The Implications of Integrating the Theory of Multiple Intelligences into English Language Learning Methodologies

Taylor Woodbury

Follow this and additional works at: https://docs.rwu.edu/sed_thesis

Part of the Bilingual, Multilingual, and Multicultural Education Commons, Educational Methods Commons, Language and Literacy Education Commons, and the Teacher Education and Professional Development Commons
ROGER WILLIAMS UNIVERSITY

SCHOOL OF EDUCATION

THE IMPLICATIONS OF INTEGRATING THE THEORY OF MULTIPLE INTELLIGENCES INTO ENGLISH LANGUAGE LEARNING METHODOLOGIES

TAYLOR WOODBURY
SPRING 2022

A thesis
submitted in partial fulfillment
of the requirements
for a baccalaureate degree in Educational Studies

Reviewed and approved by the following:

Amy Leshinsky, Ed.D.
Thesis Supervisor
Abstract

The achievement gap between English Language Learners and their peers has emerged as a problem in our nation's school system. Although the Theory of Multiple Intelligences has been used in education, it is not often applied to English Language Learners. This research analyzed the application of Multiple Intelligence Theory as it pertained to the achievement of EL’s. The results show that by using MI to dictate what teaching method to use, EL’s benefited both socioemotionally and academically. Overall, the findings show the importance of 1) ESL training for all teachers, 2) the consideration of students’ Funds of Knowledge, and 3) the incorporation of MI in classrooms.

Keywords: Multiple Intelligence Theory, English Language Learners, Howard Gardener, ESL
TABLE OF CONTENTS

Chapter 1: Introduction ........................................................................................................ 4

  Statement of the Problem ................................................................. 5

  Significance of the Research Question ........................................... 6

  Research Problem and Research Question ................................. 7

  Theoretical Framework ................................................................. 7

  Positionality Statement ............................................................... 11

  Keywords ...................................................................................... 13

  Conclusion ..................................................................................... 16

Chapter 2: Review of the Literature ......................................................... 18

  Theme 1: .................................................................................... 19

  Theme 2: .................................................................................... 25

  Summary ..................................................................................... 34

Chapter 3: Implications ................................................................................. 36

  Revisiting Problem of Practice .................................................... 36

  Implications .................................................................................. 36

  Future Research ............................................................................ 46

References ................................................................................................. 48
Chapter 1: Introduction

As of 2018, there are 5 million English Language Learners in the United States public school system, and this number continues to grow (NCES, 2021). That means 10% of the public school population needs ESL services to aid in student success. The most common languages spoken by EL’s are Spanish, Arabic, Chinese, and Vietnamese. In Pennsylvania alone, more than 225 languages are spoken by students (U.S. Department of Education, 2016). The variety of languages used in the U.S. public school system has caused state legislatures to alter educational policy over the last several decades to re-examine expectations for how educators teach EL’s.

The Every Student Succeeds Act requires states to annually assess the proficiency of EL’s. They are also required to provide “reasonable accommodations for them on state assessments, and develop new accountability systems that include long-term goals and measures of progress for ELs” regardless of the students’ native language (U.S. Department of Education, 2016). The question is what are “reasonable accommodations?” How do teachers effectively teach students who are so linguistically diverse? How do teachers know a lesson being delivered to a student from Somalia alongside a student from Peru is being fully absorbed by both? The answers to these questions have been researched by educators for decades.

This research examines methodologies currently deemed as successful approaches to teaching EL’s. For example, educators have used Keyword Method and Content Based Instruction to target the language needs of their students. However, in my research, I have identified Multiple Intelligence Theory (MI) as the most successful approach to EL student learning, as it allows a variety of intelligences to be targeted in the classroom. This research examines MI as a theoretical framework, and the value it brings to the elementary classroom. Recently, I have integrated peer-reviewed literature and my experience at an urban elementary
school, Rhode Island to evaluate the way current EL educators are incorporating MI into the classroom.

**Statement of the Problem**

In the past three decades, the number of people who speak a language other than English in the U.S. has tripled from 23 to 60 million (Nieto, 2017). Educationally this means that a larger portion of students need ESL services. The achievement gap between English Language Learners and their peers has emerged as a problem in our nation's school system. In 2005, the National Center for Education Statistics reported that “46% of ELL students nation-wide achieved at the below basic level in math in grade 4. In reading 73% were below basic” (Fry, 2007). Factors such as low self-efficacy, little to no academic support, and ineffective teaching methods are reasons for the discrepancy in scores. There are various traditional and contemporary ELL teaching methods that have been researched in depth such as Content Based Instruction, Task Based Instruction, Total Physical Response, Keyword Method, Experiential Learning, and Communicative Language Teaching. Based on research done by educators such as Sonia Nieto, James Soland, and many more, all these methods have been examined and evaluated for their pros and cons. They have been compared and contrasted but are not often used simultaneously in the classroom.

The theory of Multiple Intelligences has been a researched and effective tool to classroom learning but more research is needed to examine its impact on EL’s. There is also little to no research on the relationship between MI of students and teaching techniques. This paper aims to explore the effectiveness of students being taught using specific teaching methods that match their MI in order to increase EL performance in elementary schools. This problem matters due to the high volume of EL’s requiring services in K-12 schools. In order to examine the relationship...
between MI theory and practice, I will use chapter 2 to discuss peer reviewed literature to highlight the use of MI theory in the classroom. Then, using an internship experience at an elementary school in Rhode Island, I will consider the way results indicated in the literature can be applied to everyday practice.

**Significance of the Research**

The target audience of this research is teachers, students, parents, and school administrators, specifically at the elementary level. As most school districts in the U.S. have ELs in their district, this research will apply to most districts. This research goes in-depth on understanding a student's dominant intelligence in order to choose the most effective teaching method. This research has value to teachers who will learn about MI and various teaching methods that are effective with ELs. The research shows not only positive outcomes for each method but the possible places where they lack or do not help ELs with academic achievement. This information is crucial for teachers, as it better equips them to teach their students effectively. The research is helpful for students to understand why their teachers teach them the way they do. It can also be a reference for students. For example, if a student feels that they are lacking in a certain area, the student can bring this research to their teacher in order to adjust the format in which they are learning. This research can also be a guide for parents to better understand what their students are doing in school and possibly provide answers if their child's education seems to be lacking. Administrators can use this information when choosing curriculum for their school or district. If a large portion of their student body receives ESL services, this research provides a good foundation for how to teach the students properly with the best outcomes.
There are 5 million K-5 students who receive ESL services in the U.S., but there is no consistency with what and how they are being taught. Often choosing a teaching methodology is left to the teacher or district. As mentioned before, the achievement gap between EL students and their peers is large. In order to bridge the gap, a methodology that addresses their individual needs should be used across the country. This research will be a guide for which lessons and teaching methods are most valuable when teaching EL’s.

**Research Problem and Research Question**

The purpose of this qualitative research study is to explore the experiences of elementary English Language Learners through the lens of the theory of Multiple Intelligence. In order to incorporate Multiple Intelligences into the classroom, various traditional and contemporary teaching techniques are examined, compared, and contrasted. The findings and knowledge generated will help identify the socio-emotional and academic benefits of using MI and provide a path to lowering the achievement gap between EL’s and their peers. This work addresses the following research questions:

- What socio-emotional and academic benefits does MI theory have on elementary ELLs?
- To what extent is the theory of Multiple Intelligences applicable to traditional and contemporary ELL methodologies?

**Theoretical Framework**

In 1983, Howard Gardner proposed the theory of Multiple Intelligences (Person, 2016). The theory states that “everyone has eight intelligences at varying degrees of proficiency and an individual's learning style is unrelated to the areas in which they are most intelligent” (Marenus, 2020). Gardner believes that people are not born intelligent, but intelligence is learned and can
grow. Essentially there is no end to learning. He also challenges the idea of a single type of intelligence or “g” general intelligence. Gardner proposes eight intelligences that people naturally fall under or are able to learn: linguistic, logical/mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalist. He also notes that there are other intelligences that could be “candidates” for his theory such as spiritual, existential, and moral.

**Linguistic intelligence** or word smart deals with language. Specifically, this intelligence explains our ability with spoken and written language, ability to learn language, and ability to use language in order to accomplish goals (Marenus, 2020). People with linguistic intelligence have a high ability to analyze information and create results involving oral or written language (Marenus, 2020). Examples of this are speeches, books, stories, conversations, etc.

**Logical/Mathematical intelligence** deals with our ability to analyze and solve mathematical operations, and investigate scientific dilemmas. People with this intelligence are often able to solve large equations that others find daunting. Examples of this would be abstract problems, large number sequences, graphs and data, etc.

**Spatial intelligence** refers to people who are able to recognize and manipulate space. They may use patterns to organize what they are looking at if the space is large enough. They are able to see things in a space that others may not, in turn creating or solving a problem. People with spatial intelligence often become pilots, surgeons, artists or architects.

**Bodily-Kinesthetic intelligence** refers to people who are able to use their entire or parts of their body to solve a problem or create a product. Athletes, dancers, physical therapists, etc. all use their mind-body union in order to perform tasks or solve problems.
Musical intelligence focuses on skills relating to performing, composing, and appreciating music. People able to recognize sounds in order to create songs or beats fall under this category.

Interpersonal intelligence is the ability to understand the feelings and actions of people around them. People with this intelligence work effectively in groups and are often a good source for advice. These people understand moods, desires, intentions, and motivations especially of those around them. Career options are teachers, psychologist, public relations, etc.

Intrapersonal intelligence is the ability to understand your own feelings and actions. People of this intelligence are in touch with their emotions and deepest thoughts and desires and can effectively regulate themselves. They also often see life as goals that need to be achieved, which to this intelligence is doable.

Naturalist intelligence acknowledges the deep understanding and appreciation for species or the environment itself. People with this intelligence have the ability to identify parts of the world around us whether it be plants, animals, weather formations, or people themselves.

All eight intelligences are important in their own way. They can also be learned over time. A big detail that Gardner points out is the difference between his eight intelligences and learning styles. They are not the same. The intelligences represent intellectual abilities while learning styles is the way an individual approaches a task. His explanation of learning styles is “a hypothesis of how an individual approaches a range of materials” (Gardner, 2008). Gardner also discusses that once a person understands a topic through the lens of their intelligence they can “typically think of it in several ways,” showing how one intelligence can match up to various learning styles (Gardner, 2008).
In their book *Multiple Intelligences And Student Achievement: Success Stories From Six Schools*, Lisa and Bruce Campbell agree with the theory of Multiple Intelligence through the lens of education. They contacted six K-12 U.S. schools that use MI programs to support student learning. Although each school was slightly different in approach, they found that “MI provides a philosophical and curricular framework in each site, and the students have made significant academic achievement gains as measured by respected standardized tests, state assessment tests, and anecdotal comments form informed educators” (Campbell, 1999). In Thomas Armstrong’s book, *Multiple Intelligences In The Classroom*, he sheds light on the opinions of critics against MI. He organizes his findings into three main criticisms: “MI theory lacking empirical support,” “no solid research supports the effectiveness of using MI in the classroom,” and “MI theory dumbs down the curriculum to make all students feel smart” (Armstrong, 2017). The author then goes on to explain his and his colleagues' response to each criticism. Their main points were that, similar to the Campbell’s, there has been significant research done on the effectiveness of MI, the idea that “g” is the universal guide to intelligence has shifted, and that MI does not dumb down information but simply is differentiated to be better comprehended. The theory of Multiple Intelligences has its critics but it also has overwhelming, backed by research, support. The effectiveness of using MI in a classroom boils down to the effectiveness of the curriculum and teachers.

In his book, *Multiple Intelligences In Practice: Enhancing Self-Esteem And Learning In The Classroom*, Mike Fleetham discusses the importance of MI and how it allows students to learn based on their already existing strengths, in turn building their confidence (Fleetham, 2006). As has been seen in English language Learners, self-esteem can seriously affect a students’ will to learn and achieve in the classroom. If teachers start to recognize the strengths of
students, whether it be Naturalist or Intrapersonal, we will be better equipped to help them succeed. Various language learning techniques—Content-Based Instruction, Task-Based Instruction, Total Physical Response, Keyword Method, Experiential Learning, Communicative Language Teaching—do not seem to cover the student as a whole. Multiple Intelligences takes all students into consideration with their various specialties and provides a teaching and learning approach that works for all.

**Positionality**

My race, native language, citizenship, geographic location, and job/internship all work to construct my positionality. I identify as a white, female, legal American citizen, who speaks English as a first language. The majority of my students will be different races and/or ethnicities than me. My future students will bring different views on the world since they have lived in other countries or their families have lived in other countries. Some of my students may be first generation American citizens or have families that have been through the green card application process, which is something I have not experienced. The process of becoming an American citizen can be very stressful and time consuming. For my future younger students, this can be confusing and impact their experiences in the classroom.

My geographic location impacts my positionality as well. I grew up and will start my teaching career in Massachusetts. The northeast in the United States is known for its good education, which I experienced myself. It is possible my students have not lived their whole lives in the northeastern United States, and it is possible their families are unfamiliar with the U.S. educational system or have lived in other parts of the U.S. that have different expectations for ELL students than we have in Massachusetts. When researching the topic of ESL, I have to remember that in Massachusetts schools, a large portion of our students need these services.
Other parts of the country may not need ESL as much or politically may disagree with certain ways of teaching. Another facet of geographic location that impacts me is my accent. I also have to recognize that I may have an accent when saying certain words that my students could potentially find confusing or idioms that are more likely to be used in the northeastern U.S. I also have to recognize that my students could have accents based on their family’s country of origin.

Finally, my job and internship experience shape my positionality. During my undergrad collegiate years, I interned and volunteered to work with international students on the Roger Williams campus. This exposed me to ESL early on and gave me a positive mindset towards the students and ESL in general. Other teachers or peers may not have had this experience so will not bring the same knowledge into the classroom.

Since I have not had a lot of experience in an actual classroom with English Language Learners, my current set of beliefs about my topic are impacted by my experiences and individuals I have met. I have worked with students from the Dominican Republic, Peru, and Japan on the RWU campus. These are international students that need additional support for English, and I serve as a connection point for them. Despite my current work, I, like all individuals, hold implicit biases. The first step to eliminating biases is to recognize them. Although subconsciously, when I think of a native Spanish speaking EL’s, I automatically compare and contrast them to the students I work with. There are also various stereotypes about countries and their people that I have heard. Even if I do not believe them, they are implanted in my brain, and if I have to acknowledge them in order to minimize their impact. The same could be said for students I work with, they may have heard or believe stereotypes that could apply to me. I need to keep in mind that I may be the first American they are interacting with. As I continue to meet with and interact with ELLs, my positionality, and theirs, will continue to alter.
Additionally, I understand that the world political climate can impact my views of others. For example, with the current climate between Russia and the Ukraine, it would be hard to separate the political climate and tensions from my initial interactions with an ELL, as I do not have awareness on how the political climate has impacted this individual and their family. My beliefs, therefore, are shaped not only from my own experience, but from social media and news outlets showcasing aspects of the current political climate.

My positionality has grown during my time at Roger Williams. Three years ago I did not know what ESL was or even about the students it serves. By declaring my major Educational Studies and delving into language in the classroom, since I enjoyed learning Spanish myself, I became exposed to ESL. I see ESL as a necessity for all schools, not just those with English Language Learners. I grew up not knowing or recognizing ESL was a topic undertaken by the federal government in an effort to provide equity in the educational system. In turn I was ignorant of the students themselves in ESL programs at the state and national level. A major issue with ESL is getting the proper recognition and research to better the programs and students. By normalizing ESL and incorporating basic knowledge about it into all of our schools, the field will not go unnoticed. I am happy to have been exposed to ESL since it gave me career aspirations but wish the exposure to this field occurred earlier.

**Definitions of Key Terminology:**

**English As A Second Language (ESL)** - Teaching English to students whose native language is not English can refer to the classroom type or curriculum.

**English As A Foreign Language (EFL)** - Teaching English to students whose native language is not English in a country that does not usually speak English. The term is often used in an international context.
Teaching English As A Second Language (TESOL) - Teaching English to students who are learning English in addition to their native language.

Multilingual - A person who knows more than two languages.

Bilingual - Someone who is fluent in two languages.

English Language Learner (ELL, EL)- A student who qualifies, needs, or wants ESL instruction. This term is most often used in the United States and Canada.

Emergent Bilingual - A recent term with the idea of being additive rather than subjective. A student who is in the process of learning English.

Newcomer - Newly arrived/returned ELL who is 2 or more years behind their same age peers academically.

Students With Interrupted Formal Education (SIFE) - A student who has either had little to no or interrupted formal education and are in need of ESL services.

Limited English Proficiency (LEP) - A term used to describe, mostly on forms, that a student is not fully proficient in English or needs ESL services.

Redesignated/Exited - A student who has graduated or tested out of ESL services.

Culture - Set of practices, ideologies, values from different groups that individuals draw from to make sense of the world. Culture is learned, can be taught, and is fluid.

Nationality - A way to categorize people based on where they hold citizenship.

Ethnicity - A way to categorize people based on their heritage and implies shared ancestral origins.

Race - A socially determined way we categorize people based on what they look like, depending on social/historical/political context of the time.
**Latinx** - A term that refers to people living in the United States with a cultural/ethnic Latin American background. It is the non-binary version of Latino; the o/a ending is replaced with x to be gender neutral.

**Latino** - Refers to someone who is from or has a background in a Latin American country.

**Chicano** - Refers to someone having Mexican parents or grandparents but was born in the United States.

**Hispanic** - Refers to someone who is Spanish-speaking or has a background in a Spanish-speaking country.

**Self Efficacy** - A term that refers to an individual's belief in themself to execute behaviors and self advocate in order to meet a goal.

**Multiple Intelligence Theory** - Howard Gardner’s theory that there are eight intelligences at varying degrees of proficiency that can be improved over time. This theory highlights that individuals are not limited to mental growth.

**Keyword Method** - A teaching method in which images or rhymes are used to aid memorization or understanding of a concept or vocabulary.

**Language Proficiency** - When a student has tested out of ESL services (passing scores vary by state) and is fluent in speaking, reading, writing, and listening in English.

**Total Physical Response** - A language teaching method where words and phrases are attached to a movement, mime, gesture, or act in order to memorize and learn.

**Mnemonics** - A way to memorize a piece of information. An example is Please Excuse My Dear Aunt Sally (PEMDAS), which is a mnemonic to help students remember the order required to complete math equations.
**Phonemes** - A unit of sound in a language with its own distinct sound that can be distinguished within a word. An example is C in car.

**Experiential Learning** - A teaching method where students learn by being hands-on and doing activities rather than sitting, listening to a lecture.

**Content-Based Instruction** - A language teaching method that focuses on a topic or subject in the target language. The idea is that students will be learning both the lesson and language simultaneously.

**Task-Based Instruction** - A language teaching method that allows students to choose a topic that interests or is relevant to them and solve a task using target language.

**World Class Instructional Design and Assessment (WIDA)** - A consortium that provides proficiency assessments given to students grades K-12 to help educators identify whether they are EL’s.

**Conclusion**

This chapter introduced and explained the theory of Multiple Intelligences and considered the significance of this research to pedagogy. In particular, this research focuses on the way to incorporate this methodology into the classroom to better serve ELs. People are born with particular intelligences that, once known, can be targeted in a classroom lesson in order to improve comprehension. There have been many challenges facing EL’s and a major achievement gap exists between them and other non-ESL serviced students. By using a student's dominant intelligence, there are many benefits that will be discussed in detail in Chapter 2.

The next chapter will review the literature on the challenges that English Language Learners face, the benefits of using MI in the classroom, and the implementation of MI with traditional and contemporary teaching techniques to aid teachers. Based on the literature, using
MI to determine which teaching method is most beneficial to EL students will lower the achievement gap and be more effective to student learning.
Chapter 2: Literature Review

Introduction

The problem which needs to be addressed in our education system is how to effectively teach English Language Learners in order to lower the achievement gap. The purpose of this senior thesis is to implement teaching techniques and methodologies that address students' intelligences based on the theory of Multiple Intelligences. As mentioned previously, Gardener’s (1983) theory of eight intelligences differs from other theories about learning styles. In order to properly teach students, educators need to acknowledge the dominant intelligences and learning styles of their students. This will ensure a well-rounded, personalized education that fits for all students.

This chapter will focus on the positive impact of using Multiple Intelligence theory with ELLs. Additionally, I will focus on how Multiple Intelligences blend with current language learning strategies employed in the K-12 classroom with ELLs. Finally, this chapter will unpack the recent literature regarding Multiple Intelligence theory, language learning strategies, and ELLs. The first step to solving the problems posed in this thesis is for teachers to narrow down their students' dominant intelligences, which will guide lesson planning and the way they teach. The second step to solving the problem is matching the students' intelligences with corresponding teaching techniques and methodologies. Further details about both steps will be discussed under each theme.

Two themes emerged from the literature. The first theme is that there are positive benefits when targeting Multiple Intelligences when working with English Language Learners. Specifically, this theme delves into socio-emotional benefits and academic achievements. The second theme is the way Multiple Intelligences blend with current English Language Learning
teaching strategies or methodologies. Within this theme, five ELL teaching strategies are discussed and compared: Content/Task-Based Instruction, Total Physical Response, Keyword Method, Experiential Learning, and Communicative Language Teaching.

**Positive benefits when targeting Multiple Intelligences when working with English Language Learners**

Ample research exists on the application of Multiple Intelligences in education. The theory itself emerged in 1983 by Howard Gardiner with the intention of improving how people learn. The theory has only recently been applied to English Language Learners, which explains the lack of research and data. The theme of using Multiple Intelligences to better education for ELL’s emerged from an examination of literature between 2014 and 2022; however, research is currently ongoing. This section covers two major topics: socio-emotional benefits and academic achievements. The first sub theme focuses on confidence, language anxiety, self-efficacy, growth, and motivation within EL students. The second sub theme focuses on improved testing, reading levels, proficiency, and cultural intelligence. The sub themes could also be categorized by studies that are qualitative and quantitative. Often in the first sub theme, qualitative data was found since it is hard to put a number to how a student feels, while the second sub theme has more quantitative data as it compares test scores and trackable achievement.

**Socio-Emotional Benefits**

In her mixed-methods study, Nieto (2017) shows how non-specialist teachers can benefit from the practices of ESL teachers. She used her own research from recent years with bilingual and ESL teachers, who teach diverse language backgrounds at different grade levels in a variety of school settings within the United States. Her findings are broken into two main lessons. One is that teachers need to learn certain bodies of knowledge and two is that teachers build bridges
with their students by having supportive dispositions about language, culture, and differences. Nieto (2017) further explains that this information about new pedagogy and curriculum requires more and better teacher education. This study shows that by building student confidence, students are more motivated to learn.

In a similar quantitative study by Soland and Sandilos (2021), the association between the achievement gap of ELL’s and their social-emotional learning constructs such as self-efficacy is established. The study focused on 5th to 8th grade EL students in a California school district, the majority of students being Hispanic. Results found that low self-efficacy at the beginning of middle school is associated with slow growth in math and reading for all students but especially EL’s. The data shows the correlation between low student motivation (self-efficacy) and achievement gap. Without the belief they can succeed, there is no incentive to attempt success. The researchers stress the importance of both effective instruction and positive verbal feedback in order to increase EL’s feelings of self-efficacy across content fields during middle school years.

Another qualitative study conducted by Madkour and Mohamed (2016) focuses on the socio-emotional benefits of EL student motivation. The study examined the impact of students' Multiple Intelligence when integrated into teaching and learning English in higher education. Specifically, they questioned the relationship between MI and language proficiency, student motivation, and problem solving. The participants from Saudi Arabia, formed two groups, mixed in gender, that studied English at a level 3. The control group learned traditionally while the experimental group learned after identifying their MI profiles. Each group was given post-experiment questionnaires. The results showed that when students identified their MI they were more motivated, which improved language proficiency. The researchers recommended
helping students identify their intelligence in order to aid their learning language skills. The second recommendation was to create a training center for teachers to use in order to learn and utilize MI instructional plans in the classroom. Finally, the third recommendation was to promote the theory of MI among colleges to integrate curriculum and conduct assessments within the framework of MI.

The quantitative study by Liu and Chen (2014) investigated language anxiety and its relationships to the use of learning strategies in ELs as a socio-emotional benefit for EL’s. The participants were 212 male and female, fifth/sixth grade EL students in Taiwanese schools. It is important to note that about 75% of these students had taken English lessons outside of the classroom. A language anxiety scale was used to measure students’ feelings before and after utilizing MI techniques in the classroom. The results showed that most students felt at least mild anxiety in the classroom and that students who used MI strategies were less likely to be anxious, which through further research could be correlated with improved achievement. The researchers suggest that teachers should better identify students who are susceptible to a higher level of anxiety and provide those students with more opportunities to practice the use of learning strategies.

A final study that focused on the socio-emotional benefits of EL students was in a 2019 qualitative study by Cho and Wang. They examined how teachers describe and understand EL’s socio-emotional abilities and what pedagogical methods they use to address those abilities in the classroom for future development. Critical Race Theory and Multiple Intelligence Theory were also described and analyzed within the classrooms. The research focused on six elementary ESL school teachers who had extensive experience with ELL students specifically from refugee families or had at least 50% EL’s in their classroom. The results showed that the teachers
identified a large range of social-emotional skills that are important for EL’s to develop within their classroom through the lens of MI. It was also discovered that teachers' views and self-reported pedagogical methods were widely deficit-oriented through the lens of CRT. The researchers had many points of advice to share. One implication was that students' funds of knowledge should be reflected in the curriculum, texts, materials, and activities. They also urged teachers to integrate age-appropriate and culturally relevant books to create a positive sense of social-emotional learning. The research also showed that teachers who were familiar with CRT and utilized MI in their classrooms had a better handle on what their students needed to succeed emotionally. A final implication was to recognize the importance of collaborating with refugee students’ parents to further promote social-emotional learning.

**Academic achievements**

In addition to MI improving students’ social emotional learning, MI also impacts academic achievement. The quantitative study by Rafie, Khosravi, and Nasiri (2016) investigated the relationship between students' cultural intelligence and performance through the lens of MI. The participants were 60 advanced ELs, aged 19-24, mixed in gender, from an Iranian college. A placement, cultural intelligence, and multiple intelligence test were used to compare results. The study found that students with higher cultural intelligence scored higher on listening tests. They also found that the students whose inter and intra personal intelligences were higher performed better when culture was incorporated in the classroom. Therefore, it highlights the importance of incorporating cultural programs in EFL classrooms to promote better communication and listening skills. Incorporating cultural programs also aligns classroom learning with students’ intelligences to make a more effective lesson. Based on the findings, the researchers suggest
incorporating programs for teaching culture in EFL classrooms in order to enhance cultural knowledge, which would promote better conversational skills and test scores.

The article by Tamiselvi and Geetha (2015) discusses origins of MI theory and ways to incorporate the theory into the classroom. The paper focuses on lesson planning, the benefits of including MI for teachers and students, and integrating various teaching methodologies. The article was written based on the Indian Education System for qualified teachers K-12. The researchers stress the importance of having a Bachelor's Degree and or a Masters Degree in the subject they teach. Although there was no research done to prove the effectiveness of the lessons and usage of MI, the authors provided many different lesson plans to try in a classroom. Based on other sources looked at in this literature review, this is a good resource to use when actually implementing MI into the classroom. In their conclusion, the authors discuss the importance of MI and urge all educators to identify and embrace students' strongest intelligences. This will expose students to a variety of ways to learn and better individualize their needs in the classroom. Similar to this thesis, the authors believe that by using varied teaching strategies, learning will be more effective and successful.

The quantitative study by Yavich and Rotnitsky (2020) examined the relationships between dominant intelligences and middle school students' academic achievement. The participants were 158 seventh grade students, at an Israeli middle school. The participants were broken up into two groups, excellent and ordinary classes. In the excellent classes, 80.9% of students had a dominance in at least one intelligence; in the ordinary classes, 48.4% of students had a dominance in at least one intelligence. These findings mean that most students do associate with Gardiner’s intelligence theory. The researchers went further to say students who related to two or more intelligences performed better in school. The researchers urge teachers to test their
students yearly to find their dominant intelligences since they may change due to the class environment.

The quantitative study by Ansarin and Khatibi (2018) aimed to assess if MI profiles have an effect on students' use of language learning strategies. Additionally, their research examined if gender and different proficiency levels played a role pertaining to MI. The participants were 303 EFL learners, mixed in gender, with an age range from 12-33 at an Iranian school. Results from the study show a positive relationship between the use of MI and proficiency scores. Although there was not a significant difference of MI and high proficiency scores across genders, the researchers suggest that teachers should evaluate students' MI before choosing teaching materials in order to correctly match students with their intelligence needs.

In the 2012 article written by Berg, Petrón, and Greybeck, the growing number of EL’s is addressed and ideas and strategies are provided for teachers to more effectively meet the needs of these students. The paper focuses on secondary teachers of EL’s. Ideas and strategies such as understanding academic background, meaningful instruction, culturally responsive instruction, peer interaction, teacher language use, and comprehensible written materials are all discussed in depth. The authors point out that with the growing number of EL’s in our educational system, most teachers, not simply ESL teachers, will have to provide instruction. The authors also mention that although the article provides ideas and strategies, it is simply a foundation for future research. Their ending remark urges more educational research on the topic in order to find better ways to teach an overwhelming part of our population.

Finally, a qualitative study by Giannikas (2018) explored whether film and Multiple Intelligence activities have an impact on EFL students' conversational skills. It also delved into the extent that films allow learners to comprehend and observe language. The study included 19
ELs, ages 21-36, females and males, from various countries, in a UK English-speaking classroom. Observations before and after viewing films and using MI activities were taken and compared with post-experiment observations. The study found that it was less about the techniques used rather than the relationship between students. Although if the students were properly prepared and socialized, the later MI activities were positively affected and were performed better. The researcher advises that media be brought into the classroom since it motivates discussion, gives a more authentic touch to learning, and encourages student autonomy.

**Conclusion**

Based on the various studies and articles described in this section, it is clear that the use of MI has socio-emotional benefits and aids in academic achievements. These themes cover topics such as confidence, language anxiety, self-efficacy, growth, and motivation along with improved testing, reading levels, proficiency, and cultural intelligence. Students, especially English Language Learners, greatly benefit from determining their dominant intelligences and using this to guide their education. In the next theme, the use of MI will be related to ELL teaching strategies and methodologies, which will further the benefits given to students.

**The Way Multiple Intelligences Could be Blended with Current English Language Learning Teaching Strategies or Methodologies**

Ample research exists on English Language Learner teaching strategies and methodologies. In the U.S. the first federally recognized language learning policy emerged in 1968. The Bilingual Act created and maintained a federal policy to meet the needs of children with limited English proficiency. It provided federal grants to school districts in order to establish education programs for students with limited English-speaking ability (Jennings, 2015).
Further research and new teaching strategies have emerged since the establishment of this federal policy; however, this policy governs the use of foreign language use in U.S. classrooms and impacts the way ELLs are taught. Although different strategies have been tested in classrooms, they have never been combined with Multiple Intelligence theory. This section covers the major and most researched EL teaching techniques that would be most beneficial paired with MI: Content/Task-Based Instruction, Total Physical Response, Keyword Method, Experiential Learning, and Communicative Language Teaching. Each sub theme delves into what the strategy is and specific instances where it was implemented with EL students based on current literature.

**Content-Based Instruction/Task-Based Instruction**

In the qualitative study by Bantis (2010), task-based instruction is shown to impact EL’s written education. The study focused on 10 EL’s, K-8th grade, in an urban public school, all with Spanish as the native language. The results indicated that using task-based instruction can be a useful tool for constructive pedagogy and addresses the diverse needs of second language learners. Teachers who participated in the study were able to address students' difficulty in understanding a text, give opportunities to compare and contrast existing knowledge, and gain awareness of students' ability to self-correct. The researcher proposes, based on the research, that teachers start using TBI in their classroom.

The second qualitative study focusing on Content-Based and Task-based Instruction was conducted by DelliCarpini and Alonso (2014) and reported on the effects of a program meant to prepare STEM and ESL teachers to work with EL students in their content classroom through collaboration of mainstream classes and language integration. The study focused on 33 STEM and ESL teachers teaching secondary level EL’s. There were multiple findings post-study. The first being that the teachers often held a deficit view of the EL’s. It was also found that
mainstream teachers especially held low levels of understanding the needs of EL’s but did want more knowledge. The final finding was the lack of knowledge that language plays in a mainstream, general education classroom. The main recommendation by the researchers was the need for collaboration between mainstream and ESL teachers. By collaborating in practice, both the teachers and students benefit.

The study by Bantis (2010) shows how students' written education is positively impacted by TBI. For students who are dominant in Linguistic intelligence, teachers should choose TBI as a way to effectively teach and improve the writing of EL’s. In the second source, collaboration was the main suggestion from the researchers. By joining mainstream general education classes with language learning, teachers will provide lessons that will target various intelligences of students. The rationale behind CBI and TBI is that language learning is integrated into another lesson (Larsen-Freeman & Anderson, 2011). Students who struggle with traditional learning styles will appreciate this approach. By targeting various intelligences, teachers can effectively teach students with different dominant intelligences all in the same classroom.

**Total Physical Response**

The qualitative study by Yusuf, Asyik, Rusdi (2017) investigated various EL teaching methods in a bilingual school in Indonesia. Total Physical Response, Natural Approach, Communicative Language Teaching, and Suggestopedia were focused on. The study followed 6 toddlers in an English bilingual classroom, focusing on the teacher behavior and use of the techniques. Based on observation and interviews with the participating teachers, TPR and NA were the most effective approaches to teaching ELs. By using TPR the students were able to demonstrate their understanding of commands through simple answers or gestures. The
researchers urge teachers to use TPR especially with younger students since it allows focus to be on both social and functional contexts within the classroom.

In this mixed methods study, Magnussen and Sukying (2021) examined whether songs and TPR could facilitate preschoolers vocab acquisition in EFL classrooms. The study focused on 72 preschoolers, in three classrooms, in a Thai school, who were taught 12 target words using TPR, songs, and a mix of both methods (TPR&S). The study lasted 6 weeks. Video recordings and pre and post tests were administered. The results show that singing and TPR significantly improved the students’ vocab acquisitions and that using a mixture of both TPR&S has an even more positive impact on students’ learning. The researchers urge others to further what they have done and increase the time period of the study to get long-term results.

The qualitative study by Al Harrasi (2014) explored the effectiveness of the curriculum and examined the results yielded by TPR when teaching EL’s. The study focused on the two part curriculum in Oman. Part 1 refers to grades 1-4 and is taught through TPR while part 2 is grades 5-10 and is taught in a different approach (not mentioned). The study explores the textbooks used in both parts and their effectiveness with EL’s. The results show that TPR has many positive benefits especially when learning vocab and commands but the study revealed that if TPR is misapplied it can be detrimental. If teachers have not taken TPR training courses or have little experience, it will not be as effective with student learning. The researcher notes that if TPR is to be implemented the quality of textbooks and teachers is necessary to success. They suggest that teachers should focus on the efficiency of the learning process rather than the ultimate outcome.

TPR is essentially asking students to use physical movement to react to verbal input (Larsen-Freeman & Anderson, 2011). The literature above shows that students, especially younger in age, respond well when using TPR. Often when put on the spot to answer, students
feel pressured and anxious, which causes a loss in motivation and confidence. TPR is a low-stress way of answering for students. As a class they will learn commands and repeat what the teacher does as a group, instilling a sense of community. This teaching methodology is effective especially with students whose dominant intelligence is Bodily-Kinesthetic. By focusing on movements and acting out words and phrases, students will gain more knowledge than if they were sitting at a table writing. Although TPR may not be suitable for dense lessons, young and beginner EL’s will benefit greatly from TPR.

**Keyword Method**

The qualitative study by Wyra and Lawson (2018) focused on the extent to which Keyword Method instruction in a Spanish classroom in Australia resulted in students’ explicit knowledge. The participants included 67 students, 11-12 years old, mixed in gender, studying Spanish in 3 Australian primary schools. There was a control and experimental group, the latter was taught how to utilize KWM. Results from open-ended response questions given to both groups were compared and found that KWM helped students gain detailed strategy knowledge. Based on the findings, researchers propose that additional research be given to examining students' strategy and meta-strategy knowledge in order to know that they have learned and can actually use it to effectively learn.

In 2017, a mixed methods study was conducted by Khorasgani and Khanehgir, aiming to find the effectiveness of Keyword Method and Total Physical Response Method when teaching vocab to early elementary students. Students were randomly chosen from 34 elementary schools, ages 6-7, with little to no English background. The study discovered that KWM is more efficient and TPR drew the same results as the control group. It was also mentioned that this is the first empirical investigation to compare efficiency with these methods. Since this is one of the first
empirical investigations on this topic, the researchers urge others to do the same or similar experiment to collect more data to support the hypothesis that KWM is actually effective.

This quantitative study performed by Wang, Lawson and Curtis (2015) aimed to examine the influence of image quality on reading comprehension in EFL students. The participants were 93 sophomore college ELs, in China, of mixed gender. Reading comprehension was tested prior to the study and was compared to post-image quality results. The findings showed that imagery strategy training helped EFLs improve reading comprehension. They also discovered that female participants showed a higher comprehension performance than males. Throughout the study, self-efficacy did not emerge as a significant predictor of achievement, but the researchers think further research could prove self-efficacy to be a major role in success.

Keyword Method is a memory technique that helps students memorize and eventually learn words, phrases, and ideas. As noted in the study by Wyra and Lawson (2018), KWM helped students not only on the tests they were given in the experiment but helped students gain detailed strategy knowledge to be used in the future. The method can also be applied through images as Wang, Lawson, and Curtis (2015) point out. Students were able to use pictures and relate them to words in order to learn the concept. KWM is an effective teaching method especially for students whose dominant intelligence is Linguistic or Musical as it relies on previous knowledge to learn new words.

**Experiential Learning**

This article by Alexandrowicz (2020) explores the development of EL’s through effective teaching with experiential approaches. The article focuses specifically on developing empathy skills, effective teaching pedagogy for EL’s in content and language development, components of experiential learning and how to implement it. Experiential learning, as described by the author,
is having concrete experiences which can be reflected and built upon in order to form new knowledge and ideas. This pedagogy can be implemented with content-based instruction in order to provide a well-rounded lesson and educational experience. The article provides curriculum and instruction that can even be applied to WIDA standards. The author suggests at the end that community service learning is a great way for all students, not just EL’s, to encourage community engagement, enrich learning, and strengthen communities, all while learning.

This qualitative study by Martinez and Mendoza (2020) examined how Latinx ELs perceive their experiences in urban schools and how these perceptions impact their path to college and career readiness. Participants were from California urban high schools with certified LL pathways (Linked Learning aka Experiential also Opportunity to Learn Theory) and identified as Latinx ELs. The study was solely based on interviews with the students which researchers gathered, transcribed, read, analyzed, and compared. The study found that students expressed a clear desire to go to college and pursue a career. Additionally, they benefited from LL learning although many challenges interfered with learning and succeeding. The researchers recommend to teachers and administrators to cultivate a strong college-going culture, inspire college and career aspirations, have extensive knowledge about college, provide access to work-based learning, and provide students ample support for learning. They also mention that more research on the effectiveness of experiential learning in improving academic preparedness of EL’s is crucial to finding additional support or opportunities to learn.

A mixed methods study conducted by Bohon and McKelvey (2017) focused on ESL teachers in a suburban school system in central Virginia and their use of Kolb’s Experiential Learning Theory. The researchers asked to what extent secondary content teachers increase their knowledge of teaching ELs after a week-long training? Through pre/post surveys of 230 content
teachers of various subjects in the schools, data was collected and analyzed. The study found that the training in Experiential Learning had a large, positive, effect on teachers regardless of previous training. Further research concluded that professional development which allowed teachers to reflect on their own teaching, was critical to implementing ELT into the classroom. Since “ELT is not a set of tools or techniques for learning, but a framework for meeting the learning needs of individuals,” significant planning time and intentionality are necessary aspects in the professional development process (Bohon et al., 2017, p.621). The researchers urge all teachers to undergo training in order to implement these ideas into their own classrooms.

Experiential Learning is a way for students to learn by doing. Every intelligence in MI is receptive to experiential learning. Students whose dominant intelligence is Naturalist would benefit from having class outside. Students whose dominant intelligence is Musical would benefit from actually playing the instrument instead of watching a video about one. Through hands-on learning, students are able to fully experience the lesson, which further embeds the information they are learning in their brain. Experiential Learning is one of the most beneficial teaching techniques since it includes all the intelligences.

**Communicative Language Teaching**

The qualitative article by Case (2021) focuses on the achievement and development of EL’s by recognizing all aspects of their lives in order to support learning and well-being. The participants were 7/8th grade EL’s from a school in the northwest region of the US. Twenty to 45 minutes interviews were conducted, which asked about students' lives in and out of school, their hobbies, languages, relationships, and anything else they felt like sharing. The interviews were then compiled and transcribed in order to be reviewed. The researcher found many overarching themes that connected the vastly different students. The results show that while literature and
discourse surrounding EL’s seem to be dominated by closing the language and achievement gaps, in reality by communicating with them in various languages helps the work through challenges and become more motivated. Based on the results, the researcher urges educators to move away from deficit mindsets towards EL’s and rather focus on the technical aspects of teaching them even if that means simply talking to the students.

In the mixed methods study by Millard and Hirano (2020), “teacher cognition and practices, student perceptions, and textbook approaches to pronunciation instruction in a community-based ESL program” is investigated. The study was conducted on a college campus of mostly Latino students, seven teachers and 11 students were interviewed while researchers also looked at their textbooks and observed their classes. It is important to note that the only cost for students was the textbook, which was an optional purchase, meaning that not all students had the luxury and could benefit from what the book had to offer. The findings showed that teachers and students acknowledged the importance of pronunciation, but teachers lacked the training in teaching it to their students. The textbooks had few pronunciation activities but they were often skipped since teachers did not understand them. The researchers concluded and suggested that ESL programs could and should benefit from professional development programs, which target pronunciation instruction.

Communicative Language Teaching aims to teach students how to clearly and competently speak in real-world situations. This method can be challenging since what it actually looks like in the classroom varies depending on the teacher's interpretation. In the example above, Case (2021) conducted recorded interviews with students and analyzed the recordings to find results. While in the second study, Millard and Hirano (2020) observed classroom conversations and tested students on pronunciation in order to see the deficits within the
classroom. Both studies found valuable knowledge and used CLT but through different applications. This flexibility allows CLT to be used for any dominant intelligence. Teachers are able to adjust lessons for their students’ success. CLT is effective and creates a classroom community when used correctly, which increases student confidence and comfort levels. As discussed in Theme 1, when students’ socio-emotional wellbeing is intact, their academic achievements rise. This cause and effect situation is possible if teachers choose to use CLT, showing how beneficial the method can be.

**Conclusion**

Based on the various studies and articles described in this section, it is clear that ELL teaching strategies and methodologies have come a long way and have many benefits. If teachers used MI to guide which teaching strategy they choose, socio-emotional benefits and academic achievements would increase. The achievement gap between EL’s and their peers would become a thing of the past. These themes covered Content/Task-Based Instruction, Total Physical Response, Keyword Method, Experiential Learning, and Communicative Language Teaching as possible ELL teaching strategies. Students, especially English Language Learners, greatly benefit from MI and specified teaching strategies being the determining factor to how teachers teach.

**Summary**

This chapter addressed the problem of how to effectively teach EL’s in order to lower the achievement gap. When teachers determine their students' intelligence based on MI and use this knowledge to choose the correct and effective teaching strategy, the students will experience socio-emotional benefits and increased academic achievements. Based on the literature, MI and the mentioned teaching techniques are successful. This senior thesis explains why combining
both will be highly beneficial to EL’s across the country. The next chapter will discuss the
observations and takeaways from being in an urban elementary school, Rhode Island which
serves 390 students in grades K-5. They will be compared to the literature found on the topics of
MI and the ELL teaching strategies and methodologies.
Chapter 3: Application to Practice

Revisiting Problem of Practice

This paper seeks to answer the questions 1) What socio-emotional and academic benefits does MI theory have on elementary ELLs and 2) To what extent is the theory of Multiple Intelligences applicable to traditional and contemporary ELL methodologies? In doing so, the researcher hopes to shed light on the field of ESL field in order to improve the educational experience for EL students. As mentioned in chapter 1, much research has been done on how to effectively teach English Language Learners due to their linguistic diversity. The theoretical framework focused on Howard Gardner's Theory of Multiple Intelligences and its application to EL’s. This research is significant to teachers, students, parents, and school administrators and will be a guide for which lessons and teaching methods are most valuable when teaching EL’s.

Current research in the field, as well as in this examination, results in two key strands. The first is that there are positive socio-emotional and academic benefits by targeting MI when working with EL’s. The second strand is when the dominant intelligence of a student is found, this can be used to determine the most effective teaching strategy or method. Strategies such as Content/Task-Based Instruction, Total Physical Response, Keyword Method, Experiential Learning, and Communicative Language Teaching are all discussed in depth. The aligning Intelligences and the effectiveness of each strategy is provided. This chapter will focus on the implications of this research and how it affects the education of over 5 million English Language Learners in the United States (NCES, 2021).

Implications

Implication 1: Mainstream Educators Need ESL Training
One implication that emerges from the research is that mainstream education teachers need training on how to work with EL’s. This is a viable implication based on the literature and observations from being in an urban elementary school. Current research like the work of Nieto (2017) and Berg, Petrón, and Greybeck (2012) indicate this is a needed area for additional focus in order to improve the education of English Language Learners.

As discussed in her research, Nieto (2017) believes that non-specialist teachers can benefit from the practices of ESL teachers. This belief is based on her own research over recent years with bilingual and ESL teachers. Her findings show that teachers need to learn certain bodies of knowledge in order to effectively teach EL’s. Nieto (2017) further explains that this information about new pedagogy and curriculum requires more and better teacher education. This study shows that by building student confidence, they are more motivated to learn. In a similar article by Berg, Petrón, and Greybeck’s (2012) this same idea that teachers need proper training is brought up. The authors point out that with the growing number of EL’s in our educational system, most teachers, not simply ESL teachers, will need to provide instruction. With this recognition they provide ideas and strategies for teachers to use in order to teach effectively. Things such as understanding academic background, meaningful instruction, culturally responsive instruction, peer interaction, teacher language use, and comprehensible written materials are all needed in order for a classroom to be beneficial.

Based on my own experiences in a Rhode Island elementary school, one educator agreed with Nieto (2017). One educator at this school has over 30 students with varying native languages who need her services. With this many students, she breaks her schedule into 30-minute time blocks to be able to meet with all students at least twice a week. She meets with students both individually and in small groups, sometimes pulling them out of class or
‘pushing-in’ to their mainstream classrooms. She told me most mainstream teachers prefer her to ‘push-in’, as this provides the students the services and extra help they need without missing valuable class time. Many students benefit from ‘push-in’ but some need that one-on-one time to get individualized help in whatever subject or skill they are struggling with. This educator suggested that if all teachers were ESL trained and certified then mainstream classrooms would be better. She also said that her own program would be better since she would not be overloaded and would have the proper time to help students when necessary. By training all teachers to work with EL’s, their education is improved and the specialists could accommodate their students.

By training all teachers in ESL, it would also help the teacher shortage. According to the Boston Globe, “the Providence School Department is launching an aggressive teacher recruitment campaign as it seeks to fill at least 133 positions before the new school year begins in September” (McGowan, 2022). In February 2022, Rhode Island sent out over 300 displacement notices in order to change job descriptions and add new certification requirements. Due to this, many of the jobs offered in the teacher recruitment campaign require ESL certification. This will help not only students who need ESL services but ESL teachers who carry large student loads. With an increase in ESL certified teachers, education will improve and more time can be allotted to individual help for students.

Another aspect of receiving ESL training would be changing teachers’ mindsets. As Soland and Sandilos (2021) mention, many teachers hold implicit bias against EL students. They automatically have a deficit mindset, which is harmful to their students. As mentioned in chapter 2, when socio-emotional skills of students are recognized, there are major benefits. Soland and Sandilos (2021) found in their study that higher self-efficacy correlates to higher achievement. The data showed that when students are not motivated or believe they can succeed, there is no
incentive to attempt success. By properly training teachers to work with EL’s, their mindsets will change and they will start instilling confidence in their students, which increases achievement.

An example of having a growth mindset was observed at my internship. The scene was three 1st grade students learning vocab by reading short stories. As a group the students went over the meaning and how to read the vocab words for the week. Then they would each read a page of the story that used the vocab words. Midway through the 30-minute session, before his reading turn, a student states, “I can read,” to which the educator responded, “Yes, you can.” She reinforced the reading skills he had and reinforced his belief in those skills. This is seemingly a small moment in a lesson but actually has a major impact. Often students needing ESL services are new to the country and language, which can be scary. By reminding students of their strengths and urging them to recognize their skillset, teachers are eliminating that fear and helping students embrace the learning process.

**Implication 2: Educators Should Consider Using Funds of Knowledge To Target Students’ Social-Emotional Needs**

Another important thing for teachers to remember is incorporating students’ Funds of Knowledge and cultural intelligence into the classroom, which is often part of ESL teacher training. In his article Luis Moll (1992) proposes the idea Funds of Knowledge, which means acknowledging and using the knowledge that students gain from home in the classroom. He pushes teachers to get to know their students and their parents to see the student in a more well-rounded way. By better knowing the families in the school community and using it in the classroom, “the relationships [between families and teachers] can become the basis for the exchange of knowledge about family or school matters, reducing the insularity of classrooms and contributing to the academic context and lessons” (Moll, 1992). This idea of joining at home life
with school life for students will also improve self-efficacy which has been proven to lower the achievement gap, especially with EL’s.

Similar to Moll (2019), Cho and Wang (2019) believe acknowledging a student's Funds of Knowledge in the classroom is very important. In their study they examine how teachers describe and understand EL’s socio-emotional abilities and what pedagogical methods they use to address those abilities in the classroom for future development. The researchers found that students' Funds of Knowledge should be reflected in the curriculum, texts, materials, and activities. They also urged teachers to integrate age-appropriate and culturally relevant books. In order to help all students feel connected to the curriculum and school community, educators with a background in Funds of Knowledge can positively impact a students’ social-emotional well being.

Another example of research that examined students’ Funds of Knowledge and more specifically cultural intelligence was conducted by Rafie, Khosravi, and Nasiri (2016). In their study, they investigated the relationship between students’ cultural intelligence and performance. They found that students with higher cultural intelligence scored higher on tests. They also found that students were more engaged when culture was incorporated into the classroom. Therefore, this study highlights the importance of incorporating cultural programs in EFL classrooms to promote better engagement and achievement levels.

An example of this successfully being done comes from my internship experience. While walking past the library with a group of Spanish speaking students, one of the boys proudly says, “I teach my teacher every week.” He further explained that he did not always understand lessons so he stopped paying attention to what the librarian was reading. She must have caught onto this and asked him every class to teach her two words in Spanish. By including his native language in
the classroom, the teacher was able to regain his attention and show him that it was ok to ask
questions on things you do not know or understand. After he explained this story to myself and
another educator, we started a vocab lesson. The students had to read the vocab words and
together we would figure out what they meant. As they were doing this, the educator asked the
student who had told the story if he enjoyed using Spanish, and he replied yes. She changed the
lesson so the students read vocab words, then translated them into Spanish, and finally they
could use this to find the meaning of the word. This made the lesson much easier for the students
since many of the words they already knew the meaning of in Spanish. I noticed this often while
observing at the school: students knew the same if not much more than their peers simply in their
native language but when they had to translate it into English they either lost confidence or got
confused. By changing the lesson, the students learned the vocab and were able to solidify the
meaning in their head using both English and Spanish, furthering their knowledge.

A final example to show how important teacher training in ESL is comes from my
experiences. One of the days I went in to observe, an educator was proctoring the students while
taking the RICAS (Rhode Island Comprehensive Assessment System, standardized testing) so I
was in a new classroom with only the mainstream teacher. There were two MLL’s in the
classroom, which I was set to aid during class. One of the students did not need help, as she is
apparently close to exiting, but the other student needed all the help she could get. For all
students, reading is based on an A-Z scale, A being beginner and Z being advanced. An average
third grader should be between N-P. The student I was working with was at an F, very far behind.
After helping and observing her I was intrigued as to why she was so low. The educator
explained that she had transferred from another district and had received ESL services there so it
carried over with her. She said since the student had failed a lot of reading and writing tests in
class she retested her to see where she was and the scores were extremely low in both. Based on the home-form, her native language was Spanish, so this educator tested her in Spanish to see if she scored higher there. She did not; she knew virtually no Spanish. Based on this, this educator said she thinks it's not ESL that she struggles with at all but either dyslexia or some sort of executive functioning issue. During the teacher prep time, I asked the mainstream teacher what she thought. She said she agrees with the other educator because when reading aloud the student often confuses B and D. She also mentioned how since she had never been trained in ESL she was not able to pick up on the issue. Often ESL services and special education are grouped together, when in reality they are two separate entities. If the mainstream teacher had been trained in ESL, she would have been able to make the distinction between it being a language issue or a learning disability. Based on this situation, and the literature, it is clear that by training mainstream teachers in ESL EL students’ education would benefit greatly.

Implication 3: MI Theory Needs To Be Incorporated Into Mainstream Education Classrooms

A third implication that emerges from the research is that mainstream education teachers need training on how to use MI in the classroom, especially when working with EL’s. This is a viable implication based on the literature and observations.

It is acknowledged by myself and researchers that implementing MI into the classroom is difficult and can only be successful if done properly. Teachers need to be trained in order to have positive results. In studies by Yavich and Rotnitsky (2020) and Ansarin and Khatibi (2018), they come to similar conclusions. When students' dominant intelligences are found and used to choose teaching materials, their proficiency levels show positive growth. The literature shows that students perform better when they are taught based on their dominant intelligences. In order
to test their intelligence and properly teach using MI, teachers need training in the theory and its application.

A study conducted by Madkour and Mohamed (2016) supported this idea. Their study examined the impact of students' Multiple Intelligence when integrated into teaching and learning English in higher education. Specifically, they questioned the relationship between MI and language proficiency, student motivation, and problem solving. They found that when students identified their MI they were more motivated, which improved language proficiency. The researchers recommended creating a training center for teachers to use in order to learn and utilize MI instructional plans in the classroom.

An example of a lesson that could have included MI comes from an observation. I came to the conclusion that younger students seem to be more aware of emotions, whether it be their own or peoples’ around them. This could be considered the intrapersonal and interpersonal intelligence. I took a lesson that I observed younger students complete, grades K-2, and tweaked it to align with these dominant intelligences. In order to learn new vocab for the week, an educator went through a chart she made with the students. One column had the word, the next column had a short sentence defining the word, and the final column had a picture of the word. Once they had gone through all the words they would read a short story which used the words. Finally they would write a sentence or two, depending on what grade they were in, using a word from the list of their choosing. For some students this was an easy way to learn vocab, while others struggled and did not always have the meaning of the word solidified in their brain by the end.

My suggestion when changing the lesson to align with MI would be, instead of simply using the definitions of the words provided, have the students find examples of the word in their
own lives. One word from a lesson I observed was ‘porch.’ The students did not all have porches and did not understand the word even after explanation. One student shared with his classmates that his family keeps their grill on the porch, and other students related to his example. Even though they did not have a porch they may have had an outdoor space or a backyard where their family gathered. By placing a personal experience with the vocab word the students were able to relate to it more and in turn would remember it better. Even for the students that did not have a porch, they did have interpersonal intelligence so they were able to relate through their classmates’ stories and learn. This is a simple fix to a lesson that any teacher could do, with or without proper MI training. Imagine what could be changed and improved with the proper training. By providing training classes or centers to ESL teachers, EL performance and overall education will be improved.

Figure 1 provides information on the Theory of Multiple Intelligences and its utilization in the classroom. One branch of the diagram gives possible reasons for using MI in the classroom. Basic tests to find which dominant intelligence as students is are also in the diagram. Another branch gives links to professional development opportunities for teachers. The final branch has specific lessons that incorporate MI in the planning and execution.
“Everyone has eight intelligences at varying degrees of proficiency and an individual's learning style is unrelated to the areas in which they are most intelligent” (Mercer, 2020).

When applied to education, MI helps teachers understand how their students learn and how to effectively teach them.

Once a student's dominant intelligences are determined, teachers can find teaching strategies that align with their students' learning styles.

**Multiple Intelligence**

- How to test for a student's dominant MI
- Professional development opportunities
- How to apply MI into lessons

**Figure 1: Viability of MI Integration in the Classroom**

This link provides a test to find your top three dominant intelligences. The test also provides "learning strategies," really just tips on how to learn better. This is a helpful and basic test to get a good starting point of your own or students dominant intelligences.

This is another online test option. It includes basic questions that would be well used with younger students. It provides information of what the various intelligences are and tells you what your dominant intelligences are.

As a part of Harvard's Project Zero, MI was studied and this site provides many resources for understanding and using MI in the classroom.

MA Association of Community Colleges offers many courses on MI and its application in the classroom. Some are psychology, education, or even career based. In order to utilize MI you must understand it, course such as these provide the knowledge needed.

This lesson plan is for 7th graders learning Botany. The source provides various ways to teach basically the same lesson but for different dominantly led intelligences.

This is a link to the book Multiple Intelligences: The Complete MI Book, which provides a blueprint for finding, using, and embracing students MI in the classroom. Everything from lesson plans to teaching tips is provided.
Future Research

Based on the literature and personal observations, there are three recommendations for further researchers. The first is to provide proper ESL training for all teachers, not simply ESL specialists. As described in chapter 3, by training both mainstream and specialist teachers, English Language Learners would gain socio-emotional and academic benefits. The second recommendation is to continue implementing MI into education in general. There is an abundance of research showing that all students can benefit from utilizing MI in the classroom. The problem is that there is not enough research showing the effects MI has on EL learning. The third recommendation is to further research on how MI impacts EL learning. From my own research and observations I have found that implementing MI into EL classrooms is highly beneficial to student success and will work to lower the achievement gap. It was also discovered that feedback from teachers, students, parents, and administrators led to better findings. When further research is conducted, feedback from participants should be welcomed in order to get the best results. The purpose of this research is to improve the educational experience for EL students.
students and also help teachers be more effective teachers. Through the feedback of all involved, valuable information can be collected to continue advancements.
References


https://www.simplypsychology.org/multiple-intelligences.html#:~:text=Multiple%20intelligences%20theory%20states%20that,they%20are%20the%20most%20intelligent.


What are Multiple Intelligences and how do they affect learning? Cornerstone University. (2021).

