

**Can Integrating the Theory of Multiple Intelligences and the use of Sign Language Assist
ELL Students Academically and Emotionally in the Classroom?**

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Abstract

English Language Learners have a difficult time learning a new language and having the extra support in a classroom can make all the difference in their education and self-esteem. As teachers in training, we know not all students are alike and because of that, we must differentiate our teaching to help students walk away with being confident in their education. Integrating the Theory of Multiple Intelligences by working to strengthen two or more intelligences can open numerous possibilities and opportunities for these students. Additionally, students who may or may not know sign language could benefit from using this form of communication to express themselves physically and emotionally in the classroom. Sign language has the ability to become the bridge that helps ELL students learn English. Through research, it has been found that sign language helps students learn new words and express themselves when English is not their native language.

Keywords: Early Childhood and Childhood Education, English Language Learners, Multiple Intelligence, American Sign Language

Aspirations of a Satellite Baby

I am what they call a “satellite baby”. I was born in Manhattan, NY, but as a baby, I was sent back to China until the age of five, and then I was sent back to the US. This was and still is very common practice among the Asian population to send their children back to the home country. For the most part, the parents are immigrants who are trying to make a living and can’t take care of their children. My parents were illegal immigrants who eventually applied for green cards and received citizenship. I struggled in my young years to learn English because I only knew Chinese. I remember going to a smaller classroom in my elementary school to learn English with a bunch of other students. I don’t remember much from this time; however, I do know that my English is not perfect. I may speak the language with ease and have an English accent, but my poor English skills shine brightly in my writings. I realized that I was also a slow learner and that I needed that extra one-on-one time with my teachers with visuals and audio clips.

As I thought about my end of the year thesis, I decided to focus on two theories, Multiple Intelligence and American Sign Language (ASL), as ways to improve English Language Learner (ELL) strategies in classrooms with struggling students. I know that as a child I would have benefited from multiple intelligence since I was a very visual and auditory learner. I learned best when I was holding the materials in my hand and able to manipulate it until I understood it. Additionally, as a college student, I got the chance to learn sign language and I loved it! I wished that someone taught me sign language when I was younger because there would have been so much I wanted to say, but could not because I was embarrassed by my horrible pronunciation.

This is why I have chosen to research the possibility of introducing multiple intelligence or sign language into my future classroom.

Sometimes English Language Learners struggle learning a new language and having the extra support in a classroom can make all the difference in their education and self-esteem. As teachers in training, we know not all students are alike and because of that, we must differentiate our teaching to help students walk away with being confident in their education. Integrating the Theory of Multiple Intelligences by Howard Gardner works to strengthen multiple intelligences that can open numerous possibilities and opportunities for these students. Additionally, students who may or may not know sign language could benefit from using this form of communication to express themselves physically and emotionally in the classroom. Sign language has the ability to become the bridge that helps ELL students learn English. Through research, it has been found that sign language helps students learn new words and express themselves when English is not their native language.

Conceptual Model

The most important concept to acknowledge is the environment that has been set up to allow for the success of English Language Learners. That important concept would be the Conceptual Model because it resembles four components: Sociocultural processes, Language Development, Academic Development, and Cognitive Development (Collier, 1995). The Sociocultural process involves the student's everyday life in their community, home, and school, and the society they live in. If there is prejudice or discrimination against the individual or their community, it can affect the student's achievement in school. Their environment has to be supportive enough for them to succeed in learning a new language. Language development is

important for ELL students because it's imperative that the student's first language, oral or written, must be developed cognitively, at least through their earlier years (Collier, 1995). If ELL students can not fully develop their first language, they will have a hard time transferring their language skills from the first language to the second. Academic development is crucial to an ELL student's school work because as they get older and enter new grades, the workload and material will only get harder. If students struggle with a certain topic in their previous grade, they most likely will struggle with a similar topic in their present grade level. It's important that the ELL student work on both their native language and their second language because focusing only on their second language leaves no room for learning about the subjects that are imperative to their academic achievements. This stress on academic development is linked to cognitive development because many times in school environments, the academics are watered down for individuals who struggle with their second language (Collier, 1995). If academics are to be watered down, those students will not be able to succeed in later years when the material is reproduced on a more advanced level. Without these components, students would not have a balanced environment suitable for their language learning. Learners are affected by their immediate surroundings, their own emotions, sociological and physical needs. If one part of the conceptual model is neglected over another, an ELL student cannot do their best work. Overall, these components need to work together in order for the student to develop deep academic proficiency in a second language.

My Struggles in the Conceptual Model

I struggled in all the components of the conceptual model, except for the sociocultural processes because when I was an ESL student in elementary school, my teachers took pity on me

and let me slack on my reading. There were many times I would skip over words I did not know, and most of my teachers never made me go back and repeat the words before continuing reading. Unfortunately, since I never developed the skills I needed to break down hard words, I struggle to this day to pronounce words that are spelled differently than they sound. My teachers should have treated me like every other student in the room, and made me go back and sound out the words I struggled with. Also, at home, my parents could not help me with my English because they did not know the language. They wanted my siblings and I to speak English at home to improve our accent and vocabulary. However, with time, that ended up not working because we lost our Chinese and became quite fluent in English. Since we were only working on one language, we lost our ability to continuously transfer those language skills from our native language to our second language. Later on in our lives, my parents realized their mistake and arranged for us to go to Chinese school on Saturdays. This may have worked if they enforced only Chinese in the house, but they could not keep my siblings and me from switching to English, since we had become more comfortable with it. Despite our preferred language switch, my siblings were around my parents more often than I was, so they kept most of their Chinese, while I lost most of mine. Now, I speak barely enough to make simple conversation with my relatives and my siblings laugh at my English accent when I try to speak Chinese. As you can see, it's imperative for an ESL student to keep a balanced conceptual model in order for them to keep their native language and their second language. As we begin to look at how multiple intelligence and ASL can affect ELL students, I will share stories and memories of how it affected me as a child and the effects I see today on students like myself.

Multiple Intelligence Theory

Multiple intelligences theory was developed by Howard Gardner in 1983. He believed that students learned in eight to nine different ways/“intelligences” according to his book, *Frames of Mind: The Theory of Multiple Intelligences*. The intelligences are as follows: musical, logical-mathematical, existential, interpersonal, intrapersonal, bodily-kinesthetic, linguistic, spatial and naturalistic. Many students learn in two or more intelligences and if teachers can prioritize certain intelligences during the school year, English Language Learners (ELL) and other students can benefit from differentiation of lessons. For example, I learned best when my teachers taught me how to spell with rhymes and riddles. I still remember some of the rhymes because the teacher used musical and visual intelligence to write out the syllables of the word. One of the rhymes was “a MAN had a HAT and the hat was TAN, that’s how you spell *Manhattan*”.

Musically-Rhythmic Framework. According to Fonseca-Mora’s article (2004), certain multiple intelligences can benefit students academically, such as, having a musical-rhythmic framework that would create a “slowing down in speech production” in order for students to pick up on the melody and remember the words. Students love to sing along to melodies of songs they know from the radio, so if teachers can create a song about grammar and teach it to the students, they are more likely to remember the grammar rules because of the song.

Visual-Spatial Framework. Having a visual-spatial framework provides comprehensive and meaningful input (Fonseca-Mora, 2004). Images have the ability to help students interpret the text by imagining the text in their mind.

Logical-Mathematical Framework. A logical-mathematical framework would benefit students academically because this intelligence speaks to students who think logically and are

skilled at identifying connections. This would include but would not be limited to, solving puzzles, measuring data through surveys, conducting experiments for a result and playing board games that require strategy.

Bodily-Kinesthetic Framework. The bodily-kinesthetic framework is also important in the classroom for “expression and perception of meaning such as gestures to communicate an idea, intention or feeling”. Gestures are nonverbal acts that can represent speech and/or help with the flow and rhythm of interaction when words are not enough (Fonseca-Mora, 2004). Research has shown that giving students the ability to express themselves in a nonverbal way, such as through role play, drama or puppets, has allowed students to flourish. Speaking isn’t always going to be easy for ELL students and if they had the opportunity to express themselves differently, they would take it.

Effect of Multiple Intelligence Academically

In his 1993 book, Howard Gardner says he believes that multiple intelligences will allow for a balanced approach with different windows on the same concept. When students see what they can do, it has a positive effect on their self-esteem and can enhance their success. According to Gilakjani’s article on Visual, Auditory, Kinaesthetic Learning Styles, students can score higher on tests, have better attitudes, be more efficient if they are taught in ways to which they can more easily relate (p. 108). There has been all sorts of research on the difference between implementing multiple intelligences vs. traditional teaching in a classroom. The majority of my research has proven that multiple intelligence outperforms traditional teaching every time. The exit slips attached to the end of the multiple intelligence study demonstrated “high degrees of satisfaction and positive attitudes to a variety of ways to learn, which can also minimize behavior

problems” (Haley, 2001). Students, like myself, are more likely to associate the information they learned with how they learned it. For example, I learned the 50 US states from left to right in 5th grade using a song that my teacher played non-stop during social studies. We would then practice by writing out the states on a map over and over again, until every one of my classmates and I knew the map like the back of our hand. Multiple intelligences can not only benefit students academically, but also emotionally in the classroom.

Effect of Multiple Intelligence Emotionally

Multiple intelligences give the students a choice of how they want to learn and when students make meaningful choices, they can be challenged to think critically, while feeling emotionally supported. When teachers implement interpersonal and intrapersonal intelligences in the classroom, students have the chance to understand perspectives and opinions of others, while knowing what they are capable of learning themselves. Active listening helps with empathy and learning that it’s okay if people have different points of view because then no one’s voice is left behind. When students use their intrapersonal intelligence, they will display self-discipline, ability to control their emotions and motivate self. Soleimani et al. (2012) compared multiple intelligences to Lego building blocks because one Lego would only allow for a limited structure, but with different shapes and sizes, there would be many structures, many different patterns. When ELL students learn which intelligence works for them, they tend to experience less anxiety about learning a new language because they gain self-awareness of their strengths and weaknesses. When I was a teaching assistant at a gifted summer school, there was a little, five-year-old girl from Norway who spoke little to no English. Trying to get her interested in English or science was very tough because the moment the teacher started speaking English, she

would turn away and do her own thing. After a few days, I realized that she was only interested in the class if there were videos, images or translations into her native language. From that day on, I worked with her one-on-one with google images and translations of the English word into her native language. I also sent a list home with her parents so that she could practice the vocabulary and familiarize herself before class the next day. By the end of the summer program, she had gained confidence and was participating in class by pointing at images/words and gesturing with her hands when she tried to explain something. If teachers consider implementing multiple intelligences in their classrooms as a way to teach, unwanted behaviors, exclusion during a lesson and the perception of lack of success may disappear too.

Implementation of Multiple Intelligence

Multiple intelligences are becoming more and more known in the educational world, but there are still many holes that research has yet to learn or improve on. However, multiple intelligences are not hard to implement in classrooms because students can be given a survey on how they prefer to learn in the beginning of the year. This survey would contain a list of questions on what kind of learning they think they will benefit from, and the results will be tallied at the end of the activity to show which intelligence each student identifies with. Teachers can then take this data and pick the top two intelligences used by their students and implement them by differentiating their lesson plans. Research from Haley (2001) gave teachers a glimpse into how they can start their class with a brain teaser or riddle to awaken their students' intelligences first thing in the morning. Then as teachers jump into their lesson, amplify an intelligence by describing prior knowledge associated with the concept in large groups. Then, transfer the intelligence by having the students reflect on their learning in previous stages and

make the content relevant to their outside lives. Multiple intelligences can be molded into any lesson plan as long as the teacher and the class are flexible with how they are willing to learn. Teachers must also make sure their own intelligences don't get in the way of the students. Teachers must learn to gear the lessons to the students' preferred intelligences in order for students to succeed in the best way possible.

Education of Diverse Populations

In sophomore year, I took a class called Education of Diverse Populations; my professor taught the class using multiple intelligence and it was my favorite three-hour course! I loved expressing myself through pictures and submitting assignments in creative ways. I remember exploring different techniques for students who may be impaired whether that may be their hearing, their eyesight or a physical impairment. We were told to accomplish skills with certain limits and asked to reflect on our experiences after the fact. Every day we would start and end class with a sharing of thoughts in a circle, which made all the students in the class feel closer to one another. I knew everyone's name and was comfortable with sharing personal details about myself. For my professor to be able to develop that kind of safe environment for her students, she had to implement strategies that made her students feel included and important. I remember the professor allowing the students to use whatever intelligence they prefer, to complete the learning task during every class and everyone loved being able to learn in their own way. The class was structured so well because the students got to pick how they wanted to learn and when students get a choice in their learning, it gives a little power back to them.

American Sign Language

Another theory that I was working on that could potentially help with ELL students in the classroom was about using American Sign Language as a bridge to English for non-native speakers. ASL was invented by Laurent Clerc and Thomas Gallaudet for the deaf community in 1814 to help them communicate. Together they established the first deaf public school in Hartford, Connecticut in 1817. ASL uses parts of the body, such as the face, torso, and hands, which technically makes it a part of the bodily-kinesthetic intelligence. My idea was that if ASL was used for the deaf to learn language, then why couldn't it be used to learn English for students who don't know the language? Students who come from different countries to the United States, are required to learn English in order to go to school. According to Haley (2001), educators tend to water down academics into cognitively simple tasks, so that their ELL students can learn the concepts better. However, this watering down technique is only denying students the opportunity to learn like their fellow classmates and can prevent students from developing academic proficiency in their second language.

Personal Experience with Reading

I remember when I was in elementary school and had to do a round robin reading for class. I hated this type of class reading because I was self-conscious of my accent and how I pronounced words. I am still working on my pronunciation and sometimes, professors can tell that I was once an ELL student by the way I read or write. Teachers in elementary school felt bad for me, so when I read in class and purposely skipped over a word I knew I could not pronounce, the teacher did not interject. Looking back now, I wish they stopped me and helped me sound out the word and read it with clarity. Since I picked up that negative habit, I see myself skipping words in my readings on a daily basis. This may not sound so bad, however, as students' grade

level increases, so does the information they learn. If students can't keep up with their current courses, how will they possibly take on the next level's information? Students like me, need to learn those important language skills earlier on, so when we need to learn a new word or skill, we can use our prior knowledge and transfer them from the first language to the second. If students can be taught sign language as a bridge to learning English, they may be able to pick up the language quicker than trying to learn English on its own. Sign language can also be a great way for students to express their emotions or ideas nonverbally when their native language is not English.

Effect of American Sign Language Physically and Academically

There has been research on how sign language can help ELL students physically and academically. Sign language is a type of kinesthetic movement that can help students voice their ideas without actually speaking. According to Heller et al. (1998), signing is like "picture writing in the air" and it can be complex, but the abstract symbols have inner structures with deeper meanings. Signing uses the left hemisphere of the brain predominantly, which is the side of language. Research has also shown that deaf children and ELL students share many of the same problems in learning English. Deaf children are learning a language that they can't hear, and ELL students are learning a language they can hear, but don't understand. Both of these students need environments that allow them to process signals and associate information with meaning. For example, red in English and rojo in Spanish will be the same sign when using American Sign Language as a tool. Once students feel confident in English, they can rely less and less on the signing portion and create a bridge between the two languages. Teachers could also teach the other students in the class how to sign, as a tool for them to communicate as well. This way, ELL

students don't feel left out and can be fully integrated into the classroom. Sign language is also a kinesthetic way of communicating because students tend to use their hands (in gestures) when they speak. Signing becomes a visual, not auditory or spatial, language. Learning sign language would be hard for foreign students, but not impossible, and including the whole class in the learning, fosters communication and community for all students.

Pilot Study at Newcomb College Nursery School. There was a pilot study for two years at Newcomb College Nursery School (NCNS), that started because there were two teachers who taught their students to sign in order to prepare for their two new incoming hearing-impaired students (Heller et al., 1998). The teachers knew that their young children were kinesthetic learners and learning sign would be hard, but not impossible. Teachers started by greeting their students at the door every morning verbally and by sign. Signs were taught throughout the day in order to accomplish daily activities and soon children started to imitate the teachers' fingers. Before teachers knew it, students were signing to each other on the playground without using their voices and parents started to learn from their kids. After the first year, the teachers wanted to see if they could implement signing into their future classroom with a study based on research. So that's when the pilot study began with twenty-nine hearing students who used sign with twenty-five non-signing students split into 4 classes (Heller et al., 1998). At pre-test time, the children's receptive language development was above the national average in all classes, which would make it harder to show improvement later on in the pretest time. However, the result was that the students who learned how to sign, had significantly higher receptive vocabulary scores on the Peabody Picture Vocabulary Test (PPVT) than the children who were not taught sign. The results proved that those who had learned sign were "clearly superior in language development to

those who had not” because the post test of both groups showed a difference of 4.83 in their mean scores (Heller et al., 1998, pg. 52). The pilot study proved that when sign was integrated naturally into a general preschool curriculum, both non-hearing and hearing children benefited.

Other ASL Success Stories. In Daniels’ article, *The Effect of Sign Language on Hearing Children's Language Development*, there were a few success stories of sign in classrooms or in research studies. There was a story about hearing parents using sign language with their hearing son as a baby. Babies can learn simple signs to communicate their needs. The son’s first words occurred at 26 weeks; 3 months earlier than normal, and his first fifty words were said 5.6 months earlier than normal. Being exposed to sign and English allowed children to be bilingual learners of two spoken languages with the same benefits. William Dean wrote an article in 2008 about how children who learned sign at a young age tend to have IQs of eight to thirteen points higher than other students (Daniels, 1994). His article proved that sign language can be beneficial academically for students, especially when they start at a young age. In 1985, R. M. Wilson and J. P. Hoyer used sign as a multisensory technique for reinforcing sign vocabulary with first and second graders from ten schools. After 14 weeks, signing produced a greater retention of vocabulary words over time than traditional instruction (Daniels, 1994). Students were able to remember vocabulary words because of the visual they learned with the sign. Learning vocabulary words in the traditional way is more about memorizing for the short term, instead of learning the meaning of the word for long term remembrance. In 1990, V. L. Brown reported an experiment that used sign and drama activities as a multisensory approach to language development. The children who participated in the drama/sign group scored higher on both expressive and receptive language measures than the control group children, who were

given the traditional curriculum (Daniels, 1994). Another program in Maryland used sign with their pre-k children because they realized it could help students pay attention. Their students became aware of the letters and words that the signs would create. It also taught students location and position within a space in kinesthetic form. Signing can improve a student's small motor skills because as they practice, the hand gestures become more fluent and easier. These examples of success stories using sign language explains Piaget's premise that "gesture and mime language in movement is the real social language of the child" (Daniels, 1994, p. 77). Sign relies heavily on gestures and iconic expressions to represent a message visually and kinesthetically. In addition to that, sign is stored in a different memory storage space than English, so when students are asked to search and recall something, they are given two language sources to pull from, giving them a wider frame to work on their language skills. Students who use sign can improve their spelling skills because they can remember the letters by how the sign looks, since sign is a very visual language. Learning the basics of sign can improve spelling, vocabulary, and overall communication skills. Students are building vocabulary when they are hearing the words and seeing the word written. When students sign the word letter by letter, the word leaves a stronger imprint on their brains. Signs are usually closely related to the actual meaning of the word, such as the word "listen" is the gesture of cupping the ear. Teachers can help students with their signing at school, however, if parents were to get involved and help their child with their language development at home, the child is more likely to succeed. Together students and parents can learn through shared book reading and connecting fingerspelling to written letters.

Effect of American Sign Language Emotionally

Sign language does not only benefit students academically, but also emotionally. Sign language can be used to help many people who can't speak or hear, express themselves in a nonverbal way. If a teacher is unfamiliar with the native language of the student, the student can use sign language to express how they feel. The teacher can then watch the student sign and figure out what they are trying to say. Signing gives students a way to communicate when their oral language is not very strong. "Signing is a visual language capable of expressing every emotion and discussing any topic, concrete or abstract, as effectively as speech" (Heller, 1998, p. 51). Since sign is a visual language, a person can see how the signer feels by just watching the signer's hands and body language. Body language can say a lot about a person and can be an effective way for ELL students to communicate with others. It gives students a sense of empowerment because now they have a voice. Signing can also provide quick communication, particularly for those with short/limited attention spans, such as younger children. Signing allows the adults in the classroom to model effective communication, encourage conflict resolution, and help the children to communicate with each other. By integrating ASL into classrooms, there will be less acts of violence such as biting, hitting and screaming. Sign language can also help with classroom management because students can learn how to sign simple words such as *bathroom*, *toilet*, and *question* to reduce interruptions and keep students on track during class time.

Implementation of ASL in the Classroom

American Sign Language can be implemented into the classroom with baby steps. It can become the bridge between two people who speak different languages. ELL students may be verbal in one language, their native language, but are non-verbal in English, the language being taught; so students who are introduced to sign earlier in the classroom will benefit greatly. Signs

would be taught as they are needed to accomplish daily activities in the classroom. With time, students will start to imitate the teachers' fingers and before the teacher knows it, the students will be signing to each other without using their voices. Teachers should have materials from both languages, native and English, on hand throughout the classroom displaying the picture of the center, shelf, library, etc. beside the English and the native language word. Labels, schedules, homework, worksheets and more should be differentiated to the child's native language as well as English. When integrating sign, teachers can have the ASL sign next to each picture displayed around the room, and as that area of the classroom is referred to throughout the year, the teacher will sign it and point to the center/area of the classroom. Over time, students will catch on and learn that certain signs are referring to certain materials in the classroom. Teachers can teach basic ASL and then slowly move into elementary ASL signs such as how to sign their name, the numbers, emotions, materials in the classroom and more. ASL in the classroom will most likely be used for communication purposes to help students communicate with each other, especially if they don't speak the same language. Students can also be provided picture dictionaries if they want to learn how to sign a word, they don't know how to say in English. Since young children love movement and singing, teachers can implement a song during circle time and use the hand signs with the song. For example, students can sing and sign "The Itsy Bitsy Spider" and do the hand motions of the spider climbing up the waterspout, the rain, the sun and more. Since signing involves hand motions, anytime students repeat a sign, they are increasing their muscle memory and the easier it will become to remember and recall vocabulary. Besides looking at the benefits of Multiple Intelligence and ASL through research, I have also seen the benefits through my teaching-related experiences.

Fieldwork 3 Placement Experience.

A few ways I saw multiple intelligence being used in my teaching-related experiences was during my Fieldwork 3 placement, where I was in a Montessori school in Ulster County. Three-fourths of my class were from Guatemala or Honduras and they were all ESL students. There was an ESL teacher that pushed in or out on a daily basis and she helped them with their English. I sat in on one of her push out lessons and I learned a lot about some of the strategies she was using in her classroom. She started the class by reviewing their sight words. The students went through the words pretty quickly and if they struggled, the teacher would help them with the first sound in the word. I appreciated that the teacher allowed the students to code switch as many times as they wanted throughout the lesson. If they didn't know how to say the word in English, they would say it in Spanish first and then the teacher would nod if it was correct, but then ask them to pronounce the word in English with support. When I asked her about the code switch, she told me that this was an important aspect to her classroom because sometimes when ESL students are learning a new language and have no chance to practice their native language, they tend to forget their native language. She did not want the students to forget their roots and their language, so she allowed code switching in her classroom. She wanted the students to communicate in the language they are most comfortable with using. The teacher knew a bit of Spanish herself and tended to code switch too throughout her lessons. During lessons, the teacher would allow the students to respond in Spanish first, but then they also have to give the English version too. During the lesson that I observed, the teacher had a question of the day, which was "How do you go to the park?" and students had to answer the question in a full sentence, "I go to the park in a _____". The teacher pulled out colorful index cards with

different kinds of transportation images and the English word attached to the image. Students had to say the words together and if they struggled they could shout the word out in Spanish, but then phone a neighbor for the English translation. After all the words had been practiced, the teacher calls on students to answer the question of the day using the full sentence she had written out on the board. Some students were able to complete the sentence with no problem, however, there were students who were quieter than others and the teacher allowed them to say the sentence in Spanish first, but then supported them in saying the sentence in English next.

The ESL teacher also used music in her classroom. Whenever she introduced a new topic, she tried to find short and easy songs that were related to the topic and played them as the students completed their activity. For example, that day they were learning about the evolution of a pumpkin for their fall unit. They had been learning about the life cycle of pumpkins and other plants. The students were going to cut out the different stages of the pumpkin on pretty paper to be taken home. While they were busy cutting and gluing, the ESL teacher started playing a very simple song about the life cycle of a pumpkin. As I watched the students hum to the tune and mouth the words, I realized that the ESL teacher had been playing this song for a while now. The song lyrics reflected the stages of a pumpkin as they were cutting and gluing the cycle onto paper. After they finished the activity, the ESL teacher reinforced the cycle one last time on the board by asking different students to name the stages in chronological order. I saw many of the students hum the song until they got to the right stage, and then raised their hand. They were using what they remembered from the song to answer the questions. This was the musical intelligence at work implemented by the ESL teacher. These students loved it and it helped them learn the material needed for class.

Also, in my Fieldwork 3 placement, there was a deaf student who was only recently introduced to sign language. According to his speech teacher and translator, who were both fluent in ASL, he was so different two years ago. When this boy was born, he was born deaf. However, his parents did not support sign language and never exposed him to sign until his speech teacher found him two years ago. They started teaching him and he became a different person overnight. His speech teacher said that the boy used to hide under the table at school and angrily grunt at everyone who tried to speak to him. Now he's this energetic boy who expresses his feelings, needs and wants through sign. He had been given a voice and a support system at school, that he does not have at home. He had a cochlear implant, but the audio box was destroyed at home by his siblings and when he took the extra one home, he accidentally broke that one too. His parents are not in support of ASL, so they refuse to pay for replacements. At home, he has no one to talk to because no one at home signs. However, at school, he has his speech teacher and his translator. He signs whatever is on his mind and he has quite the sense of humor. It is amazing for me as a teacher candidate to see the effects of sign on nonverbal students. It only goes to show that sign is a language that can help those who don't have the voice to speak for themselves. Sign gives them a way to communicate and be heard by society and that is the same goal I am trying to achieve with English Language Learners.

Student Teaching Experience

I'm currently a student teacher at a public school in Queens. Within the first week, I realized that the school was using multiple intelligence and ASL in their classrooms, whether they knew it or not. My school bought into a program called Wilson Foundations, that helps students build the needed groundwork for critical foundational skills such as, phonemic

awareness, word study, reading fluency, vocabulary, comprehension strategies, and more.

According to their Wilson Language (2020) website, “Foundations serves as a prevention program to help reduce reading and spelling failure. Foundations provides research-based instruction in Tier 1 as well as early intervention (Tier 2) for students at risk for reading difficulties.” My class of 24 students is mostly made up of ELL learners, who are slowly building their reading.

According to my cooperating teacher, she says that there has been great improvement for those ELL learners from when they first got to her classroom. I noticed during their Foundations time, they used kinesthetic, visual-spatial, verbal-linguistic, and a little bit of musical intelligence to teach the words of the day. I noticed that the teacher would write the word on the board and students would have to tap it out by using their prior knowledge on vowels and consonants (musical intelligence). If the word of the day had different shades of meaning, the teacher would ask students to name a juicier word (visual-spatial). Then, all students would stand up and write the letters in the air while verbally saying the letters they were writing (kinesthetic and verbal-linguistic). Then, the students would do it again but with their eyes closed. The Foundation literacy coach told the students that the act of moving their fingers and arms in the motion of the letters, while saying it aloud, activates a certain part of their brain that deals with language.

When they move their arm while writing in the air, it helps with their muscle memory to recall what each letter looks like. Next, students would take out their gel pads and write the words while verbally saying the letters aloud, and then while erasing the letters, they are saying the letters aloud again. At this point, they have practiced the word of the day 4x, but that’s not the end of their practice. If the word was a trick word, they would come up with the explanation together to show they understand why the word was pronounced in that way. Students would

then take out their composition books and the teacher would review vowels, r-controlled vowels, vowel teams, and more to test their prior knowledge and retention. I, for one, have never heard of this program until I got to this school. As an observer, I learned a lot about syllables and vowels and why certain words can be tricky to teach. I know I will never look at phonetics the same again after that first week and I have already started to implement it in my own speaking and reading. I would have really liked to participate in this program when I was younger because it would have been so essential to my language development as an ESL student.

I have also observed ASL being used in the classroom because students were taught how to sign *bathroom*, *water*, *add-on*, *agree* and *challenge*. I have researched how ASL can be used to lessen the distractions in a classroom by just teaching the students to sign *bathroom* and *water*. I saw how students used those two signs on a daily basis and teachers would just nod in their direction and they would get up and go. In discussions, students were taught to sign *add-on* and *challenge* if they have something they want to say. Instead of disagreeing, they hold up a C with their hands, and they can “challenge” their peers. If their peers were saying something they agree with, they can make the *same* ASL sign to show that they agree with the statement being made. If students have something to add onto, they rotate their arms in a circular motion to show they have something else to say. Discussion flowed so naturally with these ASL signs because it was not distracting, and students were able to express their thoughts without interrupting their peers. I noticed a lot of the ELL students using the agree sign to show they were following the discussion and if they showed the challenged sign, they could call on a peer to help translate their thoughts.

Critics about Sign Language

There are many critics who believe that sign language could not work in a classroom because the students are hearing and not deaf, and they would be learning two languages, English and ASL. However, I would like to challenge that idea because even though sign language was created for the deaf, hard-of-hearing or mute, ELL students can relate to them in a way. ELL students may be able to hear, but they also don't know English and are trying to learn it. With signs, ELL students have a way to bridge the words they are learning in English, with the words they already know from their native language. Sometimes ELL students are shy or are slower learners, however ASL can give them a voice they didn't have, especially if it was English they were learning.

Concluding Remarks

Overall, the effects of multiple intelligence and ASL in an ELL classroom could bring about great achievements. These methods give students multiple entry points to their learning. They have the ability to pick how they want to express themselves and throughout my research, I have found success stories for both methods. Multiple intelligence allows students to pick the intelligence they feel is best for them and ASL allows students to express thoughts they haven't learned how to say. Both of these methods have proven to be beneficial academically and emotionally in an ELL classroom.

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