THE DIFFERENCE BETWEEN ENGLISH AND MATH HIGH SCHOOL TEACHERS’ ATTITUDES AND PERCEPTIONS TOWARD THE INCLUSION OF ENGLISH LANGUAGE LEARNER STUDENTS

by

Ashley Sibert Williamson

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements of the Degree

Doctor of Education

Liberty University

2017
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APPROVED BY:

Andrea Lee, Ed.D., Committee Chair

Lisa Schlabra, Ed.D., Committee Member

Jason Barnett, Ed.D., Committee Member
ABSTRACT

Within the last 10 years, the United States experienced an influx of non-English speaking students, which challenged teachers, administrators, and other educational stakeholders on how to successfully accommodate these English Language Learners (ELL). This causal-comparative study examined the attitudes and perceptions of secondary English and math teachers in relation to ELL inclusion. Specifically, the study presented the main question of whether there is a difference between English and math teachers’ attitudes and perceptions toward the inclusion of ELLs. Teacher attitudes have been found to play a role in determining student academic achievement; therefore, assessing teacher attitudes toward ELLs could be a factor in determining how best to educate ELLs. The convenience sample of 122 teachers was comprised of secondary English and math teachers in a northeast Alabama school district. A 40-question survey determined teacher attitudes toward ELL inclusion and was adapted from a previous study that focused on mainstream teacher attitudes. The survey was administered to and collected from participants electronically. The survey was scored utilizing a four-point Likert scale collecting an average score for each item. Data analysis was conducted using SPSS® software, in which a t-test analyzed and determined the difference of means between teacher attitudes. The research concluded that the vast majority of English and math teachers had positive attitudes regarding ELL inclusion; however, English teachers were found to have slightly negative attitudes regarding inclusion and perceptions of language and language learning. Recommendations for future research include implementation of teacher education programs to focus coursework on ELL students and ELL inclusion, as well as more professional development opportunities regarding ELL students.

Keywords: English Language Learner, inclusion, math, English, teacher attitudes
ACKNOWLEDGEMENTS

I would first like to acknowledge and give praise to my Lord and Savior, Jesus Christ, for providing me with the ability, support, love, and endurance to take this educational journey. Next, I would like to acknowledge and thank my dissertation chair, Dr. Andrea Lee, as well as my committee members, Dr. Jason Barnett and Dr. Lisa Schlabra for their continued support and encouragement through this process. I would also like to thank and recognize Dr. Kurt Michael, without whom I would not have completed this process. He has been a guiding light through this process. These individuals proved to me that this was an attainable goal and that it was worth the sacrifice. I would like to also acknowledge and thank all of my former students who inspired me to continue with my education and research a topic that will shed light on a growing issue in an area that we love and call home. In addition to my students, I would like to thank all my former administrators and school faculty that I taught at during the dissertation process. These include: Mr. Donny Jones at Collinsville High School, Mr. Steve Street at Geraldine High School, Mr. Greg Christian at Rome Middle School, and Mr. Westley King at Sylvania High School. Each of these individuals gave me an opportunity to grow and learn as a teacher and a student. I would like to thank my family, most notably my parents, Jeff & Becky Sibert for their continued love, support, and encouragement to not give up on my goals and to achieve what they knew was possible. Without my family support, I would not have finished this endeavor. Lastly, I would like to acknowledge and thank my husband, Chad. Without him, I would not have had the drive to continue. He is my motivator, inspiration, and biggest fan. I also give thanks to all the unnamed individuals who helped me in the biggest and the
smallest ways during this journey. Your contribution has not gone unnoticed. Thank you all from the bottom of my heart.
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LIST OF ABBREVIATIONS

American Association for Colleges for Teacher Education (AACTE)

English as a Second Language (ESL)

English Language Arts (ELA)

English Language Learners (ELLs)

English Language Proficiency (ELP)

Language Proficiency Assessment Committee (LPAC)

Limited English Proficient (LEP)

National Assessment of Educational Progress (NAEP)

National Council for Accreditation of Teacher Education (NCATE)

National Council of Teachers of English (NCTE)

National Education Association (NEA)

No Child Left Behind (NCLB)

Sheltered Instruction Observation Protocol (SIOP)

World-Class Instruction Design and Assessment (WIDA)
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CHAPTER ONE: INTRODUCTION

Overview

Few research studies examine the notion of teacher attitudes toward English Language Learner (ELL) inclusion. Even fewer studies have examined specific subject area teacher attitudes toward ELL inclusion. The purpose of this study was to determine if there was a difference in the attitudes of secondary English and math teachers toward the inclusion of ELL students. The study did not specifically test one educational theory but used various theories to validate research and components of the study. Chapter One will discuss the background of public education in the United States, the growth of the ELL population in public schools, as well as challenges that the influx of ELLs presented for schools. The purpose statement and problem statement will be discussed in greater detail, as well as the significance of the study, the research question presented in the study, and definitions pertinent to the study.

Background

The public education system in the United States is an ever-evolving, growing, and transitioning entity; therefore, it is imperative that educational stakeholders acclimate to a changing classroom atmosphere. Researchers (e.g., Obiakor, Harris, Mutua, Rotatori, & Algozzine, 2012) indicate that educators must be able to set diverse goals, assessments, and instructional strategies to meet the growing needs and developmental attributes of students in classrooms today. English language learners represent a growing population in America’s public schools. During the 2014-15 school year, there were almost 4.6 million ELL students in the United States, comprising 9.1 percent of all preK-12 students nationwide (National Clearinghouse for English Language Acquisition, 2015). According to the National Education Association (NEA) in 2012, the United States hosts 5.3 million English Language Learners
(ELLs) in public schools across the country. Those ELL students in schools across the country represent over 150 different languages spoken (Migration Policy Institute, 2015).

One of the many mandates set forth in the No Child Left Behind (NCLB, No Child Left Behind Act. (2002). NCLB (2002)) requires ELL students to meet performance standards of the general student population. In addition, it notes that children, including ELL students, must reach established high standards with proficiency in English Language Arts, as well as mathematics by 2014, and that schools must be willing to help those ELL students, as well as other subgroups, make progress toward these standards (Abedi & Dietel, 2004). NCLB and the inclusion mandates for ELL students sought to close the achievement gap that exists between regular education students and ELL students in the mainstream classroom.

The continually growing population of ELL students in the classroom is one of many challenges and transitions that the country’s public education system faces. Educational stakeholders are concerned with how best to teach these culturally and linguistically diverse students in today’s classroom. Educational stakeholders also continually attempt to determine successful accommodation methods for the mainstream classroom. Teachers are required to ensure that ELL students achieve in the classroom. The inclusion of ELLs in the mainstream classroom greatly affects many aspects of academia, such as class size, cultural atmosphere, and instructional strategies, just to name a few. Teachers and other educational stakeholders are presented with numerous requirements in regards to the inclusion of ELL students in the classroom (e.g., Casale-Giannola, 2012).

Among many factors that influence ELL students’ academic achievement, teacher attitudes toward ELLs are of great concern because ELLs present an unfamiliar and tedious workload for educators, as well as influencing teacher attitudes, which can affect various aspects
of instructional decisions in the classroom. Teachers with ELL students have a variety of components to consider when planning instruction, including class inclusion, coursework modification, language learning, and professional development; each of these factors can play a significant role in a teacher’s attitude toward ELL students. Researchers (e.g., Sirota & Bailey, 2009) indicate that teachers’ negative expectations not only can ultimately have a critical effect on available learning and achievement opportunities for students, but also for minority students, typically Latino students, who have been graded unfairly because of their race and/or ethnicity.

Teacher attitudes toward students can vary from subject to subject. An English Language Arts (ELA) teacher might face a more extensive workload based on ELL inclusion in contrast to a math teacher. Rubin (2011) determined that, “English teachers are particular targets for scrutiny and strict oversight due to the heavy emphasis on literacy on standardized assessments. Many ELA teachers feel an increasing sense of powerlessness since they are limited to their ability to determine curriculum” (p. 410). In addition, Rubin (2011) found that teachers reported a massive increase in their workloads with NCLB due to the expanding standardization. Inclusion requirements affect their attitudes and behaviors toward those students. This study explored the disparity among secondary English and math teachers’ attitudes based on ELL inclusion.

During the past decade, the United States experienced a massive influx of non-English speaking students into public schools across the country resulting in a culturally and linguistically diverse atmosphere around classrooms, as well as challenges in teaching those diverse students (Hernandez, Denton, & Macartney, 2007). According to Hernandez et al. (2007), these immigrant children are leading the racial-ethnic transformation of America, and these children constitute a diverse group of national origins. The continually growing population
of immigrant students in the classroom is one of the many challenges associated with these students. Many of these new students arrive at the school door with limited English proficiency and a different native language. Growing concerns of how best to teach these culturally and linguistically diverse children are at the forefront of many educational stakeholders’ minds within the public school system. Aside from educating these students, educational stakeholders had to identify who these linguistically diverse students were. These non-proficient English students quickly became known as English Language Learners (ELLs). The National Council of Teachers of English (NCTE, 2008) defines an English Language Learner as “an active learner of the English language who may benefit from various types of language support programs. This term is used mainly in the U.S. to describe K–12 students” (p. 2). In addition, Garcia, Lekifen, and Flachi (2008) also define ELLs as those students acquiring English who are culturally and linguistically diverse and have foreseen language barriers.

As the ELL population grows, teachers, administrators, schools, and departments of education attempt to find effective ways to accommodate ELLs into the mainstream classroom (Verdugo & Flores, 2007). Public school teachers are required to follow numerous practices and procedures to ensure that ELL students perform well in the inclusive classroom. Inclusion became one of the most notable procedures in which all students, regardless of ability or readiness, were placed in the same general education classroom for educational purposes (Obiakor et al., 2012). Inclusion is defined as “the placement of students with disabilities in regular education classrooms” (Daniel & King, 1997, p. 67). Inclusion became a practice, not only for special education students, but also for those students considered to be ELLs, and became one of the most notable procedures in which all students, regardless of ability or
readiness, were placed in the same general education classroom for educational purposes (Obiakor et al., 2012).

Soifer (2012) found that in hopes of accommodating ELL students, inclusion and accountability procedures became mandates of the NCLB legislation and the National Assessment of Educational Progress (NAEP). Inclusion sought to help ELL students; however, it also created a number of challenges in the classroom setting.

These ELL students and their presence in an inclusive classroom, affect several components of the education system. In addition, ELLs affect the learning community and educational system monetarily. Local education agencies and state and federal departments of education have the responsibility, per the Equal Educational Opportunities Act of 1974, “to provide the academic and fiscal resources to help ELLs overcome language barriers and gain English fluency” (Jimenez-Castellanos & Topper, 2012, p. 180). This fiscal responsibility to ELLs created many more issues such as insufficient funding in accommodating ELL students (Castellanos, Combs, Martinez, & Gomez, 2013).

In addition to monetary challenges, ELLs affect the education system and learning community as a whole. Jong and Harper (2005) examined the notion of the achievement gap between students and determined that the gap:

along with an educational climate that encourages inclusionary practices rather than separate, specialized programs, make it imperative that teacher preparation programs examine the knowledge, skills, and dispositions that mainstream teachers need to develop in order work effectively with both ELLs and fluent English speakers. (p. 101)
Not only are teachers affected, but schools are also required to enroll the increasing number of diverse students. Jong and Harper (2005) held that ELLs must be included at any level of educational practice for achievement.

Another societal effect that ELLs created relates to family and cultural dynamics. These ELL students are considered to be learning English at school, while their native language is spoken at home. Fillmore (1991) noted that children from families of a linguistic minority must acquire the language that is dominant in society to be able to take full advantage of educational opportunities presented. As ELL students learn the language of the American society, English, they also fall away from their primary language. Filmore (1991) referred to this phenomenon as subtractive bilingualism because it shows a loss or wearing away of the ELLs primary language. Because this occurs across the United States, Filmore (1991) noted that American immigrant children are losing their ethnic languages while attempting to assimilate to an English-speaking society, school, and culture. Upon acquisition of the English language, ELL children typically do not maintain or continue to develop their home-spoken or native language; however, Fillmore (1991) stated that there should be a delicate balance between acquisition of a second language and continued use of a first language.

Teacher attitudes and perceptions of ELL students have been examined through various educational theories. ELL students are considered to be linguistically different; however, they are also considered to be culturally different, as well. Researchers (e.g. Kendall, 1996; Walker, Shafer, & Iiams, 2004) noted a form of teacher biasness in teacher attitudes that derived from cultural differences. Walker et al. (2004) noted that the study of cultural biases and teacher attitudes is critical because without awareness and an effort to change and improve negative
attitudes and beliefs of teachers of language minority students, school-wide reform cannot take place.

While no definitive educational theory was tested during this study, there were several utilized to further explain and support the study. English and math teachers, as well as other mainstream teachers, can be inadvertently culturally biased towards ELL students in their classroom because of the extensive additional work requirements with increasing pressure to meet student achievement standards and educational mandates. Students classified as ELLs are students who are culturally and linguistically diverse, which leads to differences in classroom atmosphere. Teachers can develop particular attitudes or perceptions about these students, which ultimately can be explained through the lens of cultural differences.

One noteworthy theory that will lend usefulness in this study is the cultural difference theory. A major contributor and proponent of this theory, Erickson, utilizes the term “microethnography”, which he describes as a “situation specific analysis” to observe “naturally occurring interaction in people’s lives” (as cited in Bolima, 2009, p. 1). Bolima (2009) noted that this theory is a way to perceive classroom problems or situations as misunderstandings; or that teachers and students are “playing into each other’s cultural blind spots” (p. 1). In short, students of varying cultural backgrounds different from those students and teachers native to the area may approach education and learning in very diverse ways.

Applying this theory to the current study indicated that teachers, on some level, may be culturally biased to subgroups of students, most notably, ELLs. Educational institutions have been an undeniable driving force in perpetuating cultural biasness because of the educational practices that are “grounded in the notion of White superiority – the idea that White cultural knowledge is superior to that of other racial and ethnic groups” (Powell, 2000, p. 11).
With the growing public education system, as well as the growing ELL population in the United States, educational stakeholders need to determine how to successfully operate an inclusive classroom for academic success. Much legislation has been mandated to help foster the challenges that ELL students brought to the classroom. The notion of teacher attitudes toward ELL inclusion and various aspects regarding ELL inclusion is addressed throughout the study.

**Problem Statement**

Teachers in mainstream classrooms experience challenges on a daily basis concerning inclusion procedures due to the massive influx of ELL students in schools across the United States. The problem is firstly that there is a lack of research regarding teacher attitudes toward ELL inclusion; in addition to that, there is little to no research on secondary English and secondary math teacher attitudes toward ELL inclusion. The inclusion of culturally and linguistically diverse ELL students creates new, but also at times, challenging implications for not only teachers, but for all educational stakeholders. Coleman and Goldenburg (2012) determined that teachers and other educational leaders are responsible for making standards accessible to students who are not only learning the academic content, but also learning the language in which that content is taught. The NCLB legislation and other educational mandates require the inclusion of ELL students in the mainstream classroom, including English and math classrooms. Youngs and Youngs (2001) determined that ESL students can create challenges for teachers, and as a result, tend to vary in in their eagerness to incorporate ESL students in content classrooms.

Based on Youngs and Youngs (2001) assertions, teachers can develop negative attitudes toward ELLs based on the challenges associated with these students. Walker et al. (2004) found that teachers who harbor negative attitudes about ELLs, or who believe fallacies around the education of language-minority students, at times fail to meet the academic needs of students.
Walker et al. (2004) also discussed a study by Pang and Sablin (2001) that determined 175 pre- and in-service teachers, with culturally diverse students, had underlying bias or prejudicial beliefs, which contributed to negative teacher attitudes in the classroom. In addition, the study found that “biased teachers tended to believe that low-status diverse students brought too many deficits to the classroom for the teacher…to make a difference in their academic success” (Pang & Sablin, 2001, p. 134).

The quality of instruction that is provided to ELLs will undoubtedly impact the future of the United States (Echevarria, 2015). The research regarding teacher attitudes toward ELLs is extremely limited with the focus primarily on mainstream teacher attitudes. Reeves (2006) noted that extensive research remains toward exploring teacher attitudes regarding ELL inclusion in the mainstream classroom. Further research on teacher attitudes toward ELL students is necessary, especially for specific and individual core subjects, as well as the implications that teacher attitudes can have on academic achievement. Reeves (2006) also determined that further studies must be conducted on teacher attitudes in order to understand their impact on teaching and learning. While previous studies on teacher attitudes toward ELLs have been conducted, there is a definite lack of current research on teacher attitudes regarding English and math teacher attitudes; therefore, the problem is the lack of research regarding the English and math teacher attitudes regarding ELLs in an inclusive classroom.

**Purpose Statement**

The purpose of this causal comparative study was to determine if there was a difference in the attitudes of secondary English and math teachers toward the inclusion of ELL students. For the study, the independent variable was the content the teacher taught, either math or
English, and the dependent variable was teacher attitudes toward ELL inclusion. A convenience sample of 122 teachers from a northeast Alabama school district were used in this study.

**Significance of the Study**

This research study on English and math teachers’ attitudes toward ELL inclusion was significant for a number of reasons. First, this study addressed the lack of research in the field regarding teacher attitudes and ELL students. This study also specifically addressed English and math teacher attitudes regarding ELL students, as there is no previous study or literature regarding English and math teacher attitudes and differences regarding ELL students. The lack of research regarding teacher attitudes of English and math teachers and ELL inclusion presented a significant gap in the literature (Reeves, 2006). In addition, Walker et al. (2004) also determined that their study did not encompass high-incidence schools that had a history of educating ELLs and that further research was necessary to explore long-term teacher attitudes in an environment with large numbers of ELLs. The population of ELL students continues to grow (NEA, 2012) while teachers are not fully prepared for the inclusion of ELLs in the classroom. As there is little to no recent research on English and math teacher attitudes toward ELL inclusion, this study provided insight into both English and math teacher attitudes and perceptions regarding various components of ELL inclusion based upon the results of the survey instrument.

Waddell (2014) noted that teachers are likely to implement educational practices that are based on their own education experiences, which are consistent with a White, middle class culture. In addition, urban students, families, and schools typically do not have similar cultural experiences, beliefs, or values as the teachers, which in turn leads to a cultural disconnect. Because of this disconnect between students and teachers of different cultures, it is critical that
teachers are prepared to teach in a diverse educational setting to be able to have an understanding of diverse cultures and have relevant practices in their classroom. According to Eagly and Chaiken (1993), “[a]ttitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (p. 1-2). In addition, Smitherman (1981) found that the attitudes of teachers regarding their students can have a significant impact on academic achievement. The notions of culture, ethnicity, biasness, and teacher attitudes are cropping up more in classrooms as public schools become more diverse. Bergh (2010) critically noted that the expectations of teachers can affect different student groupings, whereby possibly widening an achievement gap for diverse students. Ulug, Ozden, and Eryilmaz (2011) determined that student performance is affected by the attitude of the teacher. This study adds to the limited amount of literature and body of knowledge that exists on ELLs and ELL inclusion. It provides additional information regarding the perception of ELLs in an inclusive classroom and how teachers can further accommodate those students for learning.

**Research Question**

The following research questions are proposed:

**RQ 1:** Is there a difference between English and math teachers’ attitudes toward the inclusion of English Language Learner (ELL) students at the secondary level?

**Definitions**

The following definitions were used for this study:

1. *English Language Learner* (ELL) – This study adopts a definition of ELL by National Council of Teachers of English ([NCTE], 2008). An ELL is an active learner of the English language who may benefit from various types of language support programs.
2. **English as a second language (ESL)** - An educational approach in which ELLs are instructed in the use of the English language. Instruction is based on a curriculum that involves little or no use of the native language, focuses on language.

3. **Inclusion** – Inclusion represents a philosophical shift in the practice of education that requires the restructuring of schools to eliminate the separation of regular and special education and to create a new system to accommodate the needs of the students (Edmunds, 2000; Daniel & King, 1997).

4. **Attitude** - Attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly & Chaiken, 1993, p. 1-2).

5. **Content Area** - A content area is a discipline of study. Examples of subject areas include: English, mathematics, science, history, social sciences. For this study, content area is synonymous with subject area. Special education nor ESL teachers are considered content area teachers.

6. **Native English Speaker** – A person whose first language is English.

7. **Non-native English Speaker** - A person whose first language is one other than English.
CHAPTER TWO: REVIEW OF THE LITERATURE

Overview

With the increase in ELL students in the inclusive classroom, teachers face challenges in meeting educational needs of ELL students (Reeves, 2006). Concerns over how best to meet the educational needs of diverse students including ELLs, as well as equal education access under US federal law, has been central to discussions regarding education. After the implementation of the Bilingual Education Act (Pub. L. No. (90-247), 81 Stat. 816, 1968), the U.S. Supreme Court held that just providing facilities, books, teachers and curriculum for students is not equal treatment; additionally, those students who are not English speakers miss meaningful educational opportunities. Ultimately, any school district that has students who do not speak English must take affirmative steps to accommodate and rectify any language deficiency by offering instructional programs to those students (Lau v. Nichols, 1974).

According to Planty et al. (2009), there were approximately 5.4 million ELL students in the United States in 2006 that were protected by the Lau v. Nichols court ruling. In addition, according to the Migration Policy Institute (2013), from 1997 to 2008, ELL enrollment in U.S. public schools grew by 53.2%. ELL student representation is expected to rise by 25% by the year 2025 (Planty et al., 2009). For academic success in a 21st century classroom, students, including ELL students, must develop English language proficiency, as well as be able to academically achieve in reading and math as addressed in NCLB (2001). It is critical for schools to be able to identify ELL students, teach them effectively and efficiently, measure knowledge gains, show progress toward established goals and standards, and eventually, close the achievement gap that exists between ELL students and native English-speaking students. Federal laws, case law, and established language policies have clearly noted that the number of
ELL students who are linguistically and culturally diverse will grow in number over the years. As a requirement, U.S. public schools and teachers will teach and inclusively provide an education to all students.

Researchers (e.g. Reeves, 2002; Reeves, 2006; Youngs & Youngs, 2001) assert that teacher attitudes play a significant role in student academic achievement. While there is some research regarding teacher attitudes toward ELL inclusion, researchers believe that there is a greater need for extensive research in the area regarding teacher attitudes and ELL students (Batt, 2008; Reeves, 2006; Walker, Shafer, & Iiams, 2004, Youngs & Youngs, 2001). Reeves (2006) noted that there is still extensive work and research to be completed in the exploration of teacher attitudes toward ELL inclusion in the mainstream classroom, as well as the instructional implications of those attitudes. By assessing teacher attitudes toward ELLs, research can best determine how to educate ELLs and all other students in multilingual school environments.

The purpose of this chapter is to establish a context for the research regarding teacher attitudes and ELL students in an all-inclusive English and math classroom. A gap in the literature exists as a result of the lack of current, relevant, and sufficient research regarding secondary English and math teacher attitudes toward inclusive ELL students. Karabenick and Noda (2004) found that some previous research examined teachers’ beliefs and attitudes toward ELLs (e.g., Knudson, 1998; Moore, 1999; Rueda & Garcia, 1996); however, there has been no multivariate study that has assessed teacher attitudes in a typical school system, as well as the beliefs of acceptance or denial among ELL students in the mainstream classroom. The cultural and linguistic differences in an inclusive classroom has tendencies to create challenges for teachers, in addition to the added demands of teaching in today’s classroom (Youngs & Youngs,
These notions hold that negative attitude development is a possibility for teachers of ELLs based on the challenges associated with inclusion (Youngs & Youngs, 2001).

The purpose of this study was to examine teacher attitudes toward ELL inclusion based on a four-point Likert scale. While no traditional educational theory was tested, the study utilized various theories to support notions of the study and the findings as these noted theories relate to English and math teacher attitudes toward ELLs in the inclusive classroom. The critical race theory and the cultural difference theory were noteworthy because they align with the notions of teacher attitudes and individual cultures in an academic setting for determination through the provided survey in this study. This review of literature will analyze research regarding public school education, secondary English and math teachers, English Language Learner students, and inclusionary procedures in the classroom. The review of literature will outline the increase of the ELL population throughout public schools in the United States and how this increase correlates to teacher attitudes and perceptions regarding those students in an inclusive classroom. This review will also discuss teacher knowledge of ELL students and their culturally and linguistically diverse population. The literature review outlines case law regarding ELLs and their rights regarding educational issues in the United States. A framework for understanding teacher attitudes in regard to cultural differences for ELL students and inclusion will also be outlined, as well as an examination of the significance of teacher attitudes toward ELL inclusion. In addition, the literature review will outline the four components contained in the survey instrument for the study: ELL inclusion, professional development, coursework modification, and perceptions of language and language learning.
Theoretical Framework

Education in the United States is an ever-evolving and transitioning entity. Continual research and studies are necessary to determine the most efficient and effective ways to engage and teach students across the country. As the country continues to be a melting-pot of cultures, races, and ethnicities, each aspect of society will continue to evolve and change, just as education has over the years. Classrooms are becoming increasingly diverse lending to various cultures, races, and ethnicities in one classroom. With such a blending of cultures and races, language barriers and difficulties associated with various cultures are real challenges facing teachers and students in classrooms. When teachers are faced with culturally diverse and linguistically different students, problems arise as how to best incorporate and accommodate these students into everyday lessons and instruction. With problems in the classroom rising to the surface, teachers can be affected as to how they present material, approach professional development, and interact with diverse learners in their classroom. Teachers can present various attitudes about different aspects of teaching and learning in the classroom. With hosting diverse learners that present new challenges for teachers, varying attitudes can be developed as a result of these and all students (Vaught & Castagno, 2008). It is important to note that minority children have been and continue to be a part of the ever-growing achievement gap in United States public schools (Bergh, Denessen, Hornstra, Voeten, & Holland, 2010).

While the present study did not depend on one significant educational theory to test, it is important to note that various theories were considered for further support of the assertions and findings in the study. Two individuals, Blaut (1992) and Helms (1993), are responsible for the development of a theory on cultural biasness. According to the APA Division 38, Helms (1993, 1994) noted “cultural [biasness] exists when there is a widespread acceptance of stereotypes
concerning different ethnic or racial groups” (APA Division 38, 2014, p. 1). Additionally, those who study cultural biasness examine the methods for communicating cultural values and how they develop and maintain positive and negative beliefs about different racial and ethnic groups” (APA Division 38, 2014, p. 1). Blaut (1992) pointed out that change is an essential notion. Culture traits survive for extended periods of time, which help further explain how a culture can feel superior or inferior (Blaut, 1992). In addition, with change being “the normal condition in human cultures” (p. 1) the lack of change will leave members of a culture not wanting to leave or discard traits or habits of his or her particular culture.

To examine teacher attitudes, there must be a basis on which attitudes are derived. Inclusion students, being the object for which the attitudes are directed, in this study are comprised of ELL students who are undoubtedly culturally and linguistically diverse from the majority of teachers and other classroom students. The notions of cultural biasness, critical race theory, cultural difference theory, and attitudes are ideals that help tie together this study and the survey of teachers. In terms of cultural biases, researchers typically want to determine the degree to which “stereotypes are widely accepted… [and] have collected data from national surveys of explicit beliefs and attitudes, as well as experimental studies of implicit attitudes” to determine various ways to communicate cultural values and maintain a positive belief in race and ethnic groups (APA Division, 2015, p. 1).

Two additional theories guide this current study in terms of attitude and cultural differences. The critical race theory notes that biasness or beliefs are interlaced in the American society and institutional bias a common thread in the current culture (UCLA School of Public Affairs, 2009). Critical race theory focuses on the struggle for cultural justice coupled with legal and/or scholarly norms that might need to be changed. In addition, the cultural difference theory
further explains teacher attitude changes when coupled with ELL inclusion. In the cultural
difference theory, “some students do poorly in school because the linguistic, social, and cultural
nature of the home environment does not prepare them for the work they will be required to do in
school” (Lynch, 2011, p. 1). Naturally, those students in an inclusion classroom of a different
culture will be those students most affected by the environment and may academically struggle,
as a result. In addition to the notion of the cultural difference theory, the expectation theory
plays hand-in-hand with cultural differences and presents a focus on how teachers treat students.
“Teachers often expect less from students of certain racial, ethnic, and cultural backgrounds.
When teachers expect students to perform poorly, they approach teaching in ways that align with
their low levels of expectations. In these instances, students tend to perform at the low levels
expected of them by teachers” (Lynch, 2011, p. 1). This notion of setting expectations and
attitudes based on a student’s culture and ethnicity aligns directly with the present study of
teacher attitudes based on the inclusion of this classification of students. If teachers do not
develop an understanding of the various student cultures present in the classroom, they will not
be able to fully understand the student as an individual or a learner. In turn, teachers will be
unable to treat all students equally and have the same expectations of students in the classroom;
therefore, not all students would be able to reach his or her full academic potential because of the
indirect cultural biasness and difference in the classroom.

The present study sought to determine secondary English and math teacher attitudes
toward ELL inclusion in the classroom. With ELL students bringing an element of change and
newness to education, many teachers, as well as other educational stakeholders, struggled and
continue to struggle to determine means that best fit educational practices for these students.
Because teacher attitude and student achievement are closely linked, teachers who develop a
cultural biasness toward ELL inclusion students may inadvertently affect the achievement of those students because of their cultural differences. The gap in the literature is clearly presented because there is a significant lack of research, studies, and information regarding English and math teacher attitudes toward ELL student inclusion, as well as overall mainstream teacher attitudes toward the same groups of culturally and linguistically diverse students.

Presently, knowing that teachers develop attitudes toward culturally diverse students, it is critical to understand how this occurs, and also to inform teachers, as well as other educational stakeholders, about how to effectively teach a diverse student population. Research holds that individuals do develop a culturally biased or negative attitude toward cultures that are different from the traditions, culture, language, and appearance of the [norm] culture in this country (Powell, 2000). In addition, ELL students make up a large majority of the population of urban and rural schools, not only in the aforementioned school district that the study took place, but also in school districts across the country. By studying and measuring teacher attitudes toward ELL student inclusion, much will be gained and learned about how to teach not only ELL students, but teach them in an all-inclusive classroom.

Research and theory development of the previously noted theories, Vaught (2008, 2011) and also Castagno (2008) have conducted extensive research on the notions of race, diversity, teacher attitude and academic achievement by examining cultural biasness. Vaught and Castagno (2008) sought to gain a deeper understanding of cultural components in school and academic achievement. To do so, they examined “what teacher attitudes reveal about the structural dimensions of inequity in schooling and achievement” noting that “…attitudes expressed by teaching in this study are illustrative of larger structural [bias] that both informs and is reinforced by these attitudes and their manifestation in practice” (Vaught & Castagno, 2008, p. 95). This
examination of teacher attitude, diversity, culture and academic achievement by Vaught and Castagno (2008) outlines the notion that biases of any sort are not just individualistic, but it is a systematic problem in which teachers recreate practices that are within a larger society.

**A Changing Education in United States Public Schools**

The country’s changing demographics have brought on issues of diversity across the field of education. Verdugo and Flores (2007) noted that:

> [t]he presence of English-language learners (ELL) in the American public schools has been an important diversity challenge. Because the United States is a country of immigrants, the historical ebb and flow of immigrants to the United States from other countries has challenged American schools to devise various ways of educating immigrant children who were unable to proficiently speak English. (p. 167)

English Language Learner students represent a growing population among students in secondary schools across the country. The inclusion of ELL students in U.S. public schools created a linguistically and culturally diverse classroom environment. This shift in classroom atmosphere and demographics has created an opportunity for the examination of teacher experiences and attitudes between educational institutional representations and roles of teachers, as well as their own roles and beliefs of teachers. In short, ELL inclusion in English and math classrooms provides an opportunity for observation of teaching in this diverse classroom setting.

Language diversity has become a growing issue among educational stakeholders and schools across the nation. At the forefront of the issue are two ideologies known as cultural pluralism and assimilation. According to the assimilationist ideology, immigrant students are expected to learn the English language and assimilate into the predominant culture. The ideology behind cultural pluralism is that immigrants will maintain their native language and
culture while acquiring the second language and culture (Banks, 2001). The notions of language, culture, and assimilation are becoming more complex issues in education. Garcia (2001) noted, “[L]anguage, identity, culture, and education are inextricably intertwined” (p. 291). Garcia (2001) also explained the importance of language in regards to nationalism and ethnicity. It is critical for a country or nation to determine an official language as a symbol of ethnicity, as well as national spirit.

According to ProEnglish (2014), the United States presently does not boast an official language; however, 31 states have legislated English as their official language. In addition, the U.S. Department of Education determined that individuals with limited English proficiency are less likely to be employed, tend to work in undesirable conditions, and tend to earn less than other workers who speak English (National Center for Educational Statistics; English Literacy and Language Minorities in the United States, 2001). With the United States becoming a melting pot of languages, traditions, and cultures, determining an official language could outline parameters for ELL students and individuals for language acquisition. According to the 2000 Census on ProEnglish (2014), “21.3 million U.S. residents met the definition of limited English proficient (LEP) set by the U.S. Census, meaning that they spoke English ‘less than very well.’ Of these, 11 million spoke English ‘not well’ or ‘not at all’” (para. 3). The influx of LEP individuals in the U.S. and ELL students in public schools are hard to ignore. Crawford (2000) noted that a rise of English-only activism in U.S. politics has caused voters to react defensively toward the language and cultural diversity brought on by this rising number of immigrants. This activism carries over in many aspects of governmental procedures in the United States, including education.
Over the past decade, with the language and culture barrier growing, a significant achievement gap began to develop between students and teachers. Jong and Harper (2005) determined that a significant number of teachers are teaching students from diverse linguistic and cultural backgrounds. This influx of linguistically and culturally diverse students fostered an environment for inclusionary practices for better student acclimation. As a result of inclusion and growing numbers of linguistically diverse students, the achievement gap widened, which created a number of issues and problems for students, teachers, and schools across the country. School districts who boast large numbers of diverse students are at times blamed for the determination of ELL students, who tend to not move beyond basic literacy and math levels (Rance-Roney, 2011).

Nationally, according to the Migration Policy Institute (2015), ELL school enrollment increased 53.2% in a 10-year period from the 1997-1998 school year to the 2007-2008 school year. In addition, ELL students on average account for 5.4 million of the national total public school enrollment. According to Payan and Nettles (n.d.), Alabama’s ELL population grew 200-400% from 1994-1995 to 2004-2005. The State of Alabama, in 2004-2005, had an ELL of population of 15,295. By the 2009-2010 school year, that number jumped to approximately 20,816 (Alabama Department of Education, 2010). To date, the school district for which the study took place is considered the second highest district for ELL population in the state of Alabama (Alabama Department of Education, 2010).

Teachers are at the forefront of these changing demographics and classrooms. The burden falls upon the teacher to make these adequate changes and implementations to accommodate the ever-increasing number of diverse learners in the classroom. According to Banks et al. (2005):
teachers need to be aware of – and be prepared to influence – the structural conditions that determine the allocation of educational opportunity within a school…[t]eachers also need to be aware of family and community values, norms and experiences, so that they can help to mediate the boundary crossing that many students must manage between home and school. (p. 233)

This awareness for teachers plays in to the challenges that these ELL students experience when entering an inclusive classroom. The values, norms, and experiences are different than what these students have experienced before in an educational environment; therefore, it is critical to find the appropriate strategies to help acclimate these students in the classroom, as well as facilitate teachers’ accommodations of these students.

**Who are English Language Learners?**

In recent years, the United States has hosted many immigrants and refugees that brought about challenges and changes to the country, as well as the education system. According to the NCTE (2008), the U.S. foreign born population has more than tripled, with more than 28 million immigrants moving to the United States between the 1990s and 2010, leading to concerns of an emerging and underserved population of students known as English Language Learners (ELLs). ELL students can be defined in a variety of ways; however, NCTE (2008) noted that they are a new and homogenous population with diverse gifts, educational needs, and unique backgrounds, languages, and goals. Some ELLs reside in a home with no English spoken, while others may have been exposed to multiple languages. The NCTE (2008) classified ELL students as having a deep sense of their non-U.S. culture, multiple cultures, or only identifying with the U.S. culture. In addition, ELL students are often “…stigmatized for the way they speak English … [or] for speaking a language other than English” (NCTE, 2008, p. 2).
In U.S. public schools, ELL students are classified as active learners of the English language who may benefit from various types of language support programs (NCTE, 2008). Another term that is often associated with ELL students is ESL, or English as a Second Language. The acronym ESL is a former term used to classify ELLs; however, it is now being used to refer to instructional programs for ELL students. Research indicates that ELLs can struggle academically by having large numbers who have fallen below being proficient on the NAEP (NCTE, 2008). In short, ELLs are defined as individuals who are linguistically and culturally diverse and are considered to have an English Language Proficiency (ELP) level of a 1-4 on an ACCESS for ELLs scale. The four ACCESS levels that an ELL will typically be categorized into include: (a) Level 1: Entering, (b) Level 2: Beginning, (c) Level 3: Developing, and (d) Level 4: Expanding (WIDA, 2014). An ELL is attempting to learn the English language, in addition to speaking his or her own native language. This literature review will continue to develop a correlation between ELLs, instructional strategies and assessment, cultural background, professional development, and teacher attitudes in regard to ELL student academic achievement.

**Language Policy for a United States Education**

The language policy in place for today’s educational society is founded on legislation from the Civil Rights Act, Title VI of 1964 noting that, “[n]o person in the United States shall, on the ground of race, color, or national origin…be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance” (The United States Department of Justice, 2014, para. 1). In addition, the Equal Educational Opportunities Act (EEOA) of 1974 notes that:
[n]o state shall deny equal educational opportunity to an individual on account of his or her race, color, sex, or national origin, by…the failure of an educational agency to take appropriate action to overcome language barriers that impede equal participation by its students in its instructional programs. (The United States Department of Justice, 2014)

The Bilingual Education Act of 1988 also says that, “[s]tates and local school districts should be encouraged to determine appropriate curricula for LEP students within their jurisdictions and develop and implement appropriate instructional programs” (DeKalb County Schools, 2010, p. 8). English Language Learner students are protected under these provisions because they are limited-English proficient. In accordance with these provisions, ELL students must be provided with equal educational access and opportunities. There are various court cases that outline these legislative provisions. Lau v. Nichols and Plyer v. Doe prove that just granting access to English language classes did not guarantee equality (DeKalb County Schools, 2010). These ELL students must be provided with language support for language equality.

In an exemplary school district, limited English proficient (LEP) students or English language leaner (ELL) terminology is taken from the No Child Left Behind Act of 2001, S.9101, 25 of Title IX (DeKalb County Schools, 2010). The purpose of the language program is for English language acquisition skills to be enabled for ELL students to “become competent in the comprehension, speaking, reading, and writing of the English language” (DeKalb County Schools, 2010, p. 6). For the present school district, a home language survey is administered to all parents and/or legal guardians in grades 7-12 and becomes part of the ELL student’s permanent and comprehensive record (DeKalb County Schools, 2010). These students must adhere to the W-APT and ACCESS for ELL’s evaluation for proficiency in speaking, listening, reading, and writing English. All of these test scores and evaluations become part of the ELL
students’ records. The eight participating schools have been identified as having an ELL population; as a result, a Language Proficiency Assessment Committee (LPAC) is formed to help promote and meet the needs of the ELL students. The LPAC consists of an administrator, teacher, ELL teacher, speech pathologist, translator, parent and/or guardian (DeKalb County Schools, 2010). As a requirement of ELL language policy and services, parents and/or guardians are notified of all continued actions of the program for which the student is involved (DeKalb County Schools, 2010).

**Teacher Attitudes toward English Language Learners**

The education of ELL students is one of many growing concerns in the education sector. Throughout a typical school day, ELLs are in and out of the mainstream classroom and attending ELL or ESL classes. While there is extremely limited research regarding ELL students and teacher attitudes, determining how best to educate these culturally and linguistically diverse group of students will forge a way to continue to close the achievement gap (Youngs & Youngs, 2001). For ELL students entering American schools, it is vital that they feel welcome and comfortable to embark on the tasks that will be set before them. Providing students with a friendly and helpful teacher is not enough to succeed academically. Nieto (2002) examined the notion of teachers asking ELL students to essentially forget their native language in lieu of learning English. Nieto (2002) also stated that giving ELL students’ easier work when English becomes too difficult for that student is doing them a disservice. Some teachers of ELLs do not learn about the culture, life, or history of these students and their backgrounds. In contrast, Nieto (2002) determined that teachers just tell them they must immerse in our culture and learn English. According to Nieto (2002):
school is a foreign land to most kids, but the more distant a child’s culture and language are from the language of the school, the more at risk the child is….We teach them to read with our words and wonder why it is hard for them. We ask them to sit quietly and we’ll tell them what’s important and what they must know to get ready for the next grade. And we never ask them who they are and where they want to go. (p. 9)

A study by Byrnes, Kiger, and Manning (1997) examined teacher attitudes using the Language Attitudes of Teachers Scale (LATS). In their research, they set out to examine (a) teachers’ previous experience with ELLs, (b) the parts of the country where language instruction is taking place, and (c) the effects of training. The study by Byrnes et al. (1997) found that:

1. A high number of language minority students are not found in high concentrations in public schools
2. Numerous public teachers do not have proper training in ESL
3. The inability of teachers to understand a student’s linguistic and cultural background can bring forth negative feelings that can impact academic promise for ELLs

Additional findings from the study noted positive teacher attitudes from participants with graduate level degrees. Educators who possessed previous educational experience with ELL students also had positive attitudes. Positive teacher attitudes were linked to those individuals with formal training. Findings of the study also suggested that there need be more direction and guidance for teacher education programs for mainstream classroom teachers for more effective ELL instruction.

Numerous studies regarding teachers and ELL students call for further research regarding teacher attitudes toward ELL students (Batt, 2008; Reeves, 2006; Walker, 2004). The focus of
these and many other studies has been the experiences, attitudes, and perceptions of mainstream teachers toward ELL students and ELL inclusion. As a result of these studies, much was gained and learned regarding ELL students and their interactions and roles with teachers. Reeves’ (2006) study discussed the limited attention given to teacher attitudes toward ELL inclusion in mainstream classrooms. Reeves (2006) conducted a study to examine secondary teacher attitudes toward ELL student inclusion based on four subscales including: (a) ELL inclusion, (b) coursework modification, (c) professional development for working with ELLs, and (d) perceptions of language and language learning. Reeves’ (2006) study found a range of attitudes for the various subscales, but the need for further research was evident.

Batt’s (2008) study on teacher perceptions of ELL education identified challenges in linguistic minority ELL education. Batt’s (2008) study found that not all educators working with ELL students were actually qualified to work with those linguistically diverse students. Frustrated teachers voiced a need to provide professional development opportunities for educators in multicultural education, training in ESL teaching methods, and assistance, in the form of specialists, for mainstream classroom teachers (Batt, 2008). Batt’s (2008) study points to the concept that ELL success cannot be placed solely on the teachers.

In addition to these studies, Walker’s (2004) study assessed dominant ideological attitudes and beliefs that mainstream teachers harbor regarding ELL students and those educational programs that serve their needs. Walker’s (2004) findings indicated that teachers who hold or harbor:

negative, ethnocentric or racist attitudes about ELLs, or who believe in any of the
numerous fallacies surrounding the education of language-minority students, often fail to meet the academic and social needs of these students and work to maintain the hegemonic legitimacy of the dominant social order. (p. 130)

Walker’s (2004) study explored three topics that included: (a) the extent and nature of mainstream teacher attitudes toward ELLs, (b) The factors that contribute to teacher attitude development, and (c) How teacher attitudes towards ELLs vary by community demographics, in particular low-incidence schools, rapid-influx schools, and schools serving migrant students.

Another study by Rodriguez, Manner, and Darcy (2010) presented an outline of the evolution of teacher perceptions regarding ELLs and the instruction of those students in an inclusive classroom. The study discussed the growing number of students who speak languages other than English, in rural and urban public schools, across the country. Rodriguez et al. (2010) found that teachers are faced with the challenge of accommodating the diverse needs of ELL students, and discovered how teacher perceptions and attitudes affect the learning growth and experiences of ELL students. The study found that professional development and diverse instructional strategies are critical for ELL student engagement and success. The authors of the study recommended that further research and future studies including “more participants teaching ELLs in rural and urban areas. In addition, comparative studies should be conducted to contrast the education of ELLs in rural settings to urban settings” (Rodriguez et al., 2010, p. 143).

Garcia-Nevarez, Stafford, and Arias (2005) conducted a study in Arizona regarding the attitudes of teachers toward ELL students. The study primarily focused on elementary teacher attitudes toward ELL students’ native languages and instructional strategies for those students (Garcia-Nevarez, Stafford, & Arias, 2005). The study discussed the idea that teachers play a
very significant and vital role in the teaching, learning, and engaging process of all students. The authors noted that attitudes regarding bilingual education commonly held by mainstream Americans more often led to negative teacher attitudes. In addition, the authors determined that since the United States is an English-speaking country, English should be the language of instruction (Garcia-Nevarez, Stafford, & Arias, 2005). Garcia-Nevarez et al. (2005) found that “teachers’ attitudes toward their ELL students differ significantly with the type of certification or endorsement they hold … [and] the more years taught, the more his or her attitude became negative toward his or her students’ native language” (p. 295).

Furthering the discussion regarding teacher attitudes toward ELL student inclusion, Youngs and Youngs (2001) researched the attitudes of mainstream teachers toward ESL students. Youngs and Youngs (2001) cited several other researchers including Jussim (1986), Clair (1995), Byrnes, Kiger, and Manning (1997) and determined that there are challenges for mainstream teachers to create and maintain a positive atmosphere for ELL students in the classroom. In addition, Youngs and Youngs (2001) conducted this research to add to the body of literature because of the lack of research and information regarding ELL students and teacher attitudes.

In their study, Youngs and Youngs (2001) designed a model of six predictors of mainstream teachers’ attitudes toward ELL students, which included: (1) General education experience, (2) Specific ELL students, (3) Demographics, (4) Characteristics, (5) Diverse cultures, prior contact with ELL students, and (6) Personality. As a result, they found that mainstream teachers have a neutral to slightly positive attitude toward teaching ELL students. In addition, they also determined that those teachers who had taken a foreign language were more likely to have a positive attitude toward ELL students.
Karabenick and Noda (2004) examined teacher attitudes and their influence and impact on student academic performance. The study initially examined the ELL practices, beliefs, and the attitudes of teachers compared to see if there was a distinct connection to teachers who might be more or less accepting of ELL students in their classroom. Karabenick and Noda (2004) found that ELLs were not technically viewed as a problem in the classroom; however, the larger problems stemmed from ELL students acquiring a second language.

A study by Rutledge (2009) on teacher attitudes toward ELL students examined mainstream teacher attitudes of ELL students in Mississippi. Rutledge (2009) determined that while teachers welcomed ELLs, they did not feel properly trained to teach the students. Relevant themes throughout the study were: (1) Coursework modification, (2) Educational environment, (3) Time, (4) Training, and (5) Attitudes. Rutledge’s (2009) study found that: (a) teachers were not prepared for ELL student inclusion in the classroom, (b) general consensus that ELL students need to be proficient in English for academic success, (c) ELL students’ native languages were not favored in the classroom, (d) expectations for ELLs to perform at coursework in the same manner as English speaking peers, (e) inclusion was opportunistic as diversity appreciation, and (f) educational stakeholders were welcoming to professional development opportunities; however, the type of professional development opportunities was unclear.

Each of these studies present a significant gap in the literature because all three found that future and significant research is necessary to gain a deeper understanding of the correlation among ELLs, inclusion, and teacher attitudes. In addition to this gap, all of these studies focused on mainstream teacher attitudes. To date, there is not a current study or research examining English and math teacher attitudes toward ELL student inclusion. This study will add to the limited amount of literature and body of knowledge that exists on ELLs. It will provide
additional information regarding the perception of ELLs in an inclusive classroom, as well as how teachers can further prepare and accommodate those students in the classroom. If this study is able to pinpoint teacher attitudes, either positive or negative, regarding ELLs in the classroom, then educational stakeholders can continue to bridge the culture gap and the achievement gap that exists between ELLs and native students. ELL inclusion in the classroom has wrought both positive and negative attitudes and outcomes; however, understanding how a second language is acquired will aide in the process. Banks et al. (2005) stated that “teachers’ attitudes and expectations, as well as their knowledge of how to incorporate the cultures, experiences, and needs of their students into their teaching, significantly influence what students learn and the quality of their learning opportunities” (p. 243).

**Inclusion Practices**

Since the inception of the NCLB legislation, inclusion procedures have become common in classrooms across the nation. “Inclusion is the placement of students with disabilities in regular education classrooms … [and] is the latest wrinkle in an escalating debate focusing on the appropriate placement of students with special needs” (Daniel & King, 1997, p. 67). The inception of the Education for All Handicapped Children Act (1975) founded an inclusive education that mandated “disabled students be placed in an environment that constitutes a least restrictive environment” (p. 67). These legislative guidelines include ELL students and their progression in the classroom. Traditionally, students who fall under this category would have been taught through programs in which special education students were separated and pulled from classes that included their age-appropriate peers (All Handicapped Children Act, 1975). It is important to note that even without the implementation of NCLB, inclusion practices are still
carried out in public school classrooms across the nation. Inclusion practices are just one way that diverse students are included and educated in the general education classroom.

Advocates for inclusion note that inclusion practices support the academic and social needs for students with disabilities (Daniel & King, 1997). With inclusion, the process of academic achievement is reinforced when those children with disabilities are expected to comply with the higher academic standards set forth in a regular classroom setting (Daniel & King, 1997). Additionally, supporters note that setting higher standards is necessary because those students with disabilities are less likely to graduate from high school, maintain employment and/or live without assistance of some sort than their nondisabled school peers (Daniel & King, 1997). For a student to grow and develop academically and socially, certain needs must be met. Inclusion practices allow for that academic growth by adhering to a general education classroom with support, while also allowing those students to interact with his or her peers in the classroom to help develop necessary social skills, including language development.

In contrast, those individuals against inclusion argue that students with disabilities were not served well in the all inclusive classroom because teachers teach in a one size fits all model (Daniel & King, 1997). Critics also argue that inclusion practices have the ability to limit choices for parents and students, while in turn creating negative effects in the regular education classroom in several ways (Daniel & King, 1997). Daniel and King (1997) critically stated that “the debate surrounding inclusion hinges on accumulation of additional information that can provide a foundation for informed, knowledgeable choices” (p. 69) to help refine education because research on inclusion is limited. Those who oppose inclusion make a good argument in that students can get lost in the shuffle of day to day regular education classroom activities. The main goal of inclusion is to help service those students who struggle academically; therefore, if
those students are unable to be adequately serviced in a general education classroom, the practices of inclusion have failed those students.

A study by Casale-Giannola (2012) continued the discussion on inclusion outlining how secondary schools continue to face challenges while working to foster the increasing number of students placed in an inclusion setting. The author noted the lack of research regarding inclusive classroom settings and the need for further research to understand and improve inclusionary practices (Casale-Giannola, 2012). An article by Obiakor, Harris, Mutua, Rotatori and Algozzine (2012) furthered the discussion on inclusion noting that creating an inclusionary environment is the goal of educational programs in order to promote student performance. The authors believed that “individuals with disabilities experience educational professionals and service providers who not only downplay their capabilities and willingness to live a normal life, but who also argue that excluding them in educational processes is justified, proper and right” (p. 477). In short, they determined that understanding how inclusion works and the practices associated with inclusion are necessary because it reinforces social justice, human value, and team-work to promote a sense of a unified classroom and school community.

**Teacher Professional Development for ELLs**

Public education teachers are required, as part of their certification requirements, to attend and complete professional development opportunities to maintain a working knowledge of educational updates and strategies. These professional development opportunities for teachers should provide and widen the understanding of ELL students, as well as instructional opportunities regarding ELLs. Professional development is one way that teachers are able to stay up to date on emerging changes in the field of education. It is critical for educational
stakeholders to grasp and develop essential parts necessary for second language acquisition (Clair & Adger, 1999).

One challenge associated with professional development has been the influx of ELL students into public schools across the country. Teachers face the daunting challenge of having culturally and linguistically different students in the classroom. Statistics show that the highest number of ELLs is confined to Hispanic students (NEA, 2006). Traditionally, ESL and bilingual teachers have been responsible for teaching ELL students; additionally, ELLs were given access to language and content instruction, but that may not have always occurred in a mainstream core-subject academic classroom. Teachers have not been adequately trained to teach the population of this massive influx of ELL students.

Teacher professional development and training is a topic that has become more and more relevant over the past few years. Teachers can view professional development opportunities and trainings as just another activity that makes the school day longer (Olsen, 1997). For teachers to truly understand ELLs and their diverse cultures and linguistic challenges, professional development needs to be designed to meet the needs of individual schools, teachers, and students (Ballantyne, Sanderman, & Levy, 2008). Professional development is just one major component when determining teacher attitudes, in the English and math classroom, toward ELLs. Research (Batt, 2008; Reeves, 2002; Reeves, 2006; Walker et al., 2001; Youngs & Youngs, 2001) shows there has been a mixed attitude regarding professional development. Some teachers feel that they need more instructional strategies to teach ELLs, while others believed that they were equipped to teach these students without professional development (Reeves, 2006).

Some general core subject teachers of ELLs are not prepared to take on the task of teaching regular education, as well as ELL students in an all inclusive classroom; therefore,
professional development for teachers of ELLs is necessary to ensure that these students have access to rigorous curricula and acquire English language proficiency. Banks et al. (2005) noted that in 1972, a commission on multicultural education, which was created by the American Association for Colleges for Teacher Education (AACTE), became the first to establish requirements in order to prepare teachers for diversity in the classroom. This was the first step for educational stakeholders on how to accommodate ELL students in a diverse classroom. The organization, National Council for Accreditation of Teacher Education (NCATE), revised teacher preparation standards toward the growing diversity in society and classrooms. The NEA (2013) found that quality instruction for ELLs requires a teacher who is equipped to teach using a variety of instructional strategies. Conclusions are drawn to the fact that if general education teachers lack some level of professional development or some sort of class or certification in ELL studies, then he or she will not be prepared to meet the needs that ELL students require (NEA, 2013).

Research shows that in present day, most general education teachers have at least one ELL student in his or her classroom, while 29.5% of those teachers have had opportunities for professional development to work with ELLs in English language acquisition (NEA, 2013). In addition, only 20 states require that new teachers take a preparation course for working with ELL students. This lack of preparation links to the difficulty associated with educating ELLs, as well as preparing for ELLS in the classroom. According to teachers, they feel unprepared to work with ELLs and have inadequate knowledge (NEA, 2013). This unpreparedness to work with ELLs is discussed by the NEA (2013) in noting that teachers feel they have a lack of skills, a lack of appropriate assessment to determine needs, a lack of appropriate assessment to measure
learning, problems associated with poor communication among students, teachers, parents, and the community, as well as a lack of professional development opportunities.

When teachers are provided opportunities for professional development, they are able to discuss ideas, concerns, and means of support for one another to successfully work with and educate ELL students. Because of the growing population of ELLs in the public school classroom, it has become necessary for teachers to become familiar with ways in which ELL students are challenged by the school curriculum, as well as ways to achieve in the classroom. The NEA (2013) notes that professional development for teachers can be problematic when school and district policies do not provide teachers guidance and support for accommodating the learning needs of ELLs. As previously noted, the number of ELLs is only expected to grow within the United States; as a result, greater numbers of educators will face the challenge of finding effective strategies for instructing ELLs. Professional development, that would be mandatory regarding ELL students and language acquisition, is simply one way that teachers could close the achievement gap and alter negative attitudes associated with educating ELLs.

One way in which teachers are trained to accommodate ELL students is through Sheltered Instruction Observation Protocol (SIOP). The SIOP model was derived from Echevarria (California State University, Long Beach, California), Vogt (California State University, Long Beach, California) and Short (Center for Applied Linguistics, Washington, DC). The purpose of SIOP was to provide mainstream and general education teachers with instructional strategies that would be useful to aide ELLs in academic achievement (Echevarria & Short, n.d.). Because ELL students are culturally and linguistically diverse, teachers need to know a variety of ways to help these ELLs become academically successful.
The SIOP model is a validated approach to teaching that helps students, especially English learners, become ready for college or careers (Echevarria, Vogt & Short, 2014). According to Echevarria et al. (2014), there are eight components to the SIOP model to ensure effectiveness and engagement. Those components include: (a) Lesson preparation, (b) Building background, (c) Comprehensible input, (d) Strategies, (e) Interaction, (f) Practice and application, (g) Lesson delivery, and (h) Review and assessment.

Techniques and strategies were developed to mold SIOP into a teacher-friendly model for content. The goal of SIOP was to help make content more understandable, as well as guide the students in learning the English language. The techniques imbedded in the SIOP model were to work as a bridge to address the gap between ELL students who need to meet high academic standards and teachers in hopes of improving learning in the classroom. The SIOP model has increased student achievement, improved academic content skills and language skills, delivered results aligned to district objectives, and prepared those students for college and/or careers (Echevarria et al., 2014).

Continuing the discussion regarding the need for professional development for teachers of ELLs, Ballantyne, Sanderman, and Levy (2008) provided that (1) a majority of teachers need more quality training for ELLs, (2) only a small number of states require training to work with ELLs, (3) only 26% of teachers with ELLs have been trained in educating them, and (4) less than 17% of colleges offer pre-service teacher preparation training to work with ELLs.

In summary, it is apparent that the more opportunities teachers have for professional development regarding ELLs, the more prepared they will be in the academic classroom. Faltis (1999) noted that the need for teacher professional development is critical to effectively work with ELLs because teacher education programs have not formally required coursework or
training for teaching ELL students. This can, in turn, create positive attitudes toward these students because there will be a deeper understanding of their culture, language, and lifestyle (Stanosheck, Youngs, & Youngs, Jr., 2001). To help teachers focus on areas that can help assist ELLs in classroom will take a burden off the teachers and expand their knowledge base and lend more sensitivity to ELLs. Without proper teacher training and instruction for ELLs, mainstream classrooms, including English and math classes, may create an obstacle for ELL student success.

**Coursework Modification for ELL Students**

For academic success in any mainstream classroom, ELL students must have access to the mainstream curriculum. To properly educate ELLs, teachers need to understand the academic curriculum of their discipline, as well as possess a knowledge of the second language acquisition process and the ends to which an ELL student must be taught (Walqui, 2000). In order to effectively teach ELL students, English proficiency and content knowledge need be developed consectively, according to Ballantyne et al. (2008). To exemplify the notion of coursework modification for ELLs, Milk et al. (1992) noted that:

> [w]hile there are mnay means to contextualize a lesson and multiple avenues for creating a highly interactive language-rich environment, a key element appears to be teachers’ conscious attention to these factors, in addition to an awareness of the kinds of classroom variables that can be successfully manipulated to generate a learning environment that promotes language acquisition. (p.4)

Coursework modification is one way teachers of ELLs can accommodate those students in an inclusion classroom. Reeves (2006) asserts that mainstream teachers are reluctant to modify curriculum in order to accommodate ELL students; however, those same teachers are open to allowing those students more time to complete the coursework. This reluctancy in
coursework modification is due in part to the lack of knowledge regarding second language acquisition and ELL students in general. While there has been no definite reason defined as to low academic achievement of ELL students, Valdes (2001) noted that combining language and content had been found to be successful. The intent behind making changes to a course curriculum would be suitable for ELL students from diverse cultural and linguistic backgrounds; although, teachers do feel not prepared to modify curriculum for ELLs, which in turn might limit ELL students’ access to the mainstream curriculum, in general (Olsen, 1997). In addition, the lack of resources, information, and time could create additional challenges for teachers to create an inclusive curriculum (Olsen, 1997).

Aforementioned research acknowledges a need to understand teacher attitudes, as well as accommodations for ELL students (Walker et al., 2004; Youngs & Youngs, 2001). Every ELL student will require different types of support in the classroom for coursework and language acquisition. It is the responsibility of the ESL teacher to provide the mainstream classroom teacher with specific accommodations and modifications recommended for each ELL student. According to the Bethlehem Central School District (2007), in Delmar, NY, there are three areas in which modification for language acquisition should occur: (a) Content, including curriculum, essential ideas, vocabulary, and key understanding; (b) Instruction, including methods of presentation, classwork, and materials utilized in lessons; and (c) Assessments, which includes the way in which student knowledge is evaluated and graded.

Koga and Hall (2004) analyzed various studies regarding how modifications and accommodations are necessary for ELL students. The report focused mainly on curriculum modification for ELL students, and noted that by taking the modified curriculum and combining
it with the student’s linguistic and cultural background is the most beneficial way to help ELLs succeed in the classroom.

Some teachers may find themselves willing to modify coursework and accommodate ELL students; however, they are not quite sure what steps to take in this process. The Bethlehem Central School District (2013) noted that determining the level of English proficiency for ESL students will determine how they will manage curriculum in a class. In addition, this aforementioned school district classified ELL students into three categories for coursework modification purposes. Students are denoted as being: (a) Early beginner, (b) High beginner / intermediate, or (c) Advanced. An early beginner would be able to identify two or three essential ideas, as well as background words that will help advanced students. A high beginner or intermediate ELL student would be able to identify numerous essential ideas, as well as a list of core vocabulary terms. An advanced ELL student would be expected to learn the vast majority of the content being taught in the regular education classroom; however, these ELL students may require, at a minimum, more time to do various classroom activities, such as: (a) Completing assignments, (b) Demonstration of content knowledge, and/or (c) More teacher support for the assignments.

Modifying curriculum can be overwhelming for teachers of ELLs when first facing the task. Some teachers may feel that they have to prepare entirely new and different lesson plans than the regular education students; however, modifying most existing lesson plans is all that most ELL students need to make progress in the classroom (Bethlehem Central School District, 2013). The point in coursework modification for teachers is to simply adjust an already existing lesson so that ELL students are able to learn, progress, and participate in mainstream classrooms. A key concept of coursework modification is pre-planning, so teachers are able to modify the
materials because the lessons are to ensure that ELL students are able to participate. Teachers must be willing to continually monitor an ELL student’s understanding and progress to ensure that they can academically achieve in the classroom. Koga and Hall (2004) conclusively note that curriculum and coursework modification for ELLs is most successful when a students’ unique linguistic and cultural backgrounds are included for academic success. Walker et al. (2004) determined that:

> [f]or even the most well intentioned teacher, the experience of not knowing how to help an ELL can quickly turn negative (not to mention how detrimental the experience can be for the student). Teachers who are uncomfortable with feeling overwhelmed, frustrated and helpless may in time begin to deflect their negative feelings onto their ELL students and begin to believe in the widespread deficit theories teachers hold regarding ELLs. (p. 142)

For positive curriculum retention, teachers need to develop a close-knit and working relationship with their students in order to promote efficient, effective, and quality instruction. By listening to students and determining teacher instruction support, objectives for coursework modification can be accomplished (Nieto, 2002). Teacher collaboration is also key for ELL classroom academic achievement. Mainstream teachers, including English and math teachers, will gain a deeper understanding of their curriculum, as well as ELL students, when interaction between both subgroups is attained (Lucas, 1997).

**Second Language Acquisition and Language Learning**

An ELL student is one whose native language is not English. Robertson (2009) found that a student’s native language can influence how he or she learns English; in addition to understanding language differences, that determination can help a student focus on difficult areas
of their language acquisition. Because languages differ in a variety of ways, it is critical that teachers pay close attention to sounds, pronunciation, grammar, word order, and sentence structure. Robertson (2009) also believed that one’s native language can influence a student’s vocabulary for translation purposes, as well as vocabulary meanings. Johnson (1999) cited several teachers’ statements and beliefs regarding second language instruction and acquisition: “Sandra says, ‘I believe learning a language is a process of gathering tools to use in expressing thoughts, ideas and ourselves’” (p. 40).

Previously discussed was how there is a close association between teacher attitude and student achievement. When considering the overall learning process, teacher attitudes play an important role. Theories on second language acquisition relay how importance a good learning environment is for ELL students (Menz, 2009). Those educators who work with ELL students would benefit from investing time and knowledge into second language acquisition in order to aide and assist ELL students in the process of language learning in the academic classroom (Christian, 1999). It is important that teachers know and understand how language acquisition fits in to the academic learning environment (Wong-Filmore & Snow, 2000).

Knowledge of second language acquisition theory is critical to establish a nurturing environment for ELL students (Menz, 2009). Language learning for ELLs may seem difficult because they may not understand instructions given or the vocabulary used in class lessons. ELL students are not likely to have the same background knowledge as their native English-speaking peers (Robertson, 2009). To aid in language learning, key concepts, vocabulary words, lesson references, time and practices, and extra materials should be utilized in order to ensure that the ELL students gain a deeper understanding and acquisition of the language (Robertson, 2009). Students who have trouble with classroom lessons, regarding language acquisition, need to be
guided by the teacher. Teachers are responsible for determining what might improve ELL student understanding of the English language. This might include: (a) introduction of new concepts, (b) various sets of directions, and/or (c) vocabulary terminology (Robertson, 2009). Identifying various ways in which students can move past language obstacles can improve a student's language acquisition outlook.

Learning a second language is not an easy, nor a straightforward process. Research regarding second language acquisition indicates that there are numerous differences in learning a second language (Reeves, 2002; Reeves, 2006; Youngs & Youngs, 2001). Researchers do not entirely understand the various differences; however, gaining a knowledge base in how a particular learner acquires a second language and applies that language to academic coursework is important for classroom teachers (Ren Dong, 2004). Teachers must be able to recognize the importance of how a student learned his or her first language in order to understand how to best learn the second language. Becoming aware of a student’s first language can in turn help educators and educational stakeholders understand how ELLs can best acquire a second language, all while making academic progress and in turn helping close the achievement gap that exists between ELL students and native English speakers. According to Mace-Matluck, Alexander-Kasparik, and Queen (1998), there are three areas that affect language learning for students. The areas include: (a) fluency in the first language, (b) the model of second language learning that is available, and (c) the interpersonal and social characteristics of the student. In a secondary school setting, acquiring a second language for students is undoubtedly a complex task when considering all the factors that can affect an ELL student.
CHAPTER THREE: METHODS

Overview

The purpose of this causal-comparative study was to examine English and math teacher attitudes and perceptions toward ELL student inclusion in a secondary classroom. Participants, from one public school district in northeast Alabama, responded to a survey regarding various components of ELL student inclusion and their attitudes toward inclusion. The current research study was modeled after similar studies involving secondary teacher attitudes toward ELL inclusion in the mainstream classroom (Reeves, 2002, 2006). Reeves (2006) study focused on all teachers’ attitudes toward ELL inclusion in the mainstream classroom. An instrument developed by Reeves (2002, 2006) was modified and used in this study. This chapter presents the research design, research questions, hypotheses, participants and setting, procedures, and data analysis methods utilized in conducting the study.

Design

The current research study utilized a causal-comparative design. The rationale for this design choice was due to the non-experimental investigation, the independent variable was measured in categories, not manipulated by the researcher, and the categories differed in the dependent variable (Gall, Gall, & Borg, 2007). The independent variable was the type of secondary teacher, which was either math or English. The dependent variable was teacher attitudes toward ELL inclusion, as measured by the survey instrument. Attitudes toward ELL inclusion is defined as a teacher having psychological tendency expressed by evaluating a particular entity with some degree of favor or disfavor (Eagly & Chaiken, 1993), and in this study, the entity is an active learner of the English language whose native language is not
English. The purpose of this study was to determine if there was a difference in the attitudes of
English and math teachers toward the inclusion of English Language Learner (ELL) students.

**Research Question**

The following research questions are proposed:

**RQ 1:** Is there a difference between English and math teachers’ attitudes toward the
inclusion of English Language Learner (ELL) students at the secondary level?

**Hypotheses**

The following null hypotheses are proposed:

**H₀₁:** There is no difference between English and math teachers’ overall attitude scores
toward the inclusion of English Language Learner (ELL) students at the secondary level.

**H₀₂:** There is no difference between English and math teachers’ attitude scores on
subscale one (inclusion) toward the inclusion of English Language Learner (ELL) students at the
secondary level.

**H₀₃:** There is no difference between English and math teachers’ attitude scores on
subscale two (coursework modification) toward the inclusion of English Language Learner
(ELL) students at the secondary level.

**H₀₄:** There is no difference between English and math teachers’ attitude scores on
subscale three (professional development) toward the inclusion of English Language Learner
(ELL) students at the secondary level.

**H₀₅:** There is no difference between English and math teachers’ attitudes scores on
subscale four (second language acquisition and language learning) toward the inclusion of
English Language Learner (ELL) students at the secondary level.
Participants and Setting

The participants for the present study were a sample of secondary English and math teachers from eight schools located in one public school district in northeast Alabama during the spring semester of the 2016-2017 school year. The school district contained twelve schools that are K-12, which are all located in rural areas with low socio-economic status. The schools were classified as Title I schools and receive federal funding. The total student population of the school district was approximately 8,750 students. The students’ race ranges from 60% White, 26% Hispanic, 12% Native American, 0.8% Black, and 0.5% multiracial. For ELL students in the district, a home language survey was administered to all parents and/or legal guardians in grades 7-12. This language survey becomes a part of the ELL students’ permanent and comprehensive record for the district. These ELL students must adhere to the previously discussed W-APT and ACCESS for ELL’s evaluation for proficiency in speaking, listening, reading, and writing English. These standards were established by WIDA, which was an academic language achievement program for linguistically diverse students utilizing high quality standards, assessments, research, and professional development for educators (WIDA, 2014). All of these accumulated scores and evaluations become part of the ELL students’ records. The eight participating schools have an extensive ELL population; as a result, a Language Proficiency Assessment Committee (LPAC) was formed to help promote and meet the needs of the ELL students. The LPAC consists of an administrator, teacher, ELL teacher, speech pathologist, translator, parent and/or guardian (DeKalb County Schools, 2010).

According to Gall et al. (2007), a sample size of 100 was needed for effect size with statistical power of .7 at an alpha level of .05. In the current study, the sample consisted of 122 teachers. Of the 122 teacher sampling, demographic information was also collected from each
individual. That information included: gender, age, race, subject area, training in working with ELL students, and other classes taught.

On average, the English teachers taught a variety of secondary classes including: literature, grammar, and English Language Arts electives including drama, creative writing, etc., dual enrollment college English 101, 102, and an ACT Prep course. On average, the math teachers taught grade level subject classes including Algebra I, Algebra II, Geometry, Pre-Calculus, dual enrollment college math 112, 113, and an ACT Prep course. The survey instrument collected the demographic information from the teachers in order to gain a deeper understanding to the teacher responses. The demographic information collected determined that 15.79% identified as male, and 84.21% identified as female. In addition, the survey determined that the age of the teachers ranged from 23-62. For all teachers surveyed, 86.84% identified as white, 2.63% as black, 7.89% as Native American, 0% as Hispanic, 0% as Asian, and 0% as multiracial. The demographic information found that 55.26% of the teachers taught English, while 44.76% taught math. Lastly, the survey determined that 0% of teachers had little to no experience in teaching ELL students, 23.82% had moderate experience in teaching ELL students, and 76.18% had extensive experience in teaching ELL students. Demographics of the respondents can be found in Table 1.

Table 1

Demographic Information of Respondents

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>English</td>
<td>66</td>
<td>54.05%</td>
</tr>
<tr>
<td>Math</td>
<td>56</td>
<td>45.95%</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td>1-29 years</td>
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</tbody>
</table>
Average Experience – 17 years

<table>
<thead>
<tr>
<th>Age</th>
<th>23-62 years old</th>
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</thead>
<tbody>
<tr>
<td>Average age</td>
<td>43 years old</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Race</th>
<th>White (106) 86.84%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>(3) 2.63%</td>
</tr>
<tr>
<td>American Indian</td>
<td>(10) 7.89%</td>
</tr>
<tr>
<td>Two or more</td>
<td>(3) 2.63%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Female (103) 84.21%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>(19) 15.79%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest Earned Degree</th>
<th>Bachelors – Educational Doctorate (Ed.D.)</th>
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</thead>
<tbody>
<tr>
<td>Average Degree</td>
<td>Masters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>English Native Language</th>
<th>Yes (122) 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>(0) 0%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Second Language</th>
<th>Yes (19) 15.79%</th>
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<tbody>
<tr>
<td>No</td>
<td>(103) 84.21%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>College ELL Training</th>
<th>Yes (34) 27.78%</th>
</tr>
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<tbody>
<tr>
<td>No</td>
<td>(88) 72.22%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional ELL Development</th>
<th>Yes (86) 70.27%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>(36) 29.73%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELL Student in Class</th>
<th>Yes (122) 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>(0) 0%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>ELL in Class (2016-2017)</th>
<th>1-27 students</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELL in Class for Career</td>
<td>3-500 students</td>
</tr>
</tbody>
</table>
The typical respondent to this survey was female, has taught either a required English or Math class for between one and 29 years, may or may not have had a training course in ELL education, and typically has more than one ELL student her classroom. Of the 122 teachers who responded, 19 (15.79%) were males and 103 (84.21%) were female. The respondents were almost evenly split in courses taught as English (66, 54.05%) and Math (56, 45.95%). The majority of the respondents had either a Bachelor’s or Master’s degree in teaching; while a select few obtained an Education Specialist (Ed.S.) degree and one had an Educational Doctorate (Ed.D.) degree. Every respondent selected English as his or her native language; however, 19 (15.79%) respondents identified as speaking a second language. The vast majority of respondents, 88 (72.22%) noted that they did not receive training or take a class for teaching language minority or ELL students while obtaining their education degree. In contrast, 86 (70.27%) respondents noted that as an employed teacher, they have received training and/or professional development for teaching language minority and/or ELL students. All of the respondents have had an ELL student enrolled in their class at some point in their teaching career. During the 2016-2017 academic school year, all respondents reported having an ELL student in their classroom and the number of ELL students in their classroom ranged from one to 27. Lastly, respondents reported that over their lifetime in teaching, they had encountered three to 500 ELL students in the classroom. The newer teachers encountered the lower number of ELL students, while more veteran teachers had encountered the higher number of ELL students. On average, the surveyed teachers had encountered 200 ELLs during their teaching career.
In instrumentation, the instrument utilized in the present study was called the “English-as-a-second-language (ESL) Students in Mainstream Classrooms: A Survey of Teachers” developed by Reeves (2002, 2006). For the present study, the original survey instrument was slightly modified to align with a survey of English and math teachers, and it was administered as an online survey via the school district’s email service. In regard to the complexities of attitudinal survey research, the current study utilized a survey instructional composed primarily of statements that were aimed at directly and/or indirectly probing the respondents’ perceptions and attitudes regarding ELL inclusion. See Appendix A for the survey instrument. The survey was intended to directly and indirectly determine participants’ attitudes of ELL inclusion in a math or English teacher’s classroom. Permission to use the original instrument was granted through contact with the creator. See Appendix D for the email communication. Reeves (2002) developed the original instrument because “no appropriate instrument was found to measure teachers’ attitudes and perceptions of ESL inclusion” (p. 40). In designing the instrument, Reeves (2002) “relied upon the small number of research studies present in the literature that explored the experiences of subject area teachers of ESL students directly” (p. 40). The development of the survey was based upon qualitative themes such as: 1) Teachers’ perceptions of language acquisition processes, the roles of English and the ELL’s native language; 2) Teachers’ perceptions of the need for coursework modifications for ESL students, as well as their attitudes toward modification practices; 3) Teachers’ attitudes and perceptions of time constraints resulting from ESL inclusion; 4) Teachers’ attitudes and perceptions of appropriate training and support for working with ESL students; 5) Teachers’ perceptions of the educational environment resulting from ESL inclusion in mainstream classes; and 6) Teachers’ general attitudes toward ESL
inclusion (Reeve, 2002). Even though the survey instrument was created utilizing qualitative themes, Reeves (2002) developed a quantitative instrument (p. 40).

The survey consisted of 40 items: Section A included 16 questions answerable on a four-point Likert scale; Section B included 11 questions answerable by utilizing the choices never, some of the time, or most or all of the time = 3, and a set of nine demographic type questions (e.g. race, gender, age, subject area, years of teaching experience, second language experience, and training in teaching ELL students). The survey was intended to measure four subscales: (1) ELL inclusion, (2) Coursework modification, (3) Professional development, and (4) Second language acquisition and language learning (Reeve, 2006).

Section A of the survey was intended to gauge teachers’ strength of agreement or disagreement with 16 statements addressing attitudes toward ELL and/or ESL inclusion. Section A used a four-point Likert scale. Participants read each statement and marked the box that most closely represented his or her opinion ranging from: strongly agree, agree, disagree, or strongly disagree; a total score can range from 16 to 64.

Section B of the survey was intended to measure the teaching behaviors among teachers with ELL students in their classrooms. Section B also utilized a four-point Likert scale. In this section, participants read a statement and marked the box that most closely represented the statement’s frequency in his or her classroom: most or all of the time, some of the time, or seldom or never.

Section C of the survey was intended to gather demographic information from the participants of the study. This section contained demographic questions regarding the participant’s specific subject area, gender, age, race, years of teaching experience, native language, any second language proficiency, experiences teaching ELL students, and types of
language training. This information was obtained to gain an accurate description of the participants.

Reeves’ (2002) created the original instrument used in this study; therefore questions of validity and reliability were addressed in her study and other aforementioned studies that also utilized Reeves’ instrument. Reeves’ (2002) conducted a pilot study using the survey to verify the clarity of the instrument. The pilot study required participants to evaluate the survey and provide feedback. Reeves (2002, 2006) did not report any information in her dissertation or further conducted studies in regards to problems of reliability for the survey instrument. For internal consistency of the survey instrument, the researcher calculated Cronbach’s alpha coefficients for the survey sections in Chapter 5. The researcher also used Spearman Brown prophecy coefficients to measure the reliability for the four subscales.

In addition to the current study, Reeves’ (2002) instrument has been utilized in various other studies and dissertations. Reeves’ (2002) instrument has been used in a number of current dissertations regarding teacher attitudes and perceptions toward ELL inclusion. Dekutoski (2011) applied Reeves’ (2002) instrument and conducted a Cronbach’s alpha for internal consistency, as well as a Spearman Brown prophecy for reliability of the subscales. Dekutoski (2011) found that when the questions were grouped together and assessed using Cronbach’s alpha coefficients, “the overall scale was moderately reliable at alpha-0.55” (p. 74).

**Procedures**

The researcher initiated the study by obtaining approval to conduct the study from various outlets before data collection. The researcher first received approval from the Institutional Review Board (IRB) at Liberty University. After approval from the IRB, the researcher contacted the board of education for the school district, via email through the district
email system, and gained approval from the superintendent to conduct the study among eight schools in the district.

The researcher also contacted, via email through the district email system, each of the principals at the eight schools and obtained their approval to contact the English and math teachers at his or her school to request their participation in the study. See Appendix B for the email. After receiving permission, the researcher sent an email to all English and math teachers in the eight participating schools in the district regarding participation in the research study. The email briefly explained the study and the survey. See Appendix C for the email. Once the researcher obtained participants, an email was sent that briefly explained the study and the survey. The email contained instructions regarding how to participate in the study. See Appendix E.

Once all approval was obtained, the researcher created the survey instrument via an online format from the website Survey Monkey®. Upon construction of the survey, the researcher sent out a second email to all participating English and math teachers. See Appendix F for the email. The email contained an Internet link to the website, Survey Monkey®, which directed the participant to the survey for the study. Participants were directed to follow the instructions for completing the survey. See Appendix G for survey instructions. The instructions for the survey included a consent form in which the participant could agree to participate in the study or refuse to participate in the study. Completion of the survey took approximately 15 minutes. Upon completion of the survey, the researcher was notified, via the website, that a participant had completed the survey. The participants had approximately a 10-day period to complete the survey. After 5 days had passed since the research initiated the survey, a reminder email was sent to the participants who had not completed the survey.
regarding the time remaining for participation in the study. See Appendix H for the email. The researcher collected the data via the survey webpage and stored it for data analysis procedures via Statistical Package for the Social Sciences (SPSS).

**Data Analysis**

This study examined math and English teachers’ attitudes toward inclusion of English Language Learners. The data were first screened and then descriptive statistics were reported. A series of *t*-tests were used to test the nulls at the 95% confidence interval. The *t*-test requires two assumptions which are assumption of equal variance and assumption of normality. The assumption of equal variance was measured using Levene’s Test of Equality of Variance and Kolmogorov-Smirnov was used to test for the assumption of normality.
CHAPTER FOUR: FINDINGS

Overview

The following chapter will present an analysis of the survey and collected data. First, the original research questions and hypotheses are stated. Next, the collected data will be described with descriptive statistics to orient the reader with an overview of the findings. The following results section was organized based on each of the hypotheses and corresponding statistical tests, analysis, alpha level, effect size and rejection or failed rejection of the null. The researcher included tables and figures of data and results.

Research Question

RQ 1: Is there a difference between English and math teachers’ attitudes toward the inclusion of English Language Learner (ELL) students at the secondary level?

Hypotheses

\( H_01: \) There is no difference between English and math teachers’ overall attitude scores toward the inclusion of English Language Learner (ELL) students at the secondary level.

\( H_02: \) There is no difference between English and math teachers’ attitude scores on subscale one (inclusion) toward the inclusion of English Language Learner (ELL) students at the secondary level.

\( H_03: \) There is no difference between English and math teachers’ attitude scores on subscale two (coursework modification) toward the inclusion of English Language Learner (ELL) students at the secondary level.

\( H_04: \) There is no difference between English and math teachers’ attitude scores on subscale three (professional development) toward the inclusion of English Language Learner (ELL) students at the secondary level.
H05: There is no difference between English and math teachers’ attitudes scores on subscale four (second language acquisition and language learning) toward the inclusion of English Language Learner (ELL) students at the secondary level.

**Descriptive Statistics**

The data in this study were collected by the cooperating school district and the eight participating schools, in conjunction with the researcher. Data was collected using an electronic, web-based survey, which was administered to teachers at the participating schools using the web-based survey website, during the Spring 2017 semester. The survey, which was an adapted version of Reeves (2002) ESL Students in Mainstream Classrooms: A Survey of Teachers, contained 27 opinion statements which were scored on a 4-point Likert scale. The statements included the following topics: ELL inclusion, language acquisition and usage, coursework modification, teacher preparedness, ELL student management, and measures of attitudes regarding ELL inclusion. The participating teacher responses were used to compute an index score, which reflected the teachers’ attitudes regarding ELL inclusion. See Tables 2-7 for Descriptive Statistics.

Table 2

*English and Math teachers’ Descriptive Statistics of Teacher Index Scores*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>overall attitude scores</td>
<td>49.33</td>
<td>8.35</td>
<td>66</td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>overall attitude scores</td>
<td>54.08</td>
<td>9.46</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>overall attitude scores</td>
<td>67.90</td>
<td>17.27</td>
<td>122</td>
</tr>
</tbody>
</table>
Table 3

*English and Math teachers’ Descriptive Statistics of Teacher: Subscale one (inclusion)*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong> inclusion scores</td>
<td>47.66</td>
<td>4.32</td>
<td>66</td>
</tr>
<tr>
<td><strong>Math</strong> inclusion scores</td>
<td>51.88</td>
<td>6.71</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong> inclusion scores</td>
<td>72.31</td>
<td>15.83</td>
<td>122</td>
</tr>
</tbody>
</table>

Table 4

*English and Math teachers’ Descriptive Statistics of Teacher: Subscale two (overall attitude toward inclusion)*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong> overall inclusion scores</td>
<td>49.62</td>
<td>11.59</td>
<td>66</td>
</tr>
<tr>
<td><strong>Math</strong> overall inclusion scores</td>
<td>43.81</td>
<td>7.34</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong> overall inclusion scores</td>
<td>68.49</td>
<td>27.03</td>
<td>122</td>
</tr>
</tbody>
</table>

Table 5

*English and Math teachers’ Descriptive Statistics of Teacher: Subscale three (coursework modification)*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong> coursework modification scores</td>
<td>51.83</td>
<td>17.42</td>
<td>66</td>
</tr>
<tr>
<td><strong>Math</strong> coursework modification scores</td>
<td>46.09</td>
<td>12.80</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong> coursework modification scores</td>
<td>72.34</td>
<td>31.45</td>
<td>122</td>
</tr>
</tbody>
</table>

Table 6

*English and Math teachers’ Descriptive Statistics of Teacher: Subscale four (professional development)*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong> professional development scores</td>
<td>43.22</td>
<td>8.32</td>
<td>66</td>
</tr>
<tr>
<td><strong>Math</strong> professional development scores</td>
<td>48.61</td>
<td>14.79</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong> professional development scores</td>
<td>79.43</td>
<td>33.68</td>
<td>122</td>
</tr>
</tbody>
</table>
Table 7

*English and Math teachers’ Descriptive Statistics of Teacher: Subscale five (second language acquisition/language learning)*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>English</em> second language acquisition/language learning scores</td>
<td>39.66</td>
<td>7.53</td>
<td>66</td>
</tr>
<tr>
<td><em>Math</em> second language acquisition/language learning scores</td>
<td>42.91</td>
<td>12.94</td>
<td>56</td>
</tr>
<tr>
<td><em>Total</em> second language acquisition/language learning scores</td>
<td>69.89</td>
<td>28.71</td>
<td>122</td>
</tr>
</tbody>
</table>

**Results**

**Null Hypothesis One**

Null hypothesis one noted that there is no statistically significant difference between English and math teachers’ overall attitude scores toward the inclusion of English Language Learner (ELL) students at the secondary level. This hypothesis references the idea that in the overall scheme of ELL student inclusion in either a math or English teachers’ classroom, there would be no difference in their attitudes.

**Data Screening.** Data was screened to ensure that there were no inconsistencies or outliers. After sorting through the data for each variable, the researcher scanned the data and found that there were no data errors, the researchers used box and whiskers plots to determine if there were any outliers. No outliers were identified.

**Assumptions.** Two assumptions were made in order to use the independent samples *t*-test. The first assumption was that the test variable was normally distributed in each of the two samples. To determine whether the normality assumption was met, the Kolmogorov-Smirnov test was used. The Kolmogorov-Smirnov test revealed that no violations of normality were found. The results from the Kolmogorov-Smirnov test are displayed in Table 8.
Table 8

Kolmogorov-Smirnov Table of Normality for Attitude Toward Inclusion

<table>
<thead>
<tr>
<th>Subject</th>
<th>Kolmogorov-Smirnov Statistic</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Toward Inclusion English</td>
<td>.331</td>
<td>64</td>
<td>.421</td>
</tr>
<tr>
<td>Math</td>
<td>.197</td>
<td>54</td>
<td>.208</td>
</tr>
</tbody>
</table>

The second assumption was that the variances of the test variable were equal for the two sample groups. To determine if this assumption was met, the researchers used the Levene test. After examining the results from the Levene test, the researchers found no violation. Due to the fact that there were no violations on either the assumption of normality or the homogeneity of variances, the researcher continued with the analysis. The results from the Levene’s test are displayed in Table 9.

Table 9

Levene's Test of Equality of Variances

<table>
<thead>
<tr>
<th>F</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>.587</td>
<td>120</td>
<td>.455</td>
</tr>
</tbody>
</table>

Results for Null Hypothesis One. To test the null hypothesis an independent samples t-test was conducted. The null hypothesis was tested at a 95% confidence level. The test was not significant, thus the null hypothesis was failed to be rejected where $t(120) = .08, p = .9$. The results from the independent samples t-test are displayed in Table 10.
Table 10

\textit{t-test for Equality of Means for Null Hypothesis One}

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.0814</td>
<td>120</td>
<td>.9353</td>
<td>-0.01000</td>
<td>0.123</td>
<td>-0.253</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.233</td>
</tr>
</tbody>
</table>

\textbf{Null Hypothesis Two}

Null hypothesis two noted that there is a statistically significant difference between English and math teachers’ attitude scores on subscale one (inclusion) toward the inclusion of English Language Learner (ELL) students at the secondary level. This hypothesis references the idea that solely in regard to ELL student inclusion in either a math or English teachers’ classroom, there would be no difference in their attitudes.

\textbf{Data Screening.} Data was screened to ensure that there were no inconsistencies or outliers. After sorting through the data for each variable, the researcher scanned the data and found that there were no data errors, the researchers used box and whiskers plots to determine if there were any outliers. No outliers were identified.

\textbf{Assumptions.} Two assumptions were made in order to use the independent samples \textit{t}-test. The first assumption was that the test variable was normally distributed in each of the two
samples. To determine whether the normality assumption was met, the Kolmogorov-Smirnov test was used. The Kolmogorov-Smirnov test revealed that no violations of normality were found. The results from the Kolmogorov-Smirnov test are displayed in Table 11.

Table 11

*Kolmogorov-Smirnov Table of Normality for Overall Attitude Toward Inclusion*

<table>
<thead>
<tr>
<th>Subject</th>
<th>Kolmogorov-Smirnov Statistic</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Attitude Toward Inclusion English</td>
<td>.349</td>
<td>64</td>
<td>.402</td>
</tr>
<tr>
<td>Math</td>
<td>.203</td>
<td>54</td>
<td>.363</td>
</tr>
</tbody>
</table>

The second assumption was that the variances of the test variable were equal for the two sample groups. To determine if this assumption was met, the researchers used the Levene test. After examining the results from the Levene test, the researcher found no violations. Due to the fact that there were no violations on either the assumption of normality or the homogeneity of variances, the researcher continued with the analysis. The results from the Levene’s test are displayed in Table 12.

Table 12

*Levene's Test of Equality of Variances*

<table>
<thead>
<tr>
<th>F</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>.691</td>
<td>120</td>
<td>.387</td>
</tr>
</tbody>
</table>

**Results for Null Hypothesis Two.** To test the null hypothesis an independent samples \( t \)-test was conducted. The null hypothesis was tested at a 95% confidence level. The test was
significant, and thus the null hypothesis was rejected $t(120) = 3.61, p < .001$. The results from the independent samples $t$-test are displayed in Table 13.

Table 13

$t$-test for Equality of Means for Null Hypothesis Two

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.6120</td>
<td>120</td>
<td>0.0004</td>
<td>0.2500</td>
<td>0.069</td>
<td>0.1130, 0.3870</td>
</tr>
</tbody>
</table>

**Null Hypothesis Three**

Null hypothesis three noted that there is no statistically significant difference between English and math teachers’ attitude scores on subscale two (coursework modification) toward the inclusion of English Language Learner (ELL) students at the secondary level. This hypothesis references the idea that in regard to coursework modification in either a math or English teachers’ classroom, there would be no difference in their attitudes.

**Data Screening.** Data was screened to ensure that there were no inconsistencies or outliers. After sorting through the data for each variable, the researcher scanned the data and found that there were no data errors, the researcher used box and whiskers plots to determine if there were any outliers. No outliers were identified.
Assumptions. Two assumptions were made in order to use the independent samples $t$-test. The first assumption was that the test variable was normally distributed in each of the two samples. To determine whether the normality assumption was met, the Kolmogorov-Smirnov test was used. The Kolmogorov-Smirnov test revealed that no violations of normality were found. The results from the Kolmogorov-Smirnov test are displayed in Table 14.

Table 14

Kolmogorov-Smirnov Table of Normality for Attitude Toward Coursework Modification

<table>
<thead>
<tr>
<th>Subject</th>
<th>Kolmogorov-Smirnov</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
</tr>
<tr>
<td>Attitude Toward Coursework Modification English</td>
<td>.455</td>
</tr>
<tr>
<td>Math</td>
<td>.561</td>
</tr>
</tbody>
</table>

The second assumption was that the variances of the test variable were equal for the two sample groups. To determine if this assumption was met, the researchers used the Levene test. After examining the results from the Levene test, the researchers found no violations. Due to the fact that there were no violations on either the assumption of normality or the homogeneity of variances, the researcher continued with the analysis. The results from the Levene’s test are displayed in Table 15.

Table 15

Levene's Test of Equality of Variances

<table>
<thead>
<tr>
<th>F</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>.892</td>
<td>120</td>
<td>.379</td>
</tr>
</tbody>
</table>
Results for Null Hypothesis Three. To test the null hypothesis an independent samples t-test was conducted. The null hypothesis was tested at a 95% confidence level. The test was not significant, and thus the null hypothesis was failed to be rejected where \( t(120) = 1.49, p = .139 \). The results from the independent samples t-test are displayed in Table 16.

Table 16
*t-test for Equality of Means for Null Hypothesis Three*

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>( t )</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.48</td>
<td>85</td>
<td>0.1392</td>
<td>0.1400</td>
<td>0.094</td>
<td>-0.0462 to 0.3262</td>
</tr>
</tbody>
</table>

Null Hypothesis Four

Null hypothesis four noted that there is no statistically significant difference between English and math teachers’ attitude scores on subscale three (professional development) toward the inclusion of English Language Learner (ELL) students at the secondary level. This hypothesis references the idea that in regard to professional development for either a math or English teacher, there would be no difference in their attitudes.

Data Screening. Data was screened to ensure that there were no inconsistencies or outliers. After sorting through the data for each variable, the researcher scanned the data and
found that there were no data errors, the researchers used box and whiskers plots to determine if there were any outliers. No outliers were identified.

**Assumptions.** Two assumptions were made in order to use the independent samples \( t \)-test. The first assumption was that the test variable was normally distributed in each of the two samples. To determine whether the normality assumption was met, the Kolmogorov-Smirnov test was used. The Kolmogorov-Smirnov test revealed that no violations of normality were found. The results from the Kolmogorov-Smirnov test are displayed in Table 17.

Table 17

*Kolmogorov-Smirnov Table of Normality for Attitude Toward Professional Development*

<table>
<thead>
<tr>
<th>Subject</th>
<th>Kolmogorov-Smirnov</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Statistic</td>
<td>Df</td>
</tr>
<tr>
<td>Attitude Toward Professional Development</td>
<td>English</td>
<td>.290</td>
<td>64</td>
</tr>
<tr>
<td>Attitude Toward Professional Development</td>
<td>Math</td>
<td>.341</td>
<td>54</td>
</tr>
</tbody>
</table>

The second assumption was that the variances of the test variable were equal for the two sample groups. To determine if this assumption was met, the researchers used the Levene test. After examining the results from the Levene test, the researchers found no violations as. Due to the fact that there were no violations on either the assumption of normality or the homogeneity of variances, the researcher continued with the analysis. The results from the Levene’s test are displayed in Table 18.
Table 18

Levene’s Test of Equality of Variances

<table>
<thead>
<tr>
<th>F</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.27</td>
<td>120</td>
<td>.672</td>
</tr>
</tbody>
</table>

Results for Null Hypothesis Four. To test the null hypothesis, an independent samples $t$-test was conducted. The null hypothesis was tested at a 95% confidence level. The test was not statistically significant, and thus the null hypothesis was failed to be rejected where $t(120) = 0.97, p = .332$. The results from the independent samples $t$-test are displayed in Table 19.

Table 19

$t$-test for Equality of Means for Null Hypothesis Four

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.9743</td>
<td>120</td>
<td>0.3319</td>
<td>0.1400</td>
<td>0.144</td>
<td>-0.1445, 0.4245</td>
</tr>
</tbody>
</table>

Null Hypothesis Five

Null hypothesis five noted that there is a statistically significant difference between English and math teachers’ attitudes scores on subscale four (second language acquisition and
language learning) toward the inclusion of English Language Learner (ELL) students at the secondary level. This hypothesis references the idea that in regard to second language acquisition and/or language learning for either a math or English teacher, there would be no difference in their attitudes.

**Data Screening.** Data was screened to ensure that there were no inconsistencies or outliers. After sorting through the data for each variable, the researcher scanned the data and found that there were no data errors, the researchers used box and whiskers plots to determine if there were any outliers. No outliers were identified.

**Assumptions.** Two assumptions were made in order to use the independent samples $t$-test. The first assumption was that the test variable was normally distributed in each of the two samples. To determine whether the normality assumption was met, the Kolmogorov-Smirnov test was used. The Kolmogorov-Smirnov test revealed that no violations of normality were found. The results from the Kolmogorov-Smirnov test are displayed in Table 20.

Table 20

*Kolmogorov-Smirnov Table of Normality for Attitude Toward Second Language Acquisition/Language Learning*

<table>
<thead>
<tr>
<th>Subject</th>
<th>Statistic</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Toward Second Language Acquisition / Language Learning</td>
<td>.277</td>
<td>64</td>
<td>.814</td>
</tr>
<tr>
<td>English</td>
<td>.085</td>
<td>54</td>
<td>.759</td>
</tr>
</tbody>
</table>
The second assumption was that the variances of the test variable were equal for the two sample groups. To determine if this assumption was met, the researcher used the Levene test. After examining the results from the Levene test, the researcher found no violations. Due to the fact that there were no violations on either the assumption of normality or the homogeneity of variances, the researcher continued with the analysis. The results from the Levene’s test are displayed in Table 21.

Table 21

*Levene's Test of Equality of Variances*

<table>
<thead>
<tr>
<th>F</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.92</td>
<td>120</td>
<td>.889</td>
</tr>
</tbody>
</table>

**Results for Null Hypothesis Five.** To test the null hypothesis an independent samples t-test was conducted. The null hypothesis was tested at a 95% confidence level. The test was significant, and thus the null hypothesis was rejected where \( t(120) = 2.85, p = .005 \). The results from the independent samples t-test are displayed in Table 22.
Table 22

*t-test for Equality of Means for Null Hypothesis Five*

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.8519</td>
<td>120</td>
<td>0.0051</td>
<td>0.3200</td>
<td>0.112</td>
<td>0.0978 - 0.5422</td>
</tr>
</tbody>
</table>
CHAPTER FIVE: CONCLUSIONS

Overview

The following chapter is divided into four sections: discussion, implications, limitations, and recommendations for future research. The discussion section will review the purpose of the study, provide a brief overview followed by a discussion on each research question. The implications section provided how the present study added to the existing body of knowledge regarding ELL inclusion. The limitations sections outline threats to internal and external validity of the present study. Lastly, this chapter closes with a list of recommendations for future research into English and math teacher attitudes and perceptions toward ELL inclusion.

Discussion

The purpose of the study was to determine if there was a difference in the attitudes and perceptions of secondary English and math teachers toward the inclusion of ELL students. The study did not specifically test one educational theory, but used various theories to validate research and components of the study. One noteworthy theory in this study is the cultural difference theory. A major contributor and proponent of this theory, Erickson, utilizes the term “microethnography”, which he describes as a “situation specific analysis” to observe “naturally occurring interaction in people’s lives” (as cited in Bolima, 2009, p. 1). Bolima (2009) noted that this theory is a way to perceive classroom problems or situations as misunderstandings; or that teachers and students are “playing into each other’s cultural blind spots” (p. 1). In short, students of varying cultural backgrounds different from those students and teachers native to the area may approach education and learning in very different ways.

Studies on teacher attitudes toward ELL students and inclusion remain sparse for a variety of reasons. One reason is a high rigor of grade level curriculum is established by state
mandated testing and graduation requirements. By understanding the complexities of ELLs, inclusion procedures, language acquisition, cultural diversity, education-stakeholders can bridge the gap that exists between native English speakers and ELL students. Second, examining teacher attitudes toward ELLs can provide valuable knowledge and support for educators and students enveloped in the language acquisition process.

The following null hypotheses were used to guide the study:

**H₀₁:** There is no difference between English and math teachers’ overall attitude scores toward the inclusion of English Language Learner (ELL) students at the secondary level.

To examine whether there was a difference between English and math teachers’ attitudes toward the inclusion of ELL students, a *t*-test was conducted comparing the mean overall attitude scores of math and English teachers’ overall attitude toward ELL inclusion. According to this test, there is no statistically significant difference between the attitudes of English and math teachers regarding ELL inclusion and the hypothesis was failed to be rejected. In the area of inclusion, there were similarities and differences between this study’s findings compared with other research studies. The data retrieved from this study, as compared to Reeves’ 2002 study, was very similar in many regards. One, the majority of teachers welcome the inclusion of ELL students in their classroom, two, teachers do not have enough time to deal with the needs of ELL students, and three, ELL students should not be mainstreamed in the classroom until they have attained a minimum level of English proficiency.

**H₀₂:** There is no difference between English and math teachers’ attitude scores on subscale one (inclusion) toward the inclusion of English Language Learner (ELL) students at the secondary level.
This research null examined whether there was a difference between the overall attitudes between math and English teachers regarding ELL inclusion. Respondents were to respond to the survey on various topics regarding ELL inclusion and ELL students. Respondents were provided with the opportunity to indicate various opinions and personal educational information regarding ELL students and ELL inclusion. A t-test comparing the overall attitude mean scores of math and English teachers regarding ELL inclusion indicated that there was a statistically significant difference between the two groups of teachers working with ELL students in an inclusive classroom. Therefore, the null hypothesis that there is no difference between the overall attitude of math and English teachers was rejected. The data retrieved from this study, as compared to Reeves (2002) study, was similar in most regards; however, the current study different from Reeves (2002) study in that English teachers held a more negative attitude toward ELL inclusion in the classroom.

$H_03$: There is no difference between English and math teachers’ attitude scores on subscale two (coursework modification) toward the inclusion of English Language Learner (ELL) students at the secondary level.

This research null examined whether there was a difference between math and English attitudes regarding coursework modification for ELL students. Respondents were to select various options on the survey geared directly to notions regarding coursework modification for ELL students in an inclusive classroom. A t-test comparing the attitude mean scores of math and English teachers regarding ELL coursework modification indicated that there was not a statistically significant difference between the two groups of teachers working with ELL students in an inclusive classroom. Therefore, the hypothesis that there is no difference between the attitudes of math and English teachers regarding coursework modification was failed to be
rejected. The $t$-test concluded that math and English teachers did not necessarily believe in coursework modification for ELL students. Reeves (2006) study disagreed that the idea that coursework modification was a good practice for ELL students. Other studies, (Olsen, 1997; Valdes, 2001) found that combining concepts for coursework modification could work well for teachers.

**H04:** There is no difference between English and math teachers’ attitude scores on subscale three (professional development) toward the inclusion of English Language Learner (ELL) students at the secondary level.

This research null examined whether there was a difference between math and English attitudes toward professional development regarding ELL students. Respondents were to select various options on the survey geared directly to notions regarding professional development for ELL students in an inclusive classroom. A $t$-test comparing the attitude mean scores of math and English teachers regarding ELL professional development indicated that there was no statistically significant difference between the two groups of teachers working with ELL students in an inclusive classroom. Therefore, the hypothesis that there is no difference between the attitudes of math and English teachers regarding professional development was failed to be rejected. The $t$-test concluded that math and English teachers believe that while they felt adequate in their professional development and training in teaching ELL students, the majority of both groups were interested in future professional development opportunities on topics concerning ELL students. The current study was very similar to Reeves’ (2002) study in that a huge majority of respondents felt untrained to work with ELL students due to lack of professional development or college coursework. In addition, respondents were highly receptive to more training on inclusive classrooms and working with ELL students. Other studies on
professional development by Montgomery, Robert, and Growe (2003) found that the U.S. teaching force was not equipped to help culturally and linguistically diverse children.

**H₀₅:** There is no difference between English and math teachers’ attitudes scores on subscale four (second language acquisition and language learning) toward the inclusion of English Language Learner (ELL) students at the secondary level.

This research null examined whether there was a difference between math and English attitudes toward second language acquisition and language learning regarding ELL students. Respondents were to select various options on the survey geared directly to notions regarding second language acquisition and language learning for ELL students in an inclusive classroom. A *t*-test comparing the attitude mean scores of math and English teachers regarding ELL second language acquisition and language learning indicated that there was a statistically significant difference between the two groups of teachers working with ELL students in an inclusive classroom. Therefore, the hypothesis that there is no difference between the attitudes of math and English teachers regarding professional development was rejected. The *t*-test concluded that the majority of math teachers felt that ELL students should not use their native language in the classroom and should acquire the English language after two years; however, the majority of the English teachers felt that ELL students should be allowed to use their native language in the classroom and that they shouldn’t necessarily have acquired the English language after two years in the classroom. Overall, the teachers in this research study expressed more positive attitudes toward ELLs on all items of the language acquisition subscale than those in Reeves’ (2002) research. A study by Byrnes, Kiger, and Manning, (1997) found that the inability of teachers to understand a students’ linguistic and cultural background can bring forth negative feelings that
impact academic promise for ELLs. Additionally, Rutledge (2009) found that the use of ones’ native language was not looked upon favorably.

**Conclusion**

The increasing numbers of English Language Learners (ELLs) in public schools across the country has created opportunities, as well as challenges for teachers, administrators and other educational stakeholders. The removal of the NCLB (2001) legislation lessened the constraints on teachers to show yearly adequate progress for these students; however, there is still pressure on teachers to ensure that ELL students are progressing in the inclusive classroom. Many educators in the 21st century find it increasingly difficult to have ELL students in the inclusive classroom due to the language barriers that exist between those students, the teacher, and other students in the classroom. Research regarding inclusion practices shows that wholly, teachers have favorable views toward inclusion, as long as they do not have to work directly with that included ELL student (Youngs & Youngs, 2001). In addition, Karabenick and Noda (2004) determined that teachers held favorable attitudes toward ELLs in the classroom, but did not want to have ELL students in their own classroom.

Teachers appear to have a great appreciation for cultural diversity that ELLs bring to the classroom. It provides an opportunity for teachers to celebrate the diverse cultures, characteristics, and linguistics of ELL students while they learn to assimilate into the dominate culture norms of an English-speaking society. Kincheloe and Steinberg (1997) noted that this “allows educators and cultural producers to speak the language of diversity but to normalize Eurocentric culture as the tacit norm everyone references” (p. 11). The researchers’ study shows that many teachers, both English and math, welcome cultural diversity that ELL students bring to the class; however, the majority of the math teachers heavily encouraged linguistic assimilation
of the ELLs. This study conducted by the researcher falls into a notion of multiculturalism labeled as liberal multiculturalism (Kincheloe & Steinberg, 1997; Kubota, 2002). With liberal multiculturalism, there can be limited acceptance of the cultural differences of ELL students, if the cultural differences do not wholly challenge the dominant cultural norms of the classroom. An example of liberal multiculturalism in the classroom would encourage ELL students to share their native cultural customs or experiences but refuse to allow ELL students excessive or continual use of their native language in the classroom.

Data analyzed from this current study suggested that both English and math teachers do accept their roles as assimilation guides for ELL students; both English and math teachers encourage language assimilation, but math teachers are less likely to allow native language usage in the classroom versus English teachers. Concerning coursework modification, math teachers seemed unwilling to modify assignments and felt that it was an unnecessary step in the assimilation process for ELL students. In contrast, the English teachers appeared to be more willing to modify assignments or alter the content of an assignment for ELL students. It is critical to note that for ELL students to have linguistic, cultural, and academic success, educators must apply the basic and most implicit rules of the dominant culture which denies minorities access to power (Delpitt, 1995). If ELL students are not provided the tools and necessities they need to succeed in an English culture, they will certainly feel abandoned. In this study, both the English and math recognized that English language and the American culture are valuable tools to obtain success in the U.S. It is important to note that forcing a dominant culture and or language will, however, cause exclusion of minorities and in turn, be insufficient in an equal education for ELL students. By establishing a set of rules for educators to recognize and follow will allow for a smoother transition for ELL students, if educators acknowledge this complex
situation. For example, to assume that the belief that English language acquisition is key to an ELL student’s academic success is to assume that ELL students will have equal access once acquired. The problem with this assumption, according to Olsen (1996), is that neither ELL immigrants gained this equal access after language assimilation. In Olsen’s (1996) study, the ELL immigrants accepted linguistic assimilation to be accepted into the U.S. society; however, linguistic assimilation was not sufficient for the immigrant ELL students to receive equal access. In Olsen’s study, these ELL immigrant students were required to maintain a position in the racial hierarchy of the subject school. This group of students did not gain equal access through their linguistic assimilation; therefore, just because ELL immigrant students are able to linguistically assimilate into a dominant culture does not mean that there will be equal treatment or equal assimilation into U.S. schools and culture.

Cummins (1980) found that just because individuals can lay down the cultural rules of the dominant society does not mean that there will be equal opportunities in the dominant culture. Teachers must examine the inequality that exists in schools regarding cultural and linguistic minority students. Cummins (1980) states, “[a]re we preparing students to accept the societal status quo or are we preparing them to participate actively and critically in their society as equal partners with those who come from dominant group backgrounds?” (p. 258). Educators must engage in reflective practices that will allow them to more deeply understand the practices in their work, as well as recognize and take responsibility for the practices that happen in their classrooms that may not provide equal opportunities for ELL students. By examining the roles that they play, as well as the role that other educational stakeholders ask them to play, teachers will be able to better educate, as well as aide in helping to assimilate ELL students in a predominately English speaking society.
Implications

The present study examined the difference in the attitudes and perceptions of secondary math and English teachers based on ELL inclusion. The following are the implications drawn from the finding and conclusions of the study. The surveyed teachers’ perceptions regarding inadequate training for teaching ELL students indicates that pre-service and in-service education programs need to be evaluated to address more effective methods for preparing all teachers, not just English and math, in working with ELL students in the inclusive classroom. The population of ELLs in this particular school district is expected to continue to increase; therefore, educators, administrators, and educational stakeholders should examine various ways or methods in which the schools and district can meet the needs of ELL students. Considering that English and math teachers may have little to no training in teaching ELL students, schools should examine policies and curriculum to ensure that ELL inclusion is a factor. Curriculum maps and student textbooks should accommodate and facilitate the growing ELL population. In this particular study, the data indicated that some English and math teachers had a degree of intolerance for language diversity in their classrooms. For ELL’s to assimilate and acquire a second language, it is critical that teachers accept the necessity of language diversity and inclusive classrooms.

In the survey, both math and English teachers supported the use of predominately English in their classrooms and noted that those students who could not use English as a native language would be at a distinct handicap during lessons. In addition, the use of an ELL’s native language in the classroom was not typically an option for application as the curriculum and course content is in English, which could contribute to an ELL’s handicap in the classroom. The survey indicated that math and English teachers, on some level, have an appreciation for diversity in the classroom and are accepting of ELL students. Teachers indicated that the inclusive classroom
can be a multicultural learning experience for all students. This notion is key for ELL students to make progression in second language acquisition. Students and teachers have the opportunity to be exposed to different cultures, practice patience in language acquisition, understand cultural differences, and celebrate various customs and traditions.

Overall, the findings from this study indicate that there need to be changes made to current policies regarding ELL students in English and math classrooms, as well as all mainstream classrooms. As the ELL population continues to rise, it would be prudent for educational stakeholders and policy makers to require various trainings in teaching ELL students, as well as in second language acquisition. At the time of this study, secondary teachers in the state of Alabama are required to take only one course in the education curriculum, Multicultural Education & Diversity, which may involve discussion on ELL inclusion. As a result, courses that teachers should or need to take to provide adequate instructional strategies for ELLs may not be offered as an individual course, and instead, embedded in with a course of similar nature as mentioned above. Prescribing ELL coursework would be a beneficial factor for all teachers, as the 21st century classrooms become more diverse.

Limitations

This study shed light into various notions regarding ELL inclusion in math and English classrooms. In addition, the study also provided key insight into math and English teachers’ attitudes toward ELL students and ELL inclusion. The study provided valuable information on ELL students and added to the body of limited literature available; however, there are some limitations to the study. The study was conducted in regard to following limitations:

1. The survey instrument used in the study was based on self-reported responses from a sample of participants. The researcher had no way to verify the honesty of each
participant’s answers on the survey; therefore, the research assumed that the participants responded to the survey items truthfully.

2. The survey instrument may have had a weakened validity as a result of the four-point Likert scale employed. The survey asked participants to choose from four different responses: strongly agree, agree, disagree, and strongly disagree. No neutral option was offered. The absence of this response option challenged the validity in that the instrument may have been unable to accurately record the answer of the participants who had neutral feelings regarding the survey statements. In addition, the participants could have been frustrated by having to answer agree or disagree to survey items and not being able to openly and honestly express their opinions.

3. This research study was limited in its ability to gain a full understanding of English and math teachers’ attitudes and experiences with ELL inclusion. The researcher conducted only quantitative methods and utilized no qualitative methods to gain additional data and a deeper understanding of teacher attitudes regarding ELL inclusion.

4. The research study was limited in the sampling of participants. Convenience sampling was utilized because the sample suits the purpose of the study, the locale was familiar to the researcher, and the population size could be accommodated (Gall, Gall, & Borg, 2007). All of the participants came from one small school district in northeast Alabama. Limiting the sample to one district limited the potential findings of the study to go beyond the district; therefore, the results of the study cannot be generalized to a broader population.
Recommendations for Future Research

In this study, the research examined secondary English and math teachers’ attitudes toward ELL students in an inclusive classroom. In addition, the researcher also examined teacher attitudes toward these students based on coursework modification, professional development, second language acquisition, and language learning. To be more specific, the researcher wanted to determine whether teacher attitudes could be influenced by instructional factors, course content, and expertise of ELL inclusion. Results of the study indicate that the variables of time and knowledge were two factors that appear to influence teacher attitudes. It is important to note that to fully understand the implications of an English or math teacher’s ELL inclusion attitude or experience, more in-depth studies should be conducted. Further studies should continue to examine individual subjects, individual subject teacher attitudes, as well as all secondary teacher attitudes toward ELLs and ELL inclusion. With more research, teachers will be able to better accommodate ELL students in the classroom and ELL students will be able to assimilate into the culture with more ease. This study was intended to highlight the need for further research into more relevant educational experiences for ELL students. Additional future research should examine potential problems and or areas for improvement in the education of ELLs. Schools should ensure that there are teachers available to speak other languages, aside from English, to help accommodate and modify coursework for ELL students. In addition, teachers should be provided with a variety of resources and tools to help educate ELL students. Educational stakeholders need to gain a better understanding of the general attitudes and behaviors of teachers within a particular school district to begin making changes regarding educational ELL policies.
Based on the findings of the study, teacher education programs need to implement additional and/or different coursework to focus on ELL students and ELL inclusion. As the ELL population is predicted to continue to rise, teachers must be equipped to teach these culturally and linguistically diverse students. It is important for pre-service teachers to be instructed on relevant methods of instruction and various forms of language acquisition to effectively work with ELLs. An additional recommendation is for school districts to continually work to implement effective professional development opportunities for teachers who work in schools with a large ELL population. Professional development opportunities should be led by qualified experts in the field of ELL instruction, along with current teachers who have developed effective strategies for teaching ELL. By implementing additional training for in-service teachers, instructional tolerance for ELLs could increase, as well as ELL academic achievement.
REFERENCES


(Unpublished doctoral dissertation). Wayne State University, Detroit, MA.


Appendix A: Survey (Page 1)

ELL Students in Secondary English and Math Classrooms: A Survey of Teachers

The following survey will collect data regarding teacher attitudes and perspectives toward English Language Learner (ELL) inclusion in secondary English and math classrooms. The data collected from this study will be analyzed and used in a doctoral dissertation and future publications. Your feedback is important to determine teacher perspectives regarding ELL inclusion in the classroom. Thank you for your participation in the survey.

Section A.

Please read each statement and mark the answer that best describes your opinion.

1. The inclusion of ELL students in subject area classes creates a positive educational atmosphere.

   Strongly Disagree  Disagree  Agree  Strongly Agree

2. The inclusion of ELL students in subject area classes benefits all students.

   Strongly Disagree  Disagree  Agree  Strongly Agree

3. ELL students should not be included in general education classes until they attain a minimum level of English proficiency.

   Strongly Disagree  Disagree  Agree  Strongly Agree

4. ELL students should avoid using their native language while at school.

   Strongly Disagree  Disagree  Agree  Strongly Agree

5. ELL students should be able to acquire English within two years of enrolling in U.S. schools.

   Strongly Disagree  Disagree  Agree  Strongly Agree

6. Subject area teachers do not have enough time to deal with the needs of ELL students.

   Strongly Disagree  Disagree  Agree  Strongly Agree
Appendix A: Survey (Page 2)

7. It is a good practice to simplify coursework for ELL students.
   Strongly Disagree  Disagree  Agree  Strongly Agree

8. It is a good practice to lessen the quantity of coursework for ELL students.
   Strongly Disagree  Disagree  Agree  Strongly Agree

9. It is a good practice to allow ELL students more time to complete coursework.
   Strongly Disagree  Disagree  Agree  Strongly Agree

10. Teachers should not give ELL students a failing grade if the students display effort.
    Strongly Disagree  Disagree  Agree  Strongly Agree

11. Teachers should not modify assignments for the ELL students enrolled in subject area classes.
    Strongly Disagree  Disagree  Agree  Strongly Agree

12. The modification of coursework for ELL students would be difficult to justify to other students.
    Strongly Disagree  Disagree  Agree  Strongly Agree

13. I have adequate training to work with ELL students.
    Strongly Disagree  Disagree  Agree  Strongly Agree

14. I am interested in receiving more training in working with ELL students.
    Strongly Disagree  Disagree  Agree  Strongly Agree
Appendix A: Survey (Page 3)

15. I would welcome the inclusion of ELL students in my class.
   
   Strongly Disagree  Disagree  Agree  Strongly Agree

16. I would support legislation making English the official language of the U.S.
   
   Strongly Disagree  Disagree  Agree  Strongly Agree

Section B.

Which, if any, of the following are descriptive of your classes when ELL students are enrolled? Please indicate the extent to which each of the following applies in your classes.

17. I allow ELL students more time to complete their coursework.
   
   Seldom or Never  Some of the Time  Most or All of the Time

18. I give ELL students less coursework than other students.
   
   Seldom or Never  Some of the Time  Most or All of the Time

19. I allow an ELL student to use her/his native language in my class.
   
   Seldom or Never  Some of the Time  Most or All of the Time

20. I provide materials for ELL students in their native languages.
   
   Seldom or Never  Some of the Time  Most or All of the Time

21. Effort is more important to me than achievement when I grade ELL students.
   
   Seldom or Never  Some of the Time  Most or All of the Time

22. The inclusion of ELL students in my classes increases my workload.
   
   Seldom or Never  Some of the Time  Most or All of the Time
Appendix A: Survey (Page 4)

23. ELL students require more of my time than other students require.

   Seldom or Never  Some of the Time  Most or All of the Time

24. The inclusion of ELL students in my class slows the progress of the entire class.

   Seldom or Never  Some of the Time  Most or All of the Time

25. I receive adequate support from school administration when ELL students are enrolled in my classes.

   Seldom or Never  Some of the Time  Most or All of the Time

26. I receive adequate support from the ELL staff when ELL students are enrolled in my classes.

   Seldom or Never  Some of the Time  Most or All of the Time

27. I conference with the ELL teacher.

   Seldom or Never  Some of the Time  Most or All of the Time

**Section C.**

Please answer the following questions. Your answers will assist in the categorization of the responses.

28. Please indicate what subject area you teach.

   English  Math

29. Please provide the number of years of experience you have in teaching (including this year.)

30. Please provide your age.
Appendix A: Survey (Page 5)

31. Please indicate your race.

   White
   Black or African American
   American Indian / Alaska Native
   Asian
   Hispanic
   Native Hawaiian / Other Pacific Islander
   Two or more races

32. Please indicate your gender.

   Male    Female

33. Please provide your highest earned degree.

34. Is English your native language? If no, please provide your native language.

   Yes    No

35. Do you speak a second language? If yes, please provide that language.

   Yes    No

36. As a student earning your education degree, did you receive training or take a class for teaching language minority / ELL students?

   Yes    No

37. As an employed teacher, have you received training and/or professional development for teaching language minority / ELL students?

   Yes    No

38. Have you ever had an ELL student enrolled in your classes?

   Yes    No
Appendix A: Survey (Page 6)

39. How many ELL students were enrolled in your class during the (2016-2017) school year?

40. Approximately, how many ELL students have enrolled in your classes throughout your teaching career?
Appendix B: Letter of Invitation to Principal of Quantitative Study Site

__________ High School
__________, AL 35___
January 2, 2017

Dear Principal ____________,

My name is Ashley Sibert Williamson, and I am a doctoral student in Educational Leadership at Liberty University. I am interested in conducting a research study on the attitudes of secondary math and English teachers regarding ELL students in their classes. ____________ High School, with its wide diversity of ELL students would be an ideal site for my study.

Teachers who volunteer to participate in my study would be asked to participate in a brief online survey regarding their experiences with ELL students. The duration of this study is from March 27, 2017 to April 7, 2017, and I would like to recruit all secondary math and English teachers at your school as participants.

Attached to this email, you will also find a letter of invitation I would like to send to each of your secondary math and English teachers at ____________ High School. I believe my study has the potential to benefit high school math and English teachers, as well as other core subject teachers, throughout the ____________ County School District. With the dramatic rise in the number of students whose first language is something other than English, the goal of my study is to understand the challenges and benefits of inclusion of these students in math and English classes. I would like to ask your permission to conduct my study at ____________ High School. I have already secured permission from Superintendent _________________ at the ____________ County Central Office, as well as from my doctoral committee at Liberty University to conduct the study within the school district. I am a secondary English Language Arts teacher at _________________ High School.

If you are willing to grant me permission to contact your secondary English and math teachers, please contact me at your convenience. If you need to discuss the study further with me, please feel free to contact me at your convenience, as well. I hope you will consider allowing me access to your teaching staff to conduct my study. Thank you.

Sincerely,

Ashley S. Williamson, Ed.S.
English Language Arts
Appendix C: Teacher Invitation for the Quantitative Study

__________ High School
__________, AL 35___

January 2, 2017

Dear Teacher ____________.

My name is Ashley Sibert Williamson, and I am a doctoral student in Educational Leadership at Liberty University. I am interested in conducting a research study on the attitudes of secondary math and English teachers regarding ELL students in their classes. ____________ High School, with its wide diversity of ELL students would be an ideal site for my study.

I am sending this email because I have received permission by the school principal to contact secondary English and math teachers at your school to ask for their participation in my research study. Teachers who volunteer to participate in my study will be asked to participate in a brief online survey regarding their experiences with ELL students.

The duration of this study is from March 27, 2017 to April 7, 2017. I am in the process of recruiting all secondary math and English teachers at your school as participants. I believe my study has the potential to benefit high school math and English teachers, as well as other core subject teachers, throughout the ____________ County School District. With the dramatic rise in the number of students whose first language is something other than English, the goal of my study is to understand the challenges and benefits of inclusion of these students in math and English classes. I would like to ask for your participation in my study at ____________ High School. I have already secured permission from your principal, Mr. ____________, Superintendent ____________ at the ____________ County Central Office, as well as from my doctoral committee at Liberty University to conduct the study within the school district. If you are willing to participate in my study, please respond to this email at your convenience. Thank you.

Sincerely,

Ashley S. Williamson, Ed.S.
English Language Arts
Appendix D: Email Permission to use Reeves’ 2002 Survey Instrument

From: Jenelle Reeves <jreeves2@unl.edu>
Sent: Tuesday, January 7, 2014 10:26 AM
To: Williamson, Ashley Sibert
Subject: Re: Research Study: Secondary Teacher Attitudes toward ELLs

Dear Ashley,

I am glad to hear my survey is of interest to you. Yes, you have my permission to use the survey for your own research. Please cite my work where appropriate,

Best of luck to you with your research. Please do let me know what you find out!

Sincerely,

Jenelle Reeves

From: "Williamson, Ashley Sibert" <absibert@liberty.edu>
Date: Wed, 1 Jan 2014 17:53:43 +0000
To: Jenelle Reeves <jreeves2@unl.edu>
Subject: Research Study: Secondary Teacher Attitudes toward ELLs

Professor Reeves:

I am a doctoral student at Liberty University in Lynchburg, Virginia. I have a deep interest in studying ELL students. I came across your article, *Secondary Teacher Attitudes Toward English Language Learners in the Mainstream Classroom*, during my research. I am interested in doing a study similar to this, but narrowing it to find the difference between the attitudes of ELA and Mathematics teacher attitudes toward ELL students in their own classroom. My problem is finding instrumentation for the study, which is why I have emailed you. I was hoping to get permission to use your instrument (survey) from your article? If this is possible, please let me know at your convenience. Thank you in advance for your time.

Ashley S. Williamson

Liberty University
Appendix E: Email Permission to use Reeves’ 2002 Survey Instrument for Publication

Research Study: Secondary Teacher Attitudes toward ELLs
Jenelle Reeves <jreeves2@unl.edu>

Yesterday, 11:33 PM
Hi Ashley,

Yes, that is fine with me. I’m glad to hear your research went well and that you’ve successfully defended your dissertation!

I’ll look for your work on Digital Commons soon.

Jenelle

Williamson, Ashley Sibert

Yesterday, 6:17 PM
jreeves2@unl.edu
Dr. Reeves:

Hi! I am contacting you because I previously emailed you to ask permission to use your survey instrument you created for your 2002 study and 2006 article. You graciously gave me permission to use your survey. I recently defended my dissertation. After defending my dissertation, my program requires me to submit it for publication in the Liberty University open-access institutional repository, the Digital Commons, and in the Proquest thesis and dissertation subscription research database. If you allow this, I will provide a citation of your work. Thank you for your consideration in this matter!

Ashley Sibert Williamson
Liberty University
Appendix F: Teacher Recruitment Email with Instructions for Survey

Ashley Sibert Williamson  
Sylvania High School  
133 1st Street  
Sylvania, AL 35988  
, 2017  

Dear high school teacher,  

I would like to invite you to participate in the research study The Difference between English and Math High School Teachers’ Attitudes toward the Inclusion of English Language Learner Students. This dissertation study is designed to explore the experiences of high school teachers whose classes enroll or may someday enroll students who are learning English as a second language (ESL) and are considered to be ELL (English Language Learners). Your input will provide valuable insight.  

Whether you have no experience with ESL students or years of experience with ESL students, I would like to ask you to participate in this study by filling a survey. The survey is anonymous, and individual respondents will not be coded in any way.  

To complete the survey, please click on the link included below. Survey results may be presented at professional conferences or published in professional journals. Completion of this survey indicates your consent to participate.  

Please keep this letter for your records, and feel free to contact me with questions or comments at Sylvania High School. Thank you for your participation.  

Sincerely,  

Ashley S. Williamson, Ed.S.  
English Language Arts,
Appendix G: Teacher Participant Reminder Email Regarding Survey

Ashley Sibert Williamson
, 2017

Dear high school teacher,

You were previously invited to participate in the research study The Difference between English and Math High School Teachers’ Attitudes toward the Inclusion of English Language Learner Students. This is a follow-up reminder email regarding your participation. Your input will provide valuable insight.

Whether you have no experience with ESL students or years of experience with ESL students, I would like to ask you to participate in this study by filling out a survey. The survey is anonymous, and individual respondents will not be coded in any way.

To complete the survey, please click on the link included below. Survey results may be presented at professional conferences or published in professional journals. Completion of this survey indicates your consent to participate.

Please keep this letter for your records, and feel free to contact me with questions or comments at Sylvania High School. Thank you for your participation.

Sincerely,

Ashley S. Williamson, Ed.S.
English Language Arts