. One barrier to this, though, is that all over the U.S., immigrant populations vary, so requiring the training in a specific language will not help. In several states across the U.S., policies are mandated such as the policy a participant explained: if there are at least 20 students of one language in a grade, in the same building, then a bilingual class must be opened; but the problem lies in the fact that there might be a handful of other languages that are being left out. In my experience as an ESL teacher, bilingual teaching in and of itself is not effective. There needs to be people who are ESL trained and not just a teacher who speaks a second language. Districts need to understand the needs of the students in order to acquire the most highly trained and qualified personnel. As

the problem was outlined in the earlier section, some of this can be addressed at the university level; such as requiring more of the degree than just one or two overview classes.

Recruiting efforts for good candidates for teachers will need to begin; yet, again, districts need to know what to look for in a good candidate. According to the *National Strategy Forum: Supporting and Staffing High Needs Schools*, (Berry [with Rasberry & Williams], 2007), teacher incentives are one way to attract quality teachers:

- Signing Bonuses for working in high-needs areas, higher bonuses for Master's level, and offering retention bonuses.
- Student Loan Forgiveness: In Arkansas, for example:
 - ...two years of forgivable loans in a four-year program for teacher education students willing to teach math, science, special education, or foreign languages. The normal \$3,000 loan forgiveness for each year is doubled to \$6,000, if the student is willing to teach one of these high-needs subjects in an area of the state that has a critical shortage of teachers. (p. 2)
- The U.S. Department of Education recently launched its \$99 million Teacher Incentive Fund designed to recruit and retain teachers for high-needs schools and to pay them more for higher student performance.
- And, the National Education Association, in association with the National Board for Professional Teaching Standards, created a series of conferences on teaching districts how to recruit and retain the quality teachers they need for their high needs.

The report goes on to state that while money is a great incentive, it is not everything that a teacher is looking for. The following are other things of importance to educators:

- location that makes a difference,
- lack of administrative support is important to others,
- poor working conditions is also a concern,
- lack of preparation from the situation they are about to enter,
- lack of student motivation is a factor,
- little decision making power from the teachers,
- and student behavior issues all play a part in the recruitment of good, quality people. (Berry et al., 2007, p. 4–5).

Other determinants that keep districts from acquiring a good quality teacher are not having:

- “strong principal leadership,
- a collegial staff with a shared teaching philosophy,
- adequate resources necessary to teach,
- a supportive and active parent community
- reasonable student load (Berry et al., 2007, p. 5–6).

This report lists several recommendations that districts might need to consider when looking to get good, qualified personnel in the high-needs fields of ESL and SPED:

1. Transform the teaching and learning conditions in high-needs schools.
2. Prepare and support teachers for the specific challenges posed by working in high-needs schools.

3. Recruit and develop administrators who can draw on the expertise of specially-prepared teacher leaders.
4. Create a menu of recruitment incentives, but focus on growing teaching expertise within high-needs schools.
5. Build awareness among policymakers, practitioners, and the public about the importance of National Board Certification for high-needs schools. (Berry et al., 2007, p. 6–13)

Understanding. Understanding the needs of the students within any given area is important, but it is especially important in the areas of ESL and SPED, specifically autism. Autism has its own set of issues, and ESL has its own set of issues. The problem occurs when the educators know about one or the other or nothing about either. Without the special training and education about these groups, a teacher will be at a loss on how to assist these children. Understanding not only comes in the form of knowing what to expect from a child with autism, but also understanding the issues facing an ELL. Each has its own set of difficulties, and a teacher must be able to learn and understand about each child's needs. For me, as the parent of a child on the spectrum, I try and educate my son's teachers at the beginning of each new school year with a 'get to know – my son' list. I tell the teacher his behavior patterns, his quirks, his likes and dislikes, that he is inquisitive to the point of being annoying, and that he is an observer, but that through his observations he usually hits the mark the first time he attempts something new. I am probably every teacher's dream parent, but unfortunately, many teachers are stabbing in the dark unless they have had students on the spectrum before in their classes or they know someone close to them who is affected. This is where the SPED and ESL teachers must come in and educate. I feel, as do many of the participants, that SPED and ESL educators need to share

more of their knowledge with the people working around them; but also the educators needing to learn must also be willing to accept the information they are being given. In my experience of being around many educators, and having family and friends in the profession, I have seen so many teachers just dismiss the idea of learning what others can share. Sharing and modeling the techniques and tools these specialized educators have gained through the years is the best way for others to learn and understand how they can be a part of the solution without having to always rely on the specialists.

Another thing that could be a huge contribution to add to the understanding of student needs would be to have a mandatory provision for all students during their student teaching semester to have to complete a certain amount of days spent in an ESL classroom, float with a SPED case manager, as well as be in the classroom with a co-teach partner; while this is only a glimpse into what they will be dealing with when they get their own classroom, it will give them a look at what they are up against without being shocked when they enter into their first year of teaching.

One last thing that might help the teaching of special populations and indoctrinating new teachers to the landscape might be to look to Europe and their requirements for teachers. As I am most familiar with Germany, I will take my example from them. My sister-in-law is studying at her university to be an elementary school teacher who specializes in music, German, and mathematics. They are required, as here in the States, to have one teaching semester in a public school and to be evaluated by the teachers and administrators who oversee her. But, in Germany that is not where it stops. After she graduates, she must be accepted to teach at a school, but she will not be allowed to teach on her own, this is the internship part of being certified. She will also get less pay for those years since she is technically an intern, and she will not get her

teaching license to teach her own class until she has completed this intern period; her administrators will need to sign off that she is qualified and ready to teach for the public schools in Germany. During this time, though, she gets to teach in her own classroom monitored by her mentor. She gets to see what it is like in the classroom and what demands are going to be put on her. With what I understand about this system, this is a wonderful way to indoctrinate teachers into the system, so that when they finally get their license and a classroom of their own, there are little in the way of surprises. According to the University of Michigan (n.d.), the evaluations do not stop there; the German state government evaluates its teachers “every 4 to 6 years until they are 55 years old” (para. 6). They are observed and evaluated on the lesson plans, the delivery of the lesson, and an examination of the teacher’s assessment of student’s work. The observer discusses with the teacher what was observed and then writes a detailed report and gives that teacher a grade (University of Michigan, n.d.).

Finally, while holding workshops and training is never a wasted effort, especially for those who have already finished their degrees, I think that incorporating the learning on the front side of getting into the classroom instead of trying to wedge it into a current teacher’s day will make for much more productive teachers in the future.

Time. Time is a precious commodity to everyone, and this is no different for educators. All the participants agreed that time was the one thing that they all needed more of, time for communication, collaboration, planning, training, follow-up, workshops, learning, and more. All participants were in agreement that if there were no time constraints, they could take their time, collaborate with others, research new methods, and have time for trials and errors. Time and classroom management are things that the classroom teacher must look at. How are they spending their time and how are they managing their lessons?

A creative article written by Minkel (2015) for *Education Week* gives some examples of how teachers may be able to overcome the woes of not having enough time. His first thought is to tell teachers to make friends with time instead of being its adversary, so “make friends with the clock” (para. 12). How can teachers do this?

1) Talk less. Let the kids talk, do, and create more.

Every teacher I know talks too much. If we only have 30 minutes for a lesson, 15 minutes is too long to talk

2) Choose depth over breadth.

Conceptual understanding matters more than coverage... allow for in-depth instruction...Kids often get more out of an hour-long block three times a week than a daily 35-minute period...The same benefits apply with respect to longer blocks of time with young children: fewer disruptions, greater focus, and more time for meaningful work.

3) Work hard, but don't work all the time.

Teaching is the most consuming work I know. The time it takes can invade your life, your home, and your mind, unless you make some clear divisions between work time and time for everything else...I love the hours I set aside each day to plan lessons, get my classroom together, and look over student work. But I love it because I also block out times to...read books for pleasure, go on long bike rides around the lake, and battle imaginary “bad guys” with sticks and plastic swords in the backyard with my three-year-old son. (Minkel, 2015, para. 16).

Classroom management techniques help. In my experience, having a Master's degree in management as well as working in the corporate world and being required to attend management workshops, districts should supply their employees with the tools and assistance they need in managing their classes. According to an article for the Florida Education Association (FEA) (n.d.), attention needs to be paid to the following to achieve good management:

- Time-on-task, which proposes that “true learning depends on the amount of time a student spends actively engaged in the learning process compared to the amount of time the student needs in order to learn” (para. 2).
- Allocated time, “the total amount of time available for learning, also noted as the opportunity given to learn...” (para. 4). The following were found to limit learning and/or cause students to lose interest:
 - Unscheduled interruptions, public announcements, fire drills, visitors and other *school management practices*
 - Uneven transitions between activities and inefficient *classroom management procedures* that disrupt the learning flow, such as disorderly material distribution or disorganized assignment collection
 - Over-reliance on seatwork, uninteresting and overly demanding lessons and other non-engaging *instructional practices*. (para. 4)
- Engaged Time was found to show “that the more engaged time students have, the higher they achieve” (para. 5).
- Academic Learning Time, which “has to do with quality; it is the amount of time students spend actively working on tasks of an appropriate difficulty” (para. 6).

According to this study, to maximize learning time, teachers must:

- lessons around the learning tasks and give clear, concise task Accurately diagnose each student's knowledge and skill level
- Prescribe learning tasks appropriate to a student's level
- Structure engaging directions
- Have substantive teacher-student interaction during the lesson, such as: modeling, guiding students as they practice, asking probing questions, giving corrective feedback. (para. 6)

Mainstreaming Students. The term mainstreaming has become a hot topic of conversation in the education world, mainly due to an overwhelmed system and misunderstanding. Many of the participants feel that this form of education is not the best way to go about educating the ELL with special needs because it is not individualized enough. The districts, unfortunately, look at things from a financial viewpoint which usually dictates how things will be done. It is time to come to a consensus on how best to utilize this concept. According to an article from Concordia Online Education (2012), every child can learn, but it is important for educators to understand how these children learn. Educators cannot tap their potential if they do not first take the time to learn the ways in which their pupils learn. This is why creating the best learning environment to include varying forms of learning instruction is important (Concordia Online Education, 2012).

Is mainstreaming an ELL with an autism spectrum disorder the best the education system can come up with in order to educate this population of student? There are many people suggesting that special-needs students need to be mainstreamed into a classroom with regularly developed peers. There are those that feel the mainstream environment is not suitable

for every child deemed special education. Are the proposed successes enough to overcome the potential drawbacks of educating special needs children in this manner? Many educators believe, as do I having a child on the spectrum, that a special-needs child can easily get lost in a regular classroom. According to studies and personal experiences, the special needs student (having a disability or language barrier) can be disruptive to all the other students in the classroom making it harder for them to concentrate and learn the materials being taught. As a parent of a child with special needs, I know all too well that I have to advocate for him, but as an educator, I have to look at the big picture, and the school system is set up for all children and not just those with special needs. So, attention cannot be diverted from the other regular developing students' needs (Concordia Online Education, 2012).

It might be beneficial to look to Europe and Canada to see how they are dealing with the issues of mainstreaming. A report from the Irish National Teacher's Organization (INTO) (2003) showcasing the mainstreaming of special needs students states that the Department of Education and Science created special appointments called resource teachers, equivalent to SPED teachers, special needs assistants, equivalent to SPED paraprofessionals, and visiting teachers, no equivalent.

- The role of the resource teacher, according to the Department of Education and Science, is to provide additional teaching support for children with special needs who have been fully integrated into mainstream schools and who need such support. (p.10).
- ...Special needs assistants...support the work of teachers whose classes include pupils with special needs. Their duties included helping pupils,

individually and in groups, to cope with tasks across the entire school programme under the guidance of the class teacher. (p. 11).

- The Visiting Teacher Service was established...to support the education of pre-school and primary school children... Working closely with Health Boards, the National Rehabilitation Board (NRB) and other agencies, the visiting teachers went into homes, mainstream schools and special schools to assist in diagnosis and assessment, to advise on and teach areas of the curriculum. The current role of the visiting teacher may be described as follows:
 - The Development of Policy in Special Education I Providing accurate, up-to-date information and guidelines for parents and professionals concerning the education of pupils with certain disabilities;
 - Responding authoritatively to queries from parents and professionals on issues pertaining to the education of pupils with disabilities;
 - Identifying developmental and educational goals and expectations, and developing strategies for their attainment;
 - Employing specialist teaching skills with their pupils, and sharing their skills with classroom teachers;
 - Exploring with parents the educational options available and assisting their decision making and giving non-directional advice;
 - Facilitating the smooth transition into an initial or alternative educational placement. (p. 11 – 12).

According to Stanviloff (n.d.) in a report for the Saskatchewan School Boards Administration in Canada, much support has to be in place for it [mainstreaming] to be successful. The report discusses how mainstreaming special populations can work as long as the right provisions and support are put into place. Identifying and defining key terms and phrases within the mainstream environment are key to making sure all participants are on the same page. The other important thing noted is that teacher's concerns are often overlooked. They are given directives and expected to follow them with little or no direction as how to do so (p. 62). Such studies reinforce the notion that while support for children is vital, the needs and concerns of teachers must also be addressed. Team members who can provide support to the classroom teacher who is involved in mainstreaming are the following:

- “school principals,
- special education teachers and consultants,
- colleagues,
- paraprofessionals,
- parents, and
- students themselves.” (Stanviloff, n.d.).

Parental Involvement. All participants were in agreement when it came to the success of their students; parents are vital. Reaching out to the parents of ELL students on the spectrum, or with any disability, is imperative to the success of the child. Here are some ways that educators can reach out to their parents according to the participants of this survey.

- Use the parents preferred language, relying on an interpreter if necessary. This not only means orally but in any form of communication given to the parents.

- Teach them about the education system in the United States as it differs greatly from other education systems of other countries.
- Explain the expectations of the system such as grading, honesty, testing standards, etc.
- Explain their rights as parents in the school system, especially for a child with special needs and language barriers.
- Explain the need for special education and what this can do for their child.
- Vie for budgets to offer parents basic English language classes.
- Establish teams to go out into the communities where they live and make contact.
- Invite parents and families into the school, not just on parent teacher nights or school carnivals; advocate for special nights for non-English speaking families and SPED which will isolate these groups so they do not feel so overwhelmed with the mainstream public.
- Make yourself available to the parent other than through notes and letters and/or phone calls.
- The PTO is a great organization to pair up with; they can offer volunteers to help with such special nights as well as individualized tours of the campus, facilities, and other things which may arise that would benefit the parent and the children. (Source: ESL, SPED & SLP Questionnaire: Participants suggestions)

In summary, each of these six barriers discussed do have some feasible way to move past in order to make for a more successful cross-educational learning environment for ELLs on the autism spectrum, as well as with any other disability. Depending on how one sees things, fortunately or unfortunately, the solutions are endless, as this paper only touches on the surface; much more in the way of research needs to be done.

Limitation to this Research

This was an overview research attempt to find out what gaps might be keeping ELL students with autism, and, as discovered, any disability, from getting the best cross-educational learning to be successful. While this questionnaire sought to discover the feelings about what teachers currently in the field are experiencing, this is a truly subjective perspective. Much more concrete research needs to be done on each of these areas singled out as well as in many more areas in order to get a good, solid picture of what is going on in the classrooms, what is working or not working, and why it is or is not working; changing attitudes will be the biggest obstacle even more so than implementing curriculum, and overcoming fears of immigrant or undocumented people is very hard given the political situation of the United States. The information gained from this research is not to influence any certain way to educate this population of students but to identify gaps and attitudes that are keeping the establishment from moving forward in finding the best ways to educate these students.

Conclusion

From this research, six main areas were of concern to the participants that they felt were hindering the cross-educational learning of an ELL on the autism spectrum: Lack of Communication, Lack of Training, Education, Materials, and Open-Minded Educators, Lack of Qualified Personnel and Understanding, Lack of Time, Mainstreaming of Students, and Parental Involvement. Each area was singled out and discussed as to the problems each area created as well as how each of these areas could be improved upon to make for gains in learning for the ELL on the spectrum. As this topic has not been discussed much in the past, it is gaining strength due to the rise in numbers of ELL school children who are also on the autism spectrum. With the influx of both seemingly not slowing down any time soon, it is imperative that these

gaps be recognized by all educators and especially those who make the decisions in the education system.

REFERENCES

- American-Speech-Language-Hearing Association. (ASHA). (n.d). Social Language Use (Pragmatics). Retrieved from <http://www.asha.org/public/speech/development/Pragmatics/>
- Autism Speaks. (2008). General Strategies for Intervention: Why a Team Approach? Retrieved from http://www.autismspeaks.org/docs/family_services_docs/sk/General_Strategies.pdf
- Autism Speaks. (2013, December 16). Study Finds High Rate of Autism among Minneapolis Somali Community. Retrieved from <https://www.autismspeaks.org/science/science-news/study-finds-high-rate-autism-among-minneapolis-somali-community>
- Autism Speaks. (2015). Retrieved from <https://www.autismspeaks.org/>
- Beebe, S.A., Beebe, S.J., & Ivy, D. (2004). Chapter One. In *Communication: Principles for a Lifetime*. (2nd ed., pp. 4-18). Boston: Pearson Education.
- Berry, B., (with Rasberry, M., & Williams, A.) (2007, November 1). Recruiting and retaining quality teachers for high-needs schools: Insights from NBCT summits and other policy initiatives. Retrieved from Center for Teaching Quality (CTQ) Web site: http://www.nea.org/assets/docs/HE/mf_nationalstrategyforumreport.pdf
<http://www.teachingquality.org/content/recruiting-and-retaining-quality-teachers-high-needs-schools-insights-nbct-summits-and-other>
- Bock, K., & Stauth, C. (2007). Chapter Two: The Healing Program. In *Healing the New Childhood Epidemics: Autism, ADHD, Asthma, and Allergies: The Groundbreaking Program for the 4-A Disorders*. (pp. 21-25). New York: Ballantine Books

- Brown University. (n.d.). Think-Pair-Share. Retrieved from <http://www.brown.edu/about/administration/sheridan-center/teaching-learning/effective-classroom-practices/think-pair-share>
- Carlyle, R. (2013, October 4). English Language Learners and Students with Autism. Retrieved from Prezi Web site: <https://prezi.com/nxylfh37biu/english-language-learners-and-students-with-autism/>
- Carter, S. (2002, December). The Impact of Family/Parent Involvement on Student Outcomes: An Annotated Bibliography of Research from the Past Decade. Retrieved from Consortium for Appropriate Dispute Resolution in Special Education (CADRE) Web site: http://www.directionservice.org/cadre/parent_family_involv.cfm
- Center for Applied Linguistics (CAL). (2014, October). Sheltered Instruction Observation Protocol (SIOP). Retrieved from <http://www.cal.org/siop/>
- Centers for Disease Control and Prevention (CDC). (2015). Autism Spectrum Disorder (ASD): Data and Statistics. Retrieved from <http://www.cdc.gov/ncbddd/autism/data.html>.
- Concordia Online Education. (2012, October 25). Mainstreaming Special Education in the Classroom. Retrieved from <http://education.cu-portland.edu/blog/special-ed/mainstreaming-special-education-in-the-classroom/>
- Devito, J.A. (2014). Chapter 1: The Essentials of Human Communication. In *Human Communication: The Basic Course*. (13th ed.). Pearson. Retrieved from http://catalogue.pearsoned.co.uk/assets/hip/gb/hip_gb_pearsonhighered/samplechapter/0205930662.pdf
- Edelson, S.M., (n.d.). Learning Styles and Autism. Retrieved from Autism Research Institute (ARI) Web site: http://www.autism.com/understanding_learning

- Elder, J.H., Seung, H., & Siddiqui, S. (2006, March). Intervention outcomes of a bilingual child with autism. *Journal of Medical Speech-Language Pathology*, 14(1), 53-63.
- Florida Education Association (FEA). (n.d.). Time-on-Task: A Strategy that Accelerates Learning. Retrieved from <https://feaweb.org/time-on-task-a-teaching-strategy-that-accelerates-learning>
- Fountain, C., & Bearman, P. (2011). Risk as Social Context: Immigration Policy and Autism in California. Retrieved from U.S. National Institute of Health's National Library of Medicine (NIH/NLM) Web site:
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3105781/>
- Fuchs, D., & Fuchs, L.S. (2006). Introduction to Response to Intervention: What, why, and how valid is it? *Reading Research Quarterly*, 41(1), 93-99.
- Gesture [Def.]. (n.d.). In *Oxford Dictionaries Online*. Retrieved from
http://www.oxforddictionaries.com/us/definition/american_english/gesture
- Gowen, E. (2012). Imitation in autism: why action kinematics matter. Retrieved from U.S. National Institute of Health's National Library of Medicine (NIH/NLM) Web site:
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3521151/>
- Houston Independent School District. (HISD). (2013). 2012-2013 Fact and Figures. Retrieved from
<http://www.houstonisd.org/site/default.aspx?PageType=14&DomainID=7908&PageID=41879&ModuleInstanceID=48525&ViewID=1e008a8a-8e8a-4ca0-9472-a8f4a723a4a7&IsMoreExpandedView=True>

- Indiana University. (2006, November 15). Report: No Child Left Behind is out of step with special education [Press release]. Retrieved from <http://newsinfo.iu.edu/news/page/normal/4379.html>
- International Society for Autism Research (INSAR). (2015). Retrieved from <http://autism-insar.org/>
- Irish National Teacher's Organization (INTO). (2003, January 1). Supporting Special Education in the Mainstream School. Retrieved from <http://www.into.ie/ROI/Publications/Title,13006,en.php>
- Jacob, E. (1988). Clarifying Qualitative Research: A Focus on Traditions. *Educational Researcher*, 17(1), 16-24.
- Kremer-Sadlik, T. (2005). *To Be or Not to Be Bilingual: Autistic Children from Multilingual Families*. In Cohen, K. T. McAlister, K. Rolstad, & J. MacSwan, (Eds.), *Proceedings of the 4th International Symposium on Bilingualism*. pp. 1225-1234. Somerville, MA: Cascadilla Press.
- Lexeme, [Def.]. (n.d.) In *Merriam-Webster Online*. Retrieved from <http://www.merriam-webster.com/dictionary/lexeme>
- Mackey, A., & Gass, S.M. (2005). *Second Language Research, Methodology and Design*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Marom, J.P. (2003). Stanford-Binet Intelligence Scale. In *Encyclopedia Online*. Retrieved from http://www.encyclopedia.com/topic/Stanford-Binet_Intelligence_Scale.aspx
- Mellon, E. (2012, November 26). HISD struggles with lack of bilingual special ed. teachers. *Houston Chronicle*. Retrieved from <http://www.houstonchronicle.com/news/houston-texas/houston/article/HISD-struggles-with-lack-of-bilingual-special-ed-4068283.php>

- Minkel, J. (2015, February 24). How Teachers Can Make Better Use of Time. *Education Week*. Retrieved from <http://www.edweek.org/tm/articles/2015/02/24/how-teachers-can-better-use-time.html>
- Naglieri, J. (n.d). Tests by Jack A. Naglieri, Ph.D. Retrieved from <http://www.jacknaglieri.com/tests.html>
- O'Hara, T. (2005). Representing Lexical Knowledge. In *Representation, Acquisition, and Utilization of Lexical Knowledge*. (Review of Literature for doctoral dissertation). Retrieved from <http://www.cs.nmsu.edu/~tomohara/ohara-phd-thesis-nmsu05.pdf> pp. 21.
- Park, S. (2014, July). Bilingualism and Children with Autism Spectrum Disorders: Issues, Research, and Implications. *NYS TESOL Journal*, 1(2), 122-129. Retrieved from <http://journal.nystesol.org/july2014/122park.pdf>
- Petersen, J. (2010). *Lexical Skills in Bilingual Children with Autism Spectrum Disorders*. (Master's Thesis). Retrieved from <https://circle.ubc.ca/handle/2429/23471>
- Response to Intervention (RTI) Action Network (n.d). What is RTI? Retrieved from <http://www.rtinetwork.org/learn/what/whatisrti>
- Schertz, H.H., & Odom, S. L. (2007). Promoting Joint Attention in Toddlers with Autism: A Parent-Mediated Developmental Model. *Journal of Autism and Developmental Disorders*, 37, 1562-1575. Retrieved from <http://www.bowdiges.org/documents/files/Promoting%20joint%20attention%20in%20toddlers.pdf>

- Semple, K. (2011, May 20). Illegal Immigrants' Children Suffer, Study Finds. *The New York Times*. Retrieved from http://www.nytimes.com/2011/05/21/nyregion/illegal-immigrants-children-suffer-study-finds.html?_r=0
- Suffolk Center for Speech. (2015, February 26). Pragmatic Speech. Retrieved from <https://thecfydiaries.wordpress.com/2015/02/>
- Sussman, F. (2012). Let's Pretend: The relationship between play and theory of mind in typical children and children with ASD. Retrieved from The Hanen Centre Web site: <http://www.hanen.org/SiteAssets/Helpful-Info/Articles/pretend-play.aspx>
- Stanviloff, L. (n.d.). Support for Classroom Teachers Involved in Mainstreaming Students with Severe Handicaps. Retrieved from Saskatchewan School Boards Association Web site, Section 5: Support Providers: <http://www.saskschoolboards.ca/old/ResearchAndDevelopment/ResearchReports/StudentsDiverseNeeds/96-10.htm>
- Szymkowiak, C. M. (2013). *Using Effective Strategies for the Elementary English Language Learner with Autism Spectrum Disorder: A Curriculum Project*. (Master's Project) Retrieved from https://dspace.sunyconnect.suny.edu/bitstream/handle/1951/63038/Claire_Szymkowiak_Masters_Project_May2013.pdf?sequence=1&isAllowed=y
- Teachers of English Speakers of Other Languages (TESOL). (2015). Retrieved from <http://www.tesol.org/>
- Texas A&M University. (2014). EC-6, Middle, and Special Education plans. In *2014-2015 Undergraduate Catalog*. (pp. 305, 324, 728, & 817). Retrieved from http://catalog.tamu.edu/archives/14-15_UG_catalog.pdf

- Texas Education Agency (TEA). (2015). English Language Proficiency Standards. In *State Board of Education Rules* (Chapter 74.4). Retrieved from <http://ritter.tea.state.tx.us/rules/tac/chapter074/ch074a.html>
- Texas Education Agency (TEA). (n.d.). Language Proficiency Assessment Committee Resources. Retrieved from <http://tea.texas.gov/student.assessment/ell/lpac/>
- National Autistic Society. (n.d.) Semantic Pragmatic Disorder. Retrieved from <http://www.autism.org.uk/about-autism/related-conditions/semantic-pragmatic-disorder.aspx>
- The Legal Framework (n.d.). Retrieved from <http://framework.esc18.net/display/webforms/landingpage.aspx>
- The Ohio State University Department of Linguistics. (2007). Chapter One: What Is Language? File 1.4. In *Language Files: Materials for an Introduction to Language and Linguistics* (10th ed. p. 18). Columbus, OH. The Ohio State University Press.
- Thordardottir, E. (2006, August). Language Intervention from a Bilingual Mindset. *The ASHA Leader*, 11, 6-21. Retrieved from <http://leader.pubs.asha.org/article.aspx?articleid=2278206>
- University of Michigan. (n.d). German and American Schools. Retrieved from http://sitemaker.umich.edu/case.356/german_schools
- U.S. Department of Education. (1997, October). Bridging School-Family Differences. Retrieved from <http://www2.ed.gov/pubs/FamInvolve/local5.html>
- U.S. Department of Education. (2010, December). *No Child Left Behind (Elementary and Secondary Education Act.)* Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/index.html>

Weissbourd, R. (2014, November 20). Why Do Immigrant Children Struggle More Than Their Parents Did? *The New Republic*. Retrieved from

<http://www.newrepublic.com/article/120352/why-americanization-makes-immigrant-children-less-successful>

Wendling, B. J., Schrank, F. A., & Schmitt, A. J. (2007). *Educational Interventions Related to the Woodcock-Johnson III Tests of Achievement (Assessment Service Bulletin No. 8)*. Rolling Meadows, IL: Riverside Publishing.

Yale School of Medicine. (n.d.). Alan Stephen Kaufman, PhD. Retrieved from

http://medicine.yale.edu/childstudy/faculty_people/alan_kaufman-2.profile

Zadina, J., Hernandez, A., & Kraus, N. (2013, March). Harmonizing EFL Practices:

Neuroscience Research. *Global Neighbors, March 2013*. Retrieved from

<http://newsmanager.commpartners.com/tesoleflis/issues/2013-03-08/9.html>

Zong, J. & Batalova, J. (2015, February 26). Frequently Requested Statistics on Immigrants and Immigration in the United States. Retrieved from Migration Policy Institute (MPI) Web

site: <http://www.migrationpolicy.org/article/frequently-requested-statistics-immigrants-and-immigration-united-states>

APPENDIX A (Email Correspondence for School District Superintendent)

To Superintendent,

Hello. My name is Jennifer Garrison Reppond [I recently got married, but my name at school is still under Garrison]. I am a faculty member at XX University, but I am completing my MAESL at Hamline University in St. Paul, MN. I would like to ask your permission to allow a few of your teachers to participate in the survey questionnaire for my Capstone project. I have attached a copy of my consent letter, approved by my university, so that you may see the research topic I have undertaken.

I have a colleague whom I teach with who retired from your district who gave my information to a fellow principal at XX elementary to ask a few teachers [SPED or ESL certified] if they would like to assist in my research by filling out a survey questionnaire. The principal advised that I contact you for permission for them to assist me.

I have been working on this project since March of 2014, and I am registered to turn in my final project paper as of May 1, 2015. The subject revolves around students who are considered SPED (I would like to survey educators who happen to have had children on the Autism spectrum – but the scope of my project can be adjusted to any disability) and also whose background is that of ESL. I chose to narrow my scope, if possible, to Autism and ESL as I am also the parent of a child on the spectrum, and in my education in learning to help my son, I have met some wonderful people who give up everything to come to the US to get the help they need with their child on the spectrum. Language is a huge barrier.

Time is the only resource that I would need to ask for from each teacher who would like to volunteer. I have been given permission by my university to give a survey questionnaire. The questionnaire is not very long; it focuses, mainly, on what their experiences, education and opinions are about how a more cross-educational learning between SPED, ESL, and general education as well as speech therapists can help for this special population of students.

I will not be asking for anyone to participate unless they are an educator or therapist, so no students or parents will be involved. I will also not be using any names, districts, places of business, etc. Attached is the consent letter that I will send each participant to read over and sign before sending them the questionnaire. I will not have names or any markings that could identify the participant.

I thank you for your time and your consideration of my request to allow a few of your teachers to participate in this survey questionnaire for my Capstone paper.

Jennifer Garrison Reppond

APPENDIX B (Individual Letter for Consent)

Dates

Dear ESL certified teacher/SPED teacher/licensed therapist here (This was personalized):

I am a graduate student at Hamline University, St. Paul, Minnesota. To complete my master's degree, I need to do research in the form of interviews and questionnaires regarding students you have which are both ESL learners and (SPED) and possibly on the Autism Spectrum. I do not want to interrupt your daily routine but rather find a time which is convenient for you to discuss things which you feel is going well for your students but also where the education / therapy of this special population of students is hindering successful learning. Hamline University has given permission for this research. I also need your permission in which to do this.

During said interviews and questionnaires, I will only be discussing things which pertain to what positive learning is going on for these children and where gaps may be appearing so far as a child/person with a disability and possibly on the autism spectrum in how they interact socially, where language problems are hindering educational learning as well as in speaking the one/two languages in which this child/person has learned. Please keep in mind that while I will stay true to this aim, research and writing are dynamic activities that may shift in focus as things progress. I will report my findings only, you nor your school or place of business will be mentioned by name. No one will know that you are part of the research.

There are no significant risks associated with this research, and I believe that educators and students, alike, will reap the benefits of the information gathered. This study is aimed at assisting in strengthening the relationships between ESL and Special Education Teachers and/or therapists so a more comprehensive cross-educational/learning experience can be achieved for this special population of students classified as SPED (possibly Autism) and ELL. The goal is to help this population have access to a learning environment that will ultimately allow them to function more independently in both their native language as well as the dominate language; thereby, allowing for a more successful outcome not only in their academic learning but in life beyond the classroom. Uncovering gaps as well as finding ways to fill those gaps in the current learning environment for this special population, including designing a possible checklist that can be utilized by educators, will have a profound impact on these students and give their educators more tools to put in their educational tool box.

The final research product will be published in a book and online as well as cataloged in Hamline's Bush Library Digital Commons, a searchable electronic repository. If you do not want to be in the research, that is ok. If you want to leave the research later, that is ok. You just need to inform me.

Thank you for your time and consideration
Jennifer Garrison Reppond
Killeen, Texas
Jgarrison02@hamline.edu; 281-914-0530

APPENDIX C (Consent / Signature Page)**Informed Consent to Participate in Qualitative Questionnaire Survey and/or Interview**
Keep this full page for your records.

I have received the letter about your research study for which you will be surveying and possibly interviewing SPED/ ESL teachers and analyzing information gained related to SPED/ESL crossover students. I understand that answering the questionnaire and/or being interviewed poses little to no risk for me, that my identity will be protected, and that I may withdraw from the interview portion of the project at any time without negative consequences.

Signature Date

APPENDIX D**Special Education (SPED) Educator's Questions****PERSONAL EXPERIENCE/EDUCATION QUESTIONS**

1. How long have you been an educator?
2. What is your specialty within SPED?
3. Were you exposed to English language learners (ELL's) during your studies or on the job?
4. What does co-teach mean to you?
5. How have you (could you) collaborated with the general education and English as a second language (ESL) teachers to benefit special education students?
6. What part of collaboration between SPED/ESL challenge you?
7. What experience do you have with ethnic diversity?
8. What types of professional development have you participated in that help you with best practices in the classroom in dealing with ELL/SPED students?
9. What do you know about second language acquisition? Explain.

STUDENT ORIENTED QUESTIONS

1. What experience do you have with ELL students with disabilities?
2. How do you (can you) engage an ELL student with disabilities in teaching/learning?
3. What materials (curriculum, techniques) have you found most effective when teaching ELL students with disabilities?
4. How do you ensure that each student receives the right type of support?
5. How have you (can you) encouraged parental involvement in student learning?
6. How much do you know about your student's culture and their views of disability?
7. How often do you communicate with the parents of your ELL/SPED students?

--- If a student's parents speak a different language other than English, what do you do to accommodate your discussion?

ASSESSMENT QUESTIONS

1. How do you (can you) assess whether it is a student's disability or lack of language skills in the student's ability to learn?
2. Should a student be referred by ESL to SPED for evaluation?
3. Should ESL teachers be involved in SPED diagnosis? If so, how?
4. Are there non-verbal tests which can be used to see if a student has ESL problems or SPED issues? Please list.
5. How do you know when a SPED student should be referred to ESL, or does this situation ever arise?

DISTRICT QUESTIONS (you may not know some/all the answers to these questions, please give any information that you do know or have knowledge of)

1. What should schools (districts) do for SPED/ELL students to ensure a comprehensive learning experience?

2. Are there any restrictions on a student getting ELL and SPED services?
3. What does the state require you to do in the classroom when it comes to ELL/SPED students?
4. What does your state not allow you to do in the classroom when it comes to ELL/SPED students?
5. What would you change up in the classroom, given that you had no restrictions, to be more productive with ELL/SPED students?

PROFESSIONAL OPINION

1. What experience can you give for the feasibility for SPED, ELL, General Education, and Speech Pathologists to collaborate to best accommodate this special population of student?
2. Name some ways you can work with ESL teachers to better teach students who have a disability and are ELL?
3. When a student has ESL needs and also a disability, what are the primary responsibilities of the teachers involved:
 - (1) General Education Teacher
 - (2) SPED teacher
 - (3) ELL Teacher
 - (4) Parents
 - (5) Speech Pathologists

LANGUAGE

(1) Please give your professional opinion on the language being used to teach an ELL student with disabilities:

- (A) What is your professional opinion as to what language parents should speak to their ELL student with disabilities?
- (B) Should a student only be taught in the dominant language of the country they reside (English) Explain.
- (C) Should a student only be taught in the native language of the country they came from? Explain.
- (D) Should a student be taught in both languages simultaneously? Explain.
- (E) Should a student be taught in the dominant language first followed at a later time with their native language? Explain.
- (F) Should a student be taught in their native language first followed at a later time with the dominant language? Explain.

- (2) Where do you feel gaps exist when teaching an ELL student with a disability?
- (3) Where do you feel we can bridge those gaps and make for a better learning environment for these students and, hopefully, give them a more successful learning outcome?

APPENDIX E

English as a Second Language (ESL) Educator Questionnaire

Personal Experience/Education Questions

1. How long have you been an educator?
2. Have you ever worked with a student who has a disability?
3. How did you get involved with English Language Learners (ELL's)?
4. Are you formerly trained in teaching ELL's, or became state certified later?
5. What does co-teach mean to you?
6. How have you (could you) collaborated with the general education and special education (SPED) teachers to benefit ELL students with a disability?
7. What part of collaboration between SPED/ESL challenge you?

STUDENT ORIENTED QUESTIONS

1. What materials (curriculum, techniques) have you found most effective when teaching ELL students with a disability? Please name what you use.
2. How have you encouraged parental involvement in student learning?
3. How have you dealt with parents of ELL students when they can't speak English?
4. How do you know when an ELL should be referred to SPED?

DISTRICT QUESTIONS (you may not know some/all the answers to these questions, please give any information that you do know or have knowledge of)

1. What should schools (districts) do for ELL students with disabilities to ensure a comprehensive learning experience?
2. In your district are there any restrictions on a student getting ELL and SPED services simultaneously?
3. What does the state require you to do in the classroom when it comes to ELL students with disabilities?
4. What does your state not allow you to do in the classroom when it comes to ELL students with disabilities?
5. What would you change up in the classroom, given that you had no restrictions, to be more productive with ELL students with disabilities?

PROFESSIONAL OPINION

1. What experience can you give for the feasibility for SPED, ESL, General Education, and Speech Pathologists to collaborate to best accommodate this special population of student?
2. How involved have you been in writing the IEP of SPED students who have ELL needs?
3. Name some ways you can work with SPED teachers to better teach students who have a disability and are ELL?

4. When a student has ELL needs and also a disability, what are the primary responsibilities of the teachers involved:
- (1) General Education Teacher
 - (2) SPED teacher
 - (3) ESL Teacher
 - (4) Parents
 - (5) Speech Pathologists

LANGUAGE

(1) Please give your professional opinion on the language being used to teach an ELL student with disabilities:

- (A) What is your professional opinion as to what language parents should speak to their ELL student with disabilities?
- (B) Should a student only be taught in the dominant language of the country they reside (English) Explain.
- (C) Should a student only be taught in the native language of the country they came from? Explain.
- (D) Should a student be taught in both languages simultaneously? Explain.
- (E) Should a student be taught in the dominant language first followed at a later time with their native language? Explain.
- (F) Should a student be taught in their native language first followed at a later time with the dominant language? Explain.

(2) Where do you feel gaps exist when teaching an ELL student with a disability?

(3) Where do you feel we can bridge those gaps and make for a better learning environment for these students and, hopefully, give them a more successful learning outcome?

APPENDIX F**Private Therapy Speech Language Pathologist Questionnaire****Personal Experience/Education Questions**

1. How long have you been a speech language pathologist (SLP)?
2. Were you introduced to ELLs (English language learners) during your studies or on the job?
3. What is your experience with second language acquisition? Please explain.
4. Can you explain, briefly, what you know and do about working with ELL's.
5. Have you ever had to collaborate with an ELL's school educators? _____ If so, what challenged you about working with these educators?

STUDENT ORIENTED QUESTIONS

1. How have you encouraged parental involvement in student learning and how often do you communicate with parents of ELLs?
2. If a student's parents speak a different language other than English, what do you do to accommodate your discussion?
3. How do you know when it is a disability that inhibits a student versus just their lack of knowing English?

ASSESSMENT QUESTIONS

1. Are there non-verbal tests/assessments which can be used to see if a student has ESL problems or something more? Please list which one you feel is the most accurate and why.

PROFESSIONAL OPINION

1. What are some things that you do to collaborate with a student's school?
2. What types of speech-language intervention would you recommend for a classroom teacher of a s/l -student you work with?
3. What experience can you give for the feasibility for speech pathologists to collaborate with other professionals and educators to best accommodate this special population of student? {this could be other therapists, the general education teacher, a SPED teacher, an ESL teacher, and/or the parents.}

LANGUAGE

- (1) Please give your professional opinion on the language being used to teach an ELL student with disabilities:

(A) What is your professional opinion as to what language parents should speak to their ELL student with disabilities? (Just choose the ones your opinion is to answer)

(a) Should a student only be taught in the dominant language of the country they reside (English) Explain.

(b) Should a student only be taught in the native language of the country they came from? Explain.

(c) Should a student be taught in both languages simultaneously? Explain.

(d) Should a student be taught in the dominant language first followed at a later time with their native language? Explain.

(e) Should a student be taught in their native language first followed at a later time with the dominant language? Explain.

(2) Where do you feel gaps exist between therapies and academic learning when assisting an ELL student that has a disability?

3) If there is an area that you feel is not covered in the school environment, how do you address this?

4) What would be your advice for school personnel regarding speech/language assisting an ELL with a SPED disability?