Exploring Preservice Teachers’ Perspectives on Dual Language Education

Kylie Ross

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Exploring Preservice Teachers’ Perspectives on Dual Language Education

by

Kylie Ross

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in Technology in Education and Second Language Acquisition
Department of Teaching and Learning
College of Education
University of South Florida

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DEDICATION

I dedicate this dissertation to language lovers all around the world. To those who were born speaking more than one language, to those who have studied long and hard to master more than one language, and to every type of language learner in between. Learning a new language is an adventure, and one that I hope to see more and more people pursue.
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ABSTRACT

This dissertation investigates preservice teachers’ perspectives towards dual language education (DLE) through a mixed methods approach. This study investigates preservice teachers enrolled in an English for Speakers of Other Languages (ESOL) certification course concerning the following research questions: 1. What impact does taking an ESOL course have on preservice teachers’ attitudes and perspectives towards DLE? 2. Is there a significant difference in change in attitude between students taking the course online versus face to face (F2F)? 3. How are preservice teachers informed about what schools have dual language programs in their area? 4. What relationship may exist between attitudes, perspectives, and preservice teachers’ own personal experiences with bilingualism and experiences with diversity, and/or place of origin? The study follows a sequential explanatory research design which included a pre and post survey at the beginning and end of the semester, and interviews with participants in between the two surveys. The participants included 24 preservice teachers enrolled in an online and F2F section of an ESOL course. Findings from the research encompassed discovering an overall positive shift in preservice teachers’ perspectives towards DLE and English learner (EL) students, a difference between the F2F and online groups’ survey responses, and relationships between preservice teachers’ attitudes and perspectives towards DLE and their past experiences and place of origin. Participants showed positive increases in perspective from the total mean scores increasing from the pre to post survey, and in interviews. Participants in the F2F group showed higher increases from the pre to post survey than the online group, however neither group yielded statistically significant findings. Interviews provided a wealth of detailed examples of how these groups of preservice teachers reflected throughout the
ESOL course and developed more positive attitudes towards ELs and DLE, and optimistic mindsets towards working with ELs and/or in a DLE setting in the future. Overall, this research seeks to underscore that the more knowledge, awareness, and empathy that preservice teachers are able to gain from courses that prepare them to work with linguistically diverse populations of students, the better equipped they will be to guide future generations of EL learners into educational success and beyond.
CHAPTER 1

INTRODUCTION

*To have another language is to possess a second soul.*

-Charlemagne

Chapter one begins with a description of the background of this study and explanation of the significance of the topic examined. Next, the guiding research questions are listed and explained. This chapter concludes with a discussion of the theoretical framework grounding this research.

**Background**

Dual language education (DLE) in the US, although starting to gain more momentum, still trails behind many other countries on a global scale (Devlin, 2015; Varghese & Park, 2010). In Europe, for example, it appears to be expected and an educational requirement, in many cases, for children to start learning other languages as early as age six and continue learning additional languages throughout their schooling (Buchberger, 2002; Devlin, 2015; Lindholm-Leary, 2005). Currently in the US, there are roughly 2,000 K-12 dual language education programs (DLEPs), a mere fraction of all US educational programs (Hammer, Jia, Uchikoshi, 2011). More specifically, the Tampa Bay area has roughly 5 DLEPs in place, which is a very small number compared to other areas in the state of Florida alone, such as Miami, which boasts roughly 106 DLEPs (Find a dual language school, 2015). The world is quickly becoming more and more universally intertwined, and a future workforce that speaks more than one language, and has the cultural capital to excel on a global stage, is imperative to the future of the United States.
education system. Implementing greater numbers of DLEPs offer one solution to this challenge and seek to develop bilingualism, biliteracy, grade-level academic achievement, and multicultural competence for all participating students (Christian, 2011).

Additionally, over the years, the US has seen a steady rise in populations of English learners (ELs) enrolling in public K-12 schools (NCES, 2018; Reynolds, 2018). EL is the most current terminology in the field of second language research to describe students who are learning English as an additional language in order to understand a mainstream school curriculum in English and is beginning to replace the term ELL, English language learner. As reported by the National Center for Education Statistics (NCES), ELs made up approximately 9.4%, or 4.8 million students in K-12 public schools in 2015, and most of these students are in lower grade levels (NCES, 2018). EL students come from diverse backgrounds, languages, and prior schooling experiences. However, in the US, the majority (roughly 77%) of ELs come from homes where Spanish is spoken, yet both Hispanic and Asian ELs, in particular, are increasing in numbers (NCES, 2018; Reynolds, 2018). Furthermore, ELs and their families are beginning to shift away from areas and states with historically dense EL populations (i.e., the coasts and the southwest US) and locate to states where EL populations have not been historically high, but are starting to see soaring increases, such as Mississippi and Tennessee where the Hispanic population more than doubled in size between 2000-2010 (Reynolds, 2018). Thus, increasing numbers in EL populations seems to be a phenomenon that soon, if not already, will impact every state in the US.

Overwhelmingly, research in the field of second language acquisition (SLA) supports using a student’s first language (L1) to best facilitate the learning of a second language (L2) (Auerback, 1993; Cummins, 2000; Lyster, 2011; Pica, 2011; Soltero, 2016). Hence, DLEPs
provide a fertile environment for ELs to maintain and advance their L1, while also using it to help develop and master English. Furthermore, there is a strong basis of research to support the success of monolingual-English speaking students to acquire a L2 at no cost to their academic content mastery (Genesee, 1987; Lyster, 2011). Accordingly, DLEPs can be places where both language majority and minority students thrive and excel (Soltero, 2016).

Furthermore, in order to educate and empower students with this diverse language and multicultural capital, teachers are needed to build successful DLEPs. Teachers are at the core of any instructional program, and the impact of teachers’ beliefs and attitudes on their future pedagogical philosophies and interactions with students has been well documented (Farrell & Ives, 2015; Molle, 2013; Sugimoto, Carter, & Stoehr, 2017). Additionally, as Reynolds (2018) exemplifies, preservice teacher preparation has started to experience great changes and more initiatives to better prepare preservice teachers with diversity and social justice training to work with ELs. Guerrero and Lachance (2018) demonstrate this recent shift with their proposal to create National DLE Teacher Preparation Standards. Thus, it is important to investigate preservice teachers’ perspectives on DLE, since they represent the future educational workforce. Specifically, for the basis of this study, I am investigating preservice teachers’ perspectives, viewpoints, and attitudes toward teaching at schools with DLEPs, and how an ESOL teacher preparation course may influence their attitudes and perspectives.

Overwhelmingly, much of the literature on DLEPs and preservice teachers’ perspectives appears to lack investigating a diverse group of preservice teachers’ perspectives on DLE. For instance, there is significant research completed on bilingual and specific English as a second language (ESL) or English for speakers of other language (ESOL)-track preservice teachers and their views on teaching in DLEPs, however there is little research looking into monolingual
and/or general-education-track preservice teachers and their attitudes and perspectives toward being a part of a DLEP (Martinez-Álvarez, Cuevas, & Torres-Guzmán, 2017; Naqvi and Pfitscher, 2011; Oliva-Olson, Estrada, & Edyburn, 2017; Williams, 2017). DL schools can be an enriching environment for bilingual teachers, but also monolingual teachers if team teaching is employed (Soltero, 2016). Additionally, significant research has been compiled on DLEPs best practices, but not many studies address general-education-track preservice teachers’ perspectives toward working in these kinds of settings (Berbeco, 2016; Ovando & Combs, 2012; Soltero, 2016).

**Topic Significance**

Research regarding DLE and preservice teachers’ merits significance because it impacts society at large, as learning languages empowers individuals to not only reveal greater cognitive aptitude and potential, but likewise develop deep cultural connections, and more (Adesope, Lavin, Thompson, & Ungerleider, 2010; Alfaro, Durán, Hunt, & Aragón, 2014; Lindholm-Leary, 2005). In the US, language programs do not receive sufficient support and do not seem to be heavily prevalent in elementary or middle public schools, despite most SLA research supported claims that younger children not only pick up languages quicker, but correspondingly are more likely to sustain their language proficiencies (Adesope, Lavin, Thompson, & Ungerleider, 2010; Berbeco, 2016; Donato & Tucker, 2010). Nevertheless, most of the US’s language classes entail foreign language courses in high school to fulfill a three-year language requirement (Berbeco, 2016). Although having language programs in high schools is better than none at all, most students do not acquire proficiency in the languages they study solely in high school, and research on age of acquisition of languages illuminates that it may not even be beneficial (Pratt, 2016). Moreover, significant research has reflected how an L1 can help with L2 grammar and metalinguistic
awareness, and maintaining a Latin based language, specifically, can be beneficial, especially, to help with literacy (Choi, 2016; Ghobadi & Ghasemi, 2015; Shum, Suk-Han Ho, Siegel, & Kit-Fong Au, 2016).

Furthermore, there are many sides to the position of DLE in the US. On the one hand, there is much research attesting to the benefits of children learning another language at a young age and the effects of being bilingual on the brain’s executive functioning properties and broadening future job opportunities (Adesope, Lavin, Thompson, & Ungerleider, 2010; Berbeco, 2016). On the other hand, learning another language does not appear to be seen as an essential, or a core, requirement/subject by the US Department of Education, and in turn typically receives less funding and value than other areas, such as STEM (College & Career Ready Standards, 2018). Some may also view it to be considerable additional work to run a DLEP and ensure that material is being taught to meet state mandated standards, while maintaining best practices (Soltero, 2016). Hence, many school officials pose the argument that they are hesitant to make room for additional language learning in their schools, insisting things like, “…adding a language program would be like adding a fifth quart of water to an already full gallon that can only hold four quarts,” (Berbeco, 2016, p. 25). However, foreign language specialists counter this idea by explaining that it would be more like adding food coloring to the pale, that does not necessarily have to take up extra space, but would greatly enhance the overall appearance of the water (Berbeco, 2016). Accordingly, curricula that embeds language learning within content subject areas already in place do not necessarily add more material, but can instead embellish material that students are already learning. Moreover, implementing DLEPs that use team teaching approaches where children receive instruction from two teachers throughout the week,
each a specialist in a particular language, offers monolingual English speaking teachers an opportunity to also thrive in DL school settings (Soltero, 2016).

Research Questions

The research questions driving this study are as follows:

1. R1: What impact does taking an ESOL course have on preservice teachers’ attitudes and perspectives towards dual language education?

2. R2: Is there a significant difference in change in attitude between students taking the course online versus face to face (F2F)?

3. R3: How are preservice teachers informed about what schools have dual language programs in their area?

4. R4: What relationship may exist between attitudes, perspectives, and preservice teachers own personal experiences with bilingualism and experiences with diversity, and/or place of origin?

ESOL Course Details

The course that participants are enrolled in throughout the duration of this study is titled TSL 4080: ESOL 1 Curriculum and Pedagogy of ESOL. It is the first of three courses that these particular preservice teachers are required to take to fulfill their ESOL Endorsement required by the State of Florida, since they will be the primary literacy teachers in the classroom. The course is a full, 15-week semester length course which seeks to prepare students to provide, “linguistically and culturally appropriate instruction, assessment and learning opportunities for EL students in content areas,” (ESOL I Syllabus). Goals of the course include: developing cross-
cultural communication and understanding toward working with EL students; deeper understanding of applied linguistics and second language acquisition; learn and practice various methods of teaching English as a second language; learn and develop strategies for curriculum development and adaptation for EL students; and learn and develop strategies and methods for language assessment of EL students.

The ESOL course uses the textbook, *The Cross-cultural, Language, and Academic Development Handbook–A Complete K-12 Reference Guide 6th Edition* by Diaz-Rico, and a plethora of insightful articles and videos related to SLA and bilingual education through the duration of the course. Students learn about the history of bilingual education in the US and do many insightful projects to reflect upon best practices to work with EL students in the classroom. Students additionally learn about SLA and the history of various approaches, methods, and school programs for SLA. Moreover, students are required to complete and reflect upon a field experience where they work directly with an EL student in the classroom and additional assignments that enrich their understanding of what it is like to learn a second language firsthand through interviewing ELs. The course likewise provides a platform for insightful discussion where students can reflect upon their past experiences with language learning and connect these experience with the content they learn in the course to be better equipped to teach ELs in their future classrooms.

The two sections of the ESOL I course that participants were enrolled in for this study were split in two different class sections, one taught online and one taught F2F. The two sections followed similar syllabi and shared all of the same core course assignments. For example, all students completed a case study throughout the course and all students completed a field experience which required them to recruit and work with an EL student. Furthermore, all
students were required to interview an EL about their experiences learning English and likewise analyze their speech. The classes, however, differed in the manner of course design. In particular, the online class consisted of bi-weekly discussion posts and optional group work assignments, if students desired to work in a group; whereas, the F2F class met weekly and was structured around large and small group class discussions and students were required to work in groups to present parts of the class readings for each week and additionally present a teaching-activity to the rest of the class each week. Hence, the F2F class required group participation nearly every week, whereas the online class required the students to comment on each other’s discussion posts on a bi-weekly basis, however group work was optional on other assignments.

Moreover, participants in the F2F group were a part of a special urban residency cohort program within their teacher preparation program. The residency cohort program is designed to provide preservice teachers with additional funding and scholarships for their commitment to intern in Title 1 schools, in the lowest income areas of their region. Preservice teachers in the urban residency program intern and are required to log 2,000+ mentor hours at partnering Title 1 schools which serve populations of students that include 90% or more students of color and which qualify for free or reduced-price lunch (Urban Teacher Residency Degree Plan, 2019). The urban residency cohort tends to have greater opportunities, typically, to work with more ELs in the classroom, since Title 1 schools generally consist of higher populations of minority language students than non-Title 1 schools. Thus, the urban residency cohort groups of preservice teachers are provided with an especially unique experience to spend a wealth of time in the classroom with diverse populations of students. Whereas, the online class of preservice teachers were not a part of the urban residency program and were not bound to intern at only Title 1 schools. Some of these students completed their internships at Title 1 schools, however
others completed their internships at other, non-Title 1 schools in the area. Preservice teachers within this group typically had less opportunities to interact with ELs in the classroom, especially preservice teachers completing their internships in non-Title 1 schools with fewer ELs available.

*Theoretical Framework*

The theoretical framework for this study will draw from four areas: sociocultural theory, constructivism, critical theory, and reflective inquiry, as reflected in Figure 1. Primarily, this study will be rooted in ideas from Vygotsky’s sociocultural theory and constructivism following the notions that learners need to interact socially and construct their own learning in multiple ways and using various social tools (Lantolf & Pavlenko, 1995; Vygotsky & Rieber, 1988).
Sociocultural theory also poses that learning should be closely related to students’ prior knowledge and use students’ personal experiences to facilitate learning (Vygotsky, 1978). In relation to preservice teachers specially, this study acknowledges, “Human interactions and environments have significant influence on shaping teacher knowledge and capacity,” (Evans, 2017, p. 308). While preservice teachers receive their training and education, they spend significant time interacting with one another and their instructors. These social interactions are important for the success of their learning and application of the skills they acquire during their education in their future classrooms. Furthermore, preservice teachers enrolled in ESOL classes acquire skills, activities, and strategies to promote learning through social interaction among EL students (Castrillón, 2017). Hence, the principles of sociocultural theory that support students learning through social interaction and making use of prior knowledge to bridge new knowledge and learning are fundamental foundations for this study.

Furthermore, this study will be grounded in the theory of constructivism, the view that knowledge is constructed by and contingent upon human practices and interaction (Ponterotto, 2005). Constructivism adheres that learning and knowledge are not objective, but are constructed by people as they engage in social interaction and discourse (Fosnot, 2013). Thus, I interpret preservice teachers’ perspectives and attitudes within their natural environment and create meaning from their individual stories. Constructivist paradigms also view cultural tools, “such as language and beliefs are at the heart of teaching and learning,” (Evans, 2017, p. 308). Educating preservice teachers about language diversity and DLEPs creates a space for them to reflect and interact around a common matter that they all share, the ability to interact in one or more languages. Through this interaction, preservice teachers can discuss and debate their past experiences with learning languages to create new meaning and valuable discourse about their
perspectives of the importance or unimportance of DLEPs. Furthermore, Guerrero and Lachance (2018) include constructivist ideals in their National DLE Teacher Preparation Standards and advocate that preservice teachers must employ critically conscious teaching methods to, “cultivate students’ academic, linguistic, and cognitive development from a constructivist approach,” (p. 39). A constructivist approach challenges preservice teachers to debate and construct their knowledge based upon practices and interactions deeply rooted in culture and unique individual backgrounds.

Additionally, critical theory, an approach that advocates and promotes change, and seeks to deconstruct the status quo, will guide this research (Hesse-Biber, 2010). This study seeks to play a small role in beginning to deconstruct the status quo of prevailing monolingual schools in the US and advocate for a change to promote increased implementation of DLEPs and more comprehensive training for preservice teachers with regards to DLE. As Evans (2017) notes, “Critical theory offers a platform which to support the perspective that educational change can happen when the meanings of teachers’ daily accomplishments and tribulations are interpreted to raise consciousness about inequities and influence transformative-oriented actions in favor of under-represented groups of teachers and learners,” (p. 308). Furthermore, the nature of educating preservice teachers on DL schools in ESOL classes may help expand their knowledge on this marked issue and social justice concerns related to schooling for EL students in both their L1 and L2.

Finally, Thomas Farell’s Reflective Inquiry (2008) will be used to guide interviews and discussions with preservice teachers to encourage development of their own reflective practices of their future teaching and thoughts surrounding DLE. Farell and Cirocki (2017) posits, “The literature shows reflective practice contributes to enhancing the quality of language instruction
and it offers support to the personal and professional development of teachers,” (p. 5). A large portion of this study hopes to help preservice teachers reflect upon their personal and professional development as future teachers, and the types of schools and classrooms they desire to work at in the future. Hence, encouraging preservice teachers to develop reflective practices has many benefits for their future students, as well as themselves, as growing and developing professionals in the field of teaching and learning.
CHAPTER 2

LITERATURE REVIEW

Chapter two is split in two sections: Section 1, an overview of the literature on DLEPs in second/foreign language learning; and Section 2, a focused review and synthesis of the existing gap of research on DLEPs in foreign/second language learning and preservice teachers. Section 1 begins with an explanation of different definitions and constructs of DLE and discussion of a problem oriented versus resource approach to language in the US. Next, teacher development efforts that are related to DLE are discussed, along with major lines of research on SLA and DLE programs. Section 1 concludes with a look at general instruction considerations of integrating DLE programs in teacher education training in the US and abroad. Table 1 provides a brief overview of a summary of the literature surrounding DLE and preservice teachers.

Table 1. Summary of Literature Surrounding DLE and Preservice Teachers

<table>
<thead>
<tr>
<th>Summary of Literature Surrounding DLE and Preservice teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Populations studied</td>
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<tr>
<td>Specific bilingual and/or ESL/ESOL-track preservice teachers,</td>
</tr>
<tr>
<td>first year teachers, early childhood preservice teachers,</td>
</tr>
<tr>
<td>parents</td>
</tr>
<tr>
<td>Topics/RQs</td>
</tr>
<tr>
<td>Perspectives on working with linguistically diverse students,</td>
</tr>
<tr>
<td>attitudes toward working with EL students, DL field experiences,</td>
</tr>
<tr>
<td>parents attitudes toward DLE, experiences of bilingual teachers</td>
</tr>
</tbody>
</table>
Table 1. (Continued).

<table>
<thead>
<tr>
<th>Research Approaches</th>
<th>Major Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative approaches (narrative inquiry, case studies, interviews); mixed-methods (survey + interviews and/or focus groups); Quantitative approaches (questionnaires, analysis of test scores)</td>
<td>Positive attitudes toward linguistically diverse populations, desires to learn more strategies/techniques to work with ELs, benefits of field experiences at DL schools, parents positive attitudes toward DLE, useful lessons from teaching experiences of bilingual teachers</td>
</tr>
</tbody>
</table>

Section 1.

Overview of Literature on DLEPs in Second/foreign Language Learning

Definitions and Constructs of DLE

Following the Bilingual Education Act (BEA), passed in 1965, DLE in the US has followed a variety of constructs and definitions as legislation has wavered in favor or against it. The BEA initiated drastic, and often swaying, political and legal movements, from promoting funding for DL programs at schools which valued learning two languages proficiently, to exclusively reserving funding for transitional English language classes in efforts to mainstream children as quickly as possible into all English curricula (Ovando & Combs, 2012). DLE practices fall under the umbrella of bilingual education and entertain a variety of terminology and definitions used to describe various models and programs (Soltero, 2016). In DLEPs, the second language (SL) is used as a medium of instruction and not taught as a subject alone (Christian, 2011).

Ovando and Combs (2012) note that a bilingual education program includes three characteristics, “The continued development of the student’s primary language; acquisition of the second language, which for many minority students is English; and instruction in the content
areas utilizing both L1 and L2.” (p. 9). With these three characteristics in mind, bilingual education could encompass a variety of forms and models. Furthermore, Ovando and Combs highlight that some bilingual education programs promote the development of two languages, whereas others may use the first language (L1) to merely facilitate learning to a quicker transition to the majority language. [The authors] define two-way bilingual classrooms (or dual language classrooms) as places that, “provide second language learning for all children that enriches the academic and the sociocultural experience of both language minority and language majority students,” (p. 29).

Similarly, Soltero (2016) defines DLE as a, “long-term additive bilingual and cross-cultural program model that consistently uses two languages for content instruction, learning, and communication, where students develop high levels of bilingual, biliterate, academic, and cross-cultural competencies,” (p. 3). She likewise notes differences between additive and subtractive models of DLE. Additive models seek to establish bilingualism and biliteracy in the two languages of instruction, and try to exude equal status of the two languages. Whereas subtractive models of DLE, such as transitional bilingual education, seek to use the L1 to transition students from minority language speakers to the dominate language, and higher status is generally placed on the majority language and transitioning students as quickly as possible (Soltero, 2016). Berbeco (2016) describes the major goals of DLE as subject content mastery alongside English-speaking students becoming functionally proficient in a SL and minority-language speaking students becoming functionally proficient in English. Berbeco similarly stresses the importance of DLEPs to have a clear separation of time periods denoted to practicing each language. Christian (2011) refers to DLEPs as, “primarily for students in preschool, elementary, and secondary levels of schooling, which provide literacy and content area
instruction to all students through two languages (their native language and a new language),” (p. 3). Additionally, Christian emphasizes that DLEPs pursue to develop bilingualism, biliteracy, grade-level academic achievement, and multicultural competence for all participating students.

For the basis of this dissertation, DLE will be discussed as K-12 education programs which strive to achieve bilingualism, biliteracy, biculturalism, and age-level academic achievement through the balanced instruction of two languages.

DLEPs are typically implemented as one-way or two-way models, depending on a variety of reasons, such as time and budget, but mainly the population of the students (Soltero, 2016). For instance, one-way programs may have majority-language speakers only and no speakers of the target language, or all students of the minority language who are not yet proficient in the majority language. For example, a one-way Spanish DL immersion program could include all monolingual English speaking students seeking to become proficient in Spanish and English. Another example of a one-way program may include ELs whose L1 is Spanish and they are developing their English skills, and once they reach academic proficiency in English they are not transitioned out of the DLEP, but instead continue to develop both English and Spanish. This model is known as late-exit developmental or maintenance bilingual education (Soltero, 2016).

In contrast, two-way DL models strive to include two groups of students, usually ELs that share the same L1 and native English speakers, with an ideal mix of 50 percent of each group (Soltero, 2016). Furthermore, heritage speakers of minority languages tend to participate in two-way programs and participate as students who may or may not be bilingual in the minority language and English, but come from a cultural background of the minority language (Ovando & Combs, 2012).
Two other important models in DLEPs include total and partial immersion. Total immersion, usually implemented at elementary levels, follow a 90-10 or 80-20 approach where students learn for 90, or 80 percent of the time in the minority language starting at the lowest grade levels (kindergarten) and then time allocation spent in each language begins to level out through each grade level. Respectively, first grade in the 90-10 model would transition to 80 percent of instruction in the minority language and 20 percent of instruction in the majority language, and so on and so forth until evening out at a balanced 50-50 in older grades (Soltero, 2016). Whereas, in 50-50 models (also known as balanced models) students learn in both languages for equal amounts of time from all grade levels. Choosing which model to implement depends upon many things, including the individual the characteristics of the school, population of students, available teachers, and age of program.
Problem Oriented vs. Resource Approach to Language in the US

Figure 2. Language as a Problem vs. Language as a Resource (Terminology: language as a problem and language as a resource, borrowed from Hornberger, 2005).

Figure 2 highlights four major shifts in language policy in the US leaning from viewing language as a problem to seeing language as a resource. In the US, bilingual education tends to be seen through a problem oriented lens, which favors quick, transitional bilingual education, or no bilingual education at all and solely supplemental English language acquisition support (Hornberger, 2005). Historically, bilingualism in the US has undergone many political shifts, but commonly appears to return to the fundamental desire for all students in US schools to learn English first and foremost, and the divisive debate of the value of learning and/or maintaining an additional language other than English. The early 1900s brought forth periods of Americanization and assimilation, which were later fueled by WWI and immigration fears which sparked language-restriction periods where languages other than English were not highly valued.
Moreover, when reflecting upon the history of bilingual education in the US, more funding, especially after the implementation of the No Child Left Behind Act (NCLB), has been allocated to programs for transitional bilingual education and supplemental ESL programs with the goals of mainstreaming students as quickly as possible, to remedy the problem of a student knowing another language other than English (Hornberger, 2005). Furthermore, the NCLB act was a catalyst for the removal of bilingual education vocabulary from Education policy in the US. As Hornberger (2005) highlights, “With enactment of No Child Left Behind in 2002, bilingualism and bilingual education vanished, indeed were banished from U.S. educational policy vocabulary, closing up with one fell swoop both ideological and implementation spaces that had been created by the BEA. Symbolically important name changes abruptly removing all reference to bilingual education reflected a shift in ideological orientation from the emerging language-as-resource orientation evident in the 1994 reauthorization back to earlier language as problem orientation,” (p. 9). These important policy name changes, reflected in Table 2 below, alone demonstrate a clear shift from viewing bilingualism as a resource to viewing it as a problem.

Table 2. Program Name Changes After NCLB (Adapted from text in Hornberger, 2005, p. 10)

<table>
<thead>
<tr>
<th>Program Name Before NCLB</th>
<th>Program Name After NCLB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilingual Education Act (Title VII)</td>
<td>Language Instruction for Limited English Proficient and Immigrant Students (Title III)</td>
</tr>
<tr>
<td>Office for Bilingual Education and Minority Language Affairs</td>
<td>Office of English Language Acquisition, Language Enhancement, and Academic Achievement for Limited English Proficiency Students</td>
</tr>
<tr>
<td>National Clearinghouse for Bilingual Education (NCBE)</td>
<td>National Clearinghouse for English Language Instruction Education Programs (NCELA)</td>
</tr>
</tbody>
</table>
Although most of the US’s language policy history seems to cycle back towards a problem-oriented approach, there have been and continue to be important glimmers of hope for a language-as-resource (instead of problem) orientation towards bilingual education from the WWII era through the Clinton administration in the 1990s and now in present day with grassroots organizers. WWII illuminated the need for foreign language specialists, and in turn created more intrinsic value for the learning of additional languages (Hornberger, 2005). After WWII, the Reagan administration in 1984 created and allocated significant additional funding for bilingual maintenance and DL programs (Hornberger, 2005). Moreover, during the Clinton administration in 1994, DLE and bilingual advocacy thrived. In this time, the BEA was reauthorized and substantial funding was allocated to two-way DL and bilingual maintenance programs, and throughout this era, the term ELL began to replace the more negatively connoted term, LEP (Hornberger, 2005). Likewise, national movements like the Civil Rights movement and court cases such as Lau vs. Nichols had positive impacts on minority language rights and bilingual education advocacy as a resource over a problem. In more recent times, grassroots movements advocating for bilingual education and dual immersion programs have been working hard to pivot the problem oriented approach towards language-as-resource approach to bilingual education in the US. For instance, Gándara and Aldana (2014) note, “While English-only policies and practices across the nation have denied many children of immigrants the opportunity to become fluently bilingual, a grassroots movement has been taking place to create more two-way dual immersion programs,” (p. 742). The US ought to view bilingualism and DLE as a resource, and take advantage of this tool that many Americans and new immigrants and refugees to the US intrinsically and powerfully possess.
**Teacher Development Efforts Related to DLE**

Teacher development efforts related to DLE have strongly focused on specific bilingual/ESL teachers, however general education teachers are finding themselves increasingly faced with more and more ELs in their classrooms and are needing to find ways to fulfill their academic needs (Evans, 2017; Martinez-Álvarez et al., 2017; Naqvi & Pfitscher, 2011). Soltero (2016) notes the ability for general education teachers to participate in DLEPs as team teachers as a great way for them to acquire knowledge about SLA, L2 instructional practices, and cross-cultural understandings from their partner bilingual teacher.

In most recent developmental efforts, Guerrero and Lachance (2018) advocate for the importance of implementing and propose a set of National DLE Teacher Preparation Standards. They call for a set of standards to be recognized and implemented nationally due to the rapid growth of students coming from homes where languages other than English are spoken and increase of DLEPs nationwide, and absence of national standards to prepare teachers for teaching in DLE settings. Guerrero and Lachance propose 6 Standards to fill this absence: 1: Bilingualism and Biliteracy; 2: Sociocultural Competence; 3: Dual Language Instructional Practices and Pedagogy; 4: Authentic Assessment in Dual Language; 5. Professionalism, Advocacy and Agency; 6: Program Design and Curricular Leadership. Each of these standards addresses a variety of initiatives to best prepare preservice teachers to work in DL settings and DL learners reach their highest potential. As the number of DL learners in the US continues to increase, which is has by nearly 25 percent since the year 2000, as Guerrero and Lachance (2018) highlight, national standards are imperative to productively prepare, train, and guide preservice teachers and teacher preparation programs on a national level to best serve DL learners and propel the field of DLE.
Oliva-Olson, Estrada, and Edyburn (2017) call for improvement of preservice teachers in early childhood education to be better trained in effective DL learning practices. These researchers address the current state of the US’s growing population, which demonstrates nearly half (49%) of children who are of an ethnic minority live in a home where language other than English are the majority, and advocate that the best way to serve this population is implement better training in DL practices for preservice teachers. Moreover, they argue that much research to date has shown instruction in a child’s first language (L1) encourages socio-emotional development, enhanced cognitive skills, heightened reading and math skills, and greater exercise of self-control, among others (Adesope, Lavin, Thompson, & Ungerleider, 2010; Kovács & Mehler, 2009; Oliva-Olson, Estrada, & Edyburn, 2017). Although this article focuses on early childhood education and not K-12 education, their push and ideology for improving preservice teachers’ training on effective DL learning practices could, and should, be applied to K-12 school teachers as well since children in early childhood education programs will progress quickly into elementary education and beyond. Thus, preservice K-12 education teachers ought to be better-trained in DL learning practices as well.

Advocating for more training on DL learning practices is advantageous to better prepare preservice teachers in K-12 schools and early childhood education, yet there is still much debate on best practices to teach these strategies. Naqvi and Pfitscher (2011) provide one strategy through exploring DL books to help preservice teachers to become more exposed to linguistic diversity in the classroom. Naqvi and Pfitscher assert that implementing resources like DL books into preservice teachers’ training can provide more opportunities to effectively implement strategies to promote multicultural/multilingual classrooms and build on children’s individual cultural capitals. Their longitudinal study follows one preservice teacher’s experiences working
with DL texts and how it prepared her to work with diverse groups of learners. Findings included advancing literacy learning for multicultural/multilingual learners, teaching to make meaning, and linguistic diversity. The participant was able to use DL texts at her teaching internships and elaborated that these texts allowed her to connect with EL children on new levels and expose children who did not speak more than one language to linguistic diversity. Furthermore, the participant noted that she saw DL books bridging home life and school life for many EL students because the books better connected their parents to their schooling and helped provide a space for more linguistic tolerance and diversity. Incorporating DL books into teacher training programs for all preservice teachers could provide many benefits by way of greater exposure linguistic diversity and prepare them to better connect with EL students and gain more insights into DLE.

Reynolds (2018) highlights changes in teacher preparation in the US to advocate for more teacher diversity, cultural and diversity training, and EL friendly academic and language instruction. She notes that preservice teacher programs have taken strong initiatives to require diversity training to, “learn about their (preservice teachers’) role in providing equal opportunity and access to content for all students. ELs are typically one population studied and discussed, but not exclusively,” (p. 3). Beyond diversity training, preservice teacher preparation is also seeing increases in cultural responsive/relevant pedagogy strategies. These initiatives are positive and useful, however, Reynolds argues that they are not sufficient and teacher preparation programs need to also work to help future teachers find ways to lower social distance in the classroom and learn more about their students’ home cultures and norms. Finally, Reynolds poses, “It is anticipated that these trends will continue, but the preparation of pre-service teachers will include more content-based instruction, language knowledge and second language acquisition principles.
Models of teaching in light of the changing student population will include more dual-language bilingual immersion programs,” (p. 6). As minority populations continue to rise in the US, DLE and bilingual programs need to likewise rise to meet the needs of this increasing population, and teacher preparation programs need to evolve and adapt to successfully prepare preservice teachers to meet this demand.

**Research on Online and F2F Course Designs**

Much of the quantitative research comparing online and classroom-based or F2F learning have not found statistically significant results. For example, Thirunarayanan and Perez-Prado (2001) compared two sections of an ESOL course, one taught online and one F2F, and after a pre and post achievement test no statistically significant difference was found. On a qualitative note, Perez-Prado and Thirunarayanan (2002) looked into students’ perspectives of their learning experiences in a F2F and online section of the same course. After analyzing interview and journal entries, their major findings included some issues especially with the online course mode in particular when students needed to cultivate “affective development” and emotionally connect with materials (p. 200). In particular, they note, “Based on the findings of this study, it may be surmised that courses that require students to develop empathy or other affective orientations may not be suitable candidates for Web-based distance education,” (p. 200). Overall, the authors call for more research to be done in this area, and more has and continues to be completed.

For instance, Tolu (2013) follows a collaborative and socio-constructivist approach to teaching online and discusses the Community of Inquiry model (CoI) which emphasizes, “creating an effective learning environment where students feel a connection with other learners and the instructor and engage in well-designed collaborative learning activities,” (p. 1049). Tolu
(2013) discusses how the CoI includes three sections (social presence, cognitive presence and teaching presence) that overlap to intersect and create the overall educational experience of an online course (2013). Following the CoI model, online students and instructors need to be able to have a social presence where they can participate and feel like they are a part of a community. They also need to be able to participate cognitively through reflective discourse practices. Finally, the last sector of the CoI model poses that the instructor must strive to maintain a teaching presence that includes, “design and organization, facilitating discourse, and direct instruction” (Tolu, 2013, p. 1052). Hence, instructors in online courses need to work hard to not solely be a facilitator, but also provide direct instruction with things like timely feedback and summarizing the course discussions. Tolu fundamentally highlights the need for instructors on online courses to adequately plan for enough time to plan their courses well in advance, create meaningful activities that promote social spaces for the instructor and students to interact, provide spaces for students to interact with the instructor through a live meeting of some sort, especially at the beginning of courses to help promote a welcoming and less stressful environment (2013).

Major Lines of Research on SLA and DLE Programs

Major lines of research on SLA and DLEPs in diverse learning environments have centered around the benefits of bilingualism and the unique learning environments that DLEPs can provide. These unique environments create authentic spaces where native speakers from both languages can potentially interact and create multicultural relationships. Learning languages can empower individuals to achieve greater cognitive aptitude and potential, and similarly develop profound cultural connections, and much more (Adesope, Lavin, Thompson, & Ungerleider,
Moreover, there is much research attesting to the benefits of children learning another language at a young age and the effects of being bilingual on the brain’s executive functioning properties and broadening future job opportunities (Adesope, Lavin, Thompson, & Ungerleider, 2010; Alfaro et al., 2014; Berbeco, 2016; Soltero, 2016).

Additionally, contributions of the L1 to enhance learning of the L2 have been important to research on SLA and DLEPs. Copious research in SLA has supported that a learners’ L1 can be a valuable resource to help acquire an L2 (Auerback, 1993; Cummins, 2000; Pica, 2011). Notably, Cummins’s view, that academic skills, literacy development, subject knowledge, and learning strategies can all transfer from L1 to L2 as communicative and vocabulary patterns develop in the L2, known as the interdependence of languages hypothesis, has been a fundamental resource to exemplify the benefits of DLEPs (Alfaro et al., 2014; Cummins, 2000; Pica, 2011). Furthermore, L1 literacy is seen as a very important foundation for L2 literacy development (Cummins, 2000; Pica, 2011). On the contrary, the idea that a student’s L1 interferes in a negative way with learning of the L2 has been less and less supported in recent research (Ovando & Combs, 2012). Thus, DLEPs provide a space for students to use their L1 skills to help build upon their L2 language and literacy skills.

Similarly, Cummins’s threshold hypothesis is important to DLE. This hypothesis proposes that language learners need to attain a certain level, or threshold of bilingualism to experience positive effects on their academic and cognitive development (Cummins, 2001). Moreover, Cummins notes there are two important thresholds: 1) language proficiency level in the L2 to avoid negative consequences; and 2) balanced development of two languages to experience positive effects (Soltero, 2016). Hence, helping students reach the second threshold
and become balanced bilinguals in two languages is one of the goals of DLE. Furthermore, the threshold hypothesis also expands upon the length of time it generally takes a student to acquire academic language in the L2 (5-7) years and this highlights the importance of DLEPs to be offered for at least 6-8 years (Cummins, 2001; Soltero, 2016). Furthermore, it takes considerably longer for students to develop academic language versus conversational language in their L2, as Cummins (2008) notes, and DLEPs additionally address this concern by promoting both academic and conversational language skills throughout several years in the program. This can particularly benefit ELs who may seem like they have a very strong hold over their L2 conversationally, yet still struggle with academic skills even though it may not be apparent on the outside.

In a similar vein, Krashen’s seminal research on SLA is noteworthy to DLE. Krashen (1989) posits that acquisition of a language requires natural communication, meaningful interaction, and comprehensible input. In his research, a distinct contrast between learning and acquisition is highlighted. Learning, to Krashen, is formal instruction that produces conscious knowledge “about” the language; whereas, acquisition is more of a subconscious acquiring of elements of a language, similar to how native speakers absorb their first language. In Krashen’s view, acquisition is more important that learning for language learners since acquisition is long-lasting and parallel to how one naturally acquires a first language. Krashen describes comprehensible input as “i+1”, where language learners need input that is just slightly (+1) above their threshold of understanding to grow and improve their language skills. Comprehensible input is essential for planning and execution of DLE. Additionally, Krashen (2005) advocates for bilingual education, and his comprehensive literature review of a plethora of studies on two-way dual language programs concluded, “a close look at the data shows that
two-way programs show some promising results, but research has not yet demonstrated that they are the best possible programs,” (p. 18). Fundamentally, Krashen (2018) supports that language and literacy development are driven from comprehension over skill-building and, “is the result of getting comprehensible input by hearing stories and reading interesting books and other print. In other words, comprehensible input is the cause of language acquisition,” (p. 6). Although Krashen’s viewpoints and research findings are older, they continue to have components that are relevant for DL practitioners in present day, and in any DLEP, teachers need to provide comprehensible input for language learners to flourish.

Likewise, content-based SL teaching is another major line of research pertaining to SLA and DLEPs. As Lyster (2011) notes, content-based SL teaching has been called the “two for one” approach, since students learn both academic content and the target language at the same time. DLEPs teach students content through two languages, and significant research has been completed to document the success of majority and minority language speakers to learn additional languages alongside mastering subject matter through immersion, at no expense of their L1 (Genesee, 1987; Lyster, 2011). It is important to note, however, that significant care still needs to be given to teaching the SL through the content and that the additional language is not just “freely acquired” in content-based SL teaching (Lyster, 2011, p. 611).

Notwithstanding, some may view it to be considerable additional work to run DLEP and ensure that material is being taught to meet state mandated standards, while equally maintaining best practices for DLE (Soltero, 2016). However, curricula that embeds language learning within content subject areas already in place do not necessarily add more material, but can instead embellish subject matter that students are already learning. In addition, students have the opportunity to become teachers and an example of their native language to their peers, which
may heighten their self-confidence and boost self-esteem (Ovando & Combs, 2012; Soltero, 2016). Moreover, implementing DLEPs that use team teaching approaches, where children receive instruction from two teachers throughout the week, each a specialist in a particular language, offers monolingual English speaking teachers an opportunity to alike thrive in DL school settings (Soltero, 2016).

**General Instructional Consideration of Integrating DLEPs in Teacher Education Training in the US and Abroad**

The field of teacher education training has well-documented the prospective impact of teachers’ beliefs and attitudes on their future pedagogical philosophies and interactions with students (Farrell & Ives, 2015; Molle, 2013; Sugimoto, Carter, & Stoehr, 2017). Therefore, teacher education training is essential to the success of students and includes not only the “what, but also the who, the where, and the how of teaching,” (Freeman & Johnson, 1998, as cited in Tsui, 2011). General instructional considerations of integrating DLEPs into teacher education training in the US not only concerns what, the content, but additionally who the individual teachers are (e.g., monolingual or bilingual), where they are receiving their training (e.g., high or low population of ELs), and how they should be best trained (e.g., positive attitudes toward bilingual education?). To date, the majority of general instructional consideration of integrating DLEPs in teacher education training in the US has seemed to follow an indirect approach, with the addition of courses focusing on policies, best practice, and techniques/strategies to best work with ELs (typically recognized as ESOL courses) and/or offering specific bilingual/ESL teacher tracks where students take additional courses to become licensed bilingual or ESL teachers (Tsui, 2011). Overall, it seems that little instructional consideration has been given to adding strategies.
to inform preservice teachers about opportunities to work in schools with DLEPs if they are monolingual English speakers. Nonetheless, ESOL courses and specific bilingual/ESL teacher tracks address many of the aspects considered in DLEPs, specifically those pertaining to benefits of bilingual education models for ELs.

Throughout the US, preservice teacher undergraduate preparation programs are requiring more and more ESOL training for teachers who will be the primary language arts teacher in the classroom (i.e., general elementary school teacher who teaches all subjects, including English/reading/writing). For instance, the state of Florida requires these preservice teachers to complete fifteen semester hours of ESOL courses pertaining to: a) Methods of teacher ESOL; b) ESOL curriculum and materials development; c) Cross-cultural communication and understanding; d) Applied linguistics; and e) Testing and evaluation of ESOL (Florida Department of Education, 2018). Adding additional courses to prepare preservice teachers to better serve ELs is a positive advancement in the fields of SLA and teacher preparation, however standards across the country vary and some preservice teachers are able to gain hands-on experience work with ELs in their teacher preparation programs, while others are not (Catalano et al., 2018; Sugimoto et al., 2017). For instance, Sugimoto et al. (2017) believe it is increasingly important to prepare preservice teachers to work with ELs in the mainstream classroom and examined how field-based experiences of preservice teachers shaped their beliefs and dispositions toward EL students. Sugimoto et al. (2017) concluded that field experiences where preservice teachers were able to engage with ELs in the classroom were beneficial for students to develop a deeper sense of empathy for ELs and see strategies from great teachers who tried hard to accommodate for their ELs, however some field experiences proved to demonstrate the
opposite, and students were sometimes appalled by how they saw ELs being treated in the classroom.

Additionally, ESOL training tends to focus heavily on policies and general strategies for preservice teachers to learn how to better address and serve the needs of ELs and tend to have very little emphasis on DLE, despite significant research in SLA that advocate for the benefits of bilingual education and using a student’s L1 to facilitate learning of the L2 (Adesope, Lavin, Thompson, & Ungerleider, 2010; Alfaro et al., 2014; Lindholm-Leary, 2005). Thus, it is questioning why ESOL training does not provide K-12 preservice teachers with more access to knowledge about DLE models and local programs in their area and around the US.

Beyond including ESOL coursework for preservice teachers, many studies have focused on specific training for bilingual and ESL track teachers. For instance, Martinez-Álvarez, et al. (2017) analyze how writing and multimodal compositions can help bilingual preservice teachers explore relationships between language, identity, and culture in learning and use these tools to better prepare them for teaching linguistically diverse groups of students. In their research, Martinez-Álvarez et al. (2017) look at the impact writing and multimodal compositions that probed bilingual, preservice teachers to rethink their relationships between language, identity, and culture in their current teaching practices, and to imagine these relationships in the future when they are teachers. Findings of the study highlighted preservice teachers gaining valuable practice at confronting realities of diverse classrooms and developing more flexible practices for teaching in diverse learning environments. Correspondingly, Palmer and Martinez (2013) call for developing more up-to-date materials for bilingual preservice teachers training and establishing deeper critical understandings of the power dynamics that function in a bilingual classroom. Zhang and Pellettari (2014) stress the importance of preservice teachers to have meaningful and
sufficient experience working with EL students in real classrooms in order to realize the complexity of the struggles ELs go through to learn another language and develop greater empathy for their students. Martinez-Álvarez et al. (2017), Palmer and Martínez (2013), and Zhang and Pelttari (2014) all call for an ideological shift for teacher educators to develop more robust considerations of bilingual education contexts.

Similar to the US, other countries have been challenged by bilingual education and teacher policies/preparation. For instance, Mexico, has struggled with finding the best ways to provide indigenous students who speak language other than Spanish with an education that rivals that of their Spanish speaking peers. Mexico boasts one of the largest indigenous populations in Latin America, with over 11 million people speaking more than 77 indigenous languages (Santibañez, 2016). With such variety among students, it is difficult to find and train enough bilingual teachers to meet the demands of these indigenous language speaking students. Santibañez (2016) highlights the struggles of these students, that despite attending intercultural bilingual education schools, they still underperform when compared to their Spanish speaking peers. Santibañez illustrates the training of teachers in such schools do not seem to be meeting standards and that a large portion of teachers are not delivering a “fully implemented” bilingual model, and the students are falling behind their Spanish speaking peers. Nevertheless, Santibañez argues the intercultural bilingual education schools have the potential to close the gap between indigenous language speaking and Spanish speaking students if policy makers strive to ensure the programs are being carried out as planned and greater training is administered to teachers on DLE practices.

All in all, there are many instructional considerations that need to be carefully pondered with teacher preparation programs and DLE. ESOL course endorsement for general education
teachers and specific track bilingual and/or ESL teachers provide a base for addressing bilingual education concerns of ELs in US schools. Nonetheless, the majority of these considerations with ESOL endorsement and Bilingual/ESL teacher training thus far have mainly included ways to aid ELs in or quickly toward mainstream classrooms. New instructional considerations need to be implemented to expose preservice teachers about their potential to work in DLEPs. These considerations may include things like adding additional units to preexisting ESOL courses to discuss local DLEPs in the area, structures of DLEPs, and/or visiting DLE schools during teacher training.

Section 2.

Focused Review and Synthesis of the Existing Gap of Research on DLEPs in Foreign/second Language Learning and Preservice Teachers.

Populations Studied

To date, the majority of populations that have been studied in relation to preservice teachers and DLE programs include bilingual and ESL specific track preservice teachers, first year teachers, early childhood preservice teachers, and general preservice teachers’ perspectives on working with linguistically diverse groups of students (not necessarily their perspectives to work at DLEPs). Specifically, these populations have mainly included undergraduate students enrolled in a teacher preparation program at the university level. Fundamentally, the majority of populations studied have been preservice teachers in the US (Catalano, Reeves, & Wessels, 2018; Doorn & Schumm, 2013; Evans, 2017; Franco-Fuenmayor et al., 2015; Greenfield, 2016; Martinez-Alvarez et al., 2017; Naqvi & Pfitscher, 2011; Sugimoto et al., 2017; Winstead & Wang, 2017).
Some Preservice Teachers’ Attitudes and Perspectives

Very few studies in the literature have looked directly at general preservice teachers’ attitudes and perspectives towards working at schools with DLEPs, however significant research has been compiled on first year and preservice teachers’ attitudes toward educating linguistically diverse students. For example, Greenfield (2016) investigated new teachers’ attitudes about language and toward working with linguistically diverse students and found that teachers professional practice toward linguistically diverse students varied based on their attitudes about instructional practices, policy, and assessment of linguistically diverse students. Greenfield noted teachers with more positive attitudes toward linguistically diverse students felt better prepared to work with ELs in the classroom. Moreover, Catalano, Reeves, and Wessels (2018) performed a critical analysis of preservice teachers in contact with emergent multilingual students and found preservice teachers continued to hold attitudes of ethnocentrism, gaps in understanding of language practices, and continued misconceptions about language learning.

On a similar note, Doorn and Schumm (2013) investigated attitudes of pre-service teachers regarding linguistic diversity in general education classrooms. The researchers administered a pre/post questionnaire and performed interviews with pre-service teacher participants. Findings illustrated that students had overwhelming positive attitudes towards promoting bilingualism and the idea that the US as a country should promote more bilingualism in schools, however participants noted lacking clarity about ESOL and bilingual program models in schools.

Mellom, Straubhaar, Balderas, Ariail, and Portes (2018) investigate the impact of professional development to shape new teachers’ attitudes towards ELs in a culturally responsive pedagogy. After analyzing results from a general questionnaire and bi-weekly log data from two
groups of teachers, a control group who had more experience and training for working with ELs, and treatment group, with little experience and/or training were compared. Findings showed treatment teachers to have a significantly overtly negative attitude towards ELs using their home language or passively accepting the home language. In contrast, the control group, with more professional development and training to work with ELs, showed more positive attitudes towards valuing home language and using the home language to support higher order thinking skills (Mellom et al., 2018).

**DLE Features Believed to Enhance ESL Education**

There are many DLE features that are believed to enhance ESL education for ELs. Much of these features stem from opportunities in DLE settings for EL students to work on improving their English skills alongside maintaining their L1 and using the L1 to facilitate learning in the L2 (Combs, Evans, Fletcher, Parra, & Jiménez, 2005; Ovando & Combs, 2012). Significant cognitive science research proposes that since languages share fundamental underlying structures, students that develop a strong foundation in their L1 are better prepared to learn an L2 (Umansky, Valentino, & Reardon, 2016; Cummins, 2000; Genesee, Geva, Dressler, & Kamil, 2008; Ovando & Combs, 2012). Thus, ELs are better equipped to acquire English when they are able to develop a strong foundation in their L1. DLEPs likewise provide a comprehensible environment for ELs where they have full access to the academic curriculum while they are learning English, whereas in many English-only classrooms some ELs may spend nearly the entire day understanding very little of the academic content (Umansky et al., 2016). DLEPs similarly provide a unique environment for students to become teachers and an example of their native language to their peers, which may heighten their self-confidence (Combs et al., 2005).
Finally, DLEPs address ethical concerns and stress the importance of maintaining ELs native languages, which may generate social benefits, such as improved self-esteem, economic benefits, and possible cognitive health benefits, like heightened executive functioning (Adesope, Lavin, Thompson, & Ungerleider, 2010; Combs et al., 2005; Umansky et al., 2016).

**Prior Research Questions**

A variety of research questions have been investigated pertaining to the literature addressing teacher and preservice teachers and DLEPs. Several studies research questions are summarized in Table 3.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Research Questions</th>
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<tbody>
<tr>
<td>Catalano, Reeves, &amp; Wessels (2018)</td>
<td>How do teacher learners in an undergraduate course on emergent multilinguals critically reflect on their learning in a practicum experience?</td>
</tr>
<tr>
<td>Doorn &amp; Schumm (2013)</td>
<td>What are the attitudes of preservice teachers at the university regarding the language development and literacy of linguistically diverse students? Does the teacher preparation program affect these attitudes and how? What other factors affect these attitudes?</td>
</tr>
<tr>
<td>Evans (2017)</td>
<td>What are the authentic experiences of these bilingual teachers in their natural environments to explore the complexities of a bilingual classroom where academic, cultural, and linguistic variables are highly dynamic and interdependent? What can preservice teachers learn from their experiences?</td>
</tr>
<tr>
<td>Franco-Fuenmayor, Padrón &amp; Waxman (2015)</td>
<td>What do bilingual/ESL teachers know about instructional practices for ELLs, research on bilingual programs, research-based instructional strategies, and knowledge related to SLA? Are their differences between Bilingual and ESL teachers’ knowledge? What PD activities do both groups participate in?</td>
</tr>
<tr>
<td>Greenfield (2016)</td>
<td>What are the relationships between teachers’ practices, language attitudes, and teacher education coursework? How do teachers’ coursework and attitudes influence their practices? How do the qualitative results explain results from quantitative data?</td>
</tr>
<tr>
<td>Martinez-Álvarez, Cuevas, Torres-Guzmán (2017)</td>
<td>Do participating teacher candidates use the multimodal composition to rethink their language, identity, and culture to reflect on their identities of self and their belonging as bilingual teachers? How do teacher candidates use and appropriate the multimodal composition to rethink their role of language, identity, and culture discursively? And how do they use it to story their identities and think through their belongings as future bilingual teachers?</td>
</tr>
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Table 3. (Continued)

<table>
<thead>
<tr>
<th>Authors</th>
<th>Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mellom et al. (2018)</td>
<td>What are the teachers prevailing attitudes towards ELLs? How do these attitudes change in relation to their work with the Instructional Conversation?</td>
</tr>
<tr>
<td>Naqvi &amp; Pfitscher (2011)</td>
<td>How are teachers being prepared to work within culturally and linguistically diverse classrooms? What role can dual language books play in the diverse classroom of a preservice/first year teacher?</td>
</tr>
<tr>
<td>Santibañez (2016)</td>
<td>What role do teachers and schools play in explaining indigenous students’ performance in Mexico?</td>
</tr>
<tr>
<td>Sugimoto, Carter, &amp; Stoehr (2017)</td>
<td>How do preservice teachers conceptualize English learners and/or mainstream teachers during recalled events from their field-based observations? What is the nature of the experiences that preservice teachers remember involving English learners? How do these experiences shape preservice teachers’ developing orientations toward working with English learners?</td>
</tr>
<tr>
<td>Winstead &amp; Wang (2017)</td>
<td>How do bilingual bicultural teachers perceive their native language use and send of self within society from childhood to adulthood? What are bilingual teachers’ perceptions of how their own language learning experience may affect teaching students of similar linguistic and cultural backgrounds?</td>
</tr>
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</table>

**Research Approaches**

The majority of studies reviewed favored qualitative approaches, using methods such as narrative inquiry, case studies, and interviews (Catalano et al., 2018; Naqvi & Pfitscher, 2011; Sugimoto et al., 2017; Williams, 2017; Winstead & Wang, 2017). Additionally, a significant number of studies followed a mixed-methods approach that paired quantitative survey and/or questionnaire data with interviews or focus groups (Doorn & Schumm, 2013; Evans, 2017; Greenfield, 2016; Martinez-Álvarez et al., 2017; Mellom et al., 2018). A smaller number of studies followed quantitative approaches, using methods such as five point Likert scale questionnaires and regression analysis of test scores, (Franco-Fuenmayor et al., 2015; Santibañez, 2016).
**Major Research Findings**

As mentioned previously, little research has been completed on general K-12 preservice teachers’ attitudes and perspectives towards DLEPs in the US and abroad. To date, most studies have focused on bilingual or ESL preservice teachers. Williams (2017) is one of the few studies that looks at general K-12 preservice teachers and exposure to DLEPs, however they do not address the preservice teachers’ attitudes themselves. Williams expands upon the results from the introduction of EL strategies and exposure to DLEPs into a general teacher preparation program. Similar to many programs around the US, preservice teachers in this program were exposed to some strategies to help ELs in their classroom, but they had the unique capability of doing a field experience at a DL school. Having this type of DL field experience seems to be fairly rare in preservice teacher programs, and thus, these preservice teachers had a unique experience. Participants gained many skills about DLE and first-hand experience with EL students that many of their counterparts without experience at such schools do not receive. Williams (2017) mentions that students in this program witnessed how faculty and staff sustain biliteracy and promote biculturalism in their school, learned the dynamics of school involved language partners, and were exposed to many strategies that they learned about in their training in real-live classroom settings. Williams (2017) demonstrates the benefit preservice teachers can receive from being provided with real-live teaching experiences in a DL setting that helps them practice the strategies they learn in their programs about working with EL students. While it is common for preservice teachers to learn strategies to work with ELs, it is less common to provide them with an opportunity to use these skills while they are still in training. Williams (2017) lacks to mention, however, the perspectives and attitudes of these preservice teachers and whether or not they desire to work at DLEPs in the future. Exposing more preservice teachers to DLEPs while
they are still in training could be a valuable asset to try to implement across all teacher preparation programs in the US, however, it is still important and necessary to investigate their personal positions and perspectives on wanting to work in this type of environment.

On a similar note, Martinez-Álvarez, et al. (2017) found bilingual preservice teachers gained valuable practice at confronting realities of diverse classrooms and developing more flexible practices for teaching in diverse learning environments through written reflections from their field experiences with bilingual students. Although their study centers on bilingual teacher candidates, their framework and strategies could be applied to groups of monolingual teacher candidates to reflect on languages that they have come in contact with and/or started to learn and how these experiences influence their teaching perspectives. Since the majority of bilingual and monolingual teachers alike in the US encounter EL students in their classrooms, it is imperative that monolingual teachers have the opportunities to work with activities that help them reflect and engage in multilingual exposure and diversity in their teacher training.

Evans (2017) looked at lessons from two exemplary Latino/a teachers of bilingual students in an effort to understand how these two examples could help prepare all preservice teachers to teach culturally and linguistically diverse students. Evans found three characteristics she believes are imperative to have in order to best serve linguistically diverse students: ethic of relationship building, decision making based on shared knowledge, and resolve to expand their discourse community. Ultimately, Evans argues that all preservice teachers, especially monolingual English speaking preservice teachers, should have opportunities to be exposed to bilingual teachers and engage in discourse with individuals from a variety of different backgrounds through field experiences. Evans proposes excellent points to advocate for momentum in future research in teacher education to fill this gap to expose monolingual
preservice teachers to more opportunities to see how bilingual teachers work with linguistically diverse students. A further push could include advocating for monolingual preservice teachers to be more educated on the foundations of DLEPs and have opportunities to visit these types of programs in their training.

Similarly, Winstead and Wang (2017) found that bilingual teachers’ reflections helped them to reflect on experience of language shame and loss that helped them learn to better relate to their linguistically diverse groups of students. Similar to Evans (2017), Winstead and Wang (2017) illustrate points that learning more about bilingual teachers’ experiences could be useful sediments for monolingual preservice teachers to better understand how to best work with EL students. On a comparable note, Franco-Fuenmayor et al. (2015) found many teachers of ELs are not receiving adequate training, specifically in areas related to bilingual education, and advocate that trained bilingual teachers seem to be much more knowledgeable that ESL teachers in terms of bilingual programs. Additionally, Franco-Fuenmayor et al. (2015) call for more training for monolingual preservice teachers to better understand bilingual and DL programs.

As mentioned previously, Naqvi and Pfitscher (2011) assert that implementing resources like DL books into preservice teachers’ training can provide more opportunities for them to effectively implement strategies to promote multicultural/multilingual classrooms and build more on children’s individual cultural capitals. Incorporating DL books into teacher training strategies for all preservice teachers may provide beneficial experiences to engage with linguistically diverse texts and better understand DL practices.

Inquiry into DLEPs and preservice teacher preparation abroad has yielded very few findings. Most notable, the previous example of indigenous language speaking students in Mexico and call for greater teacher training on bilingualism and implementation of bilingual
schools was the most notable article found specifically related to teacher preparation and DLE abroad (Santibañez, 2016). However, research has been completed on bilingual programs abroad, and in particular struggles between minority language students, not unlike ELs in the US. For example, Mortimer (2016) discusses the successes of Paraguayan national policy change for universal bilingual education to aid in integrating language minority students of Guarani to have access to their language in schools, however this policy change was not enough to disrupt “hegemonic monoglossic ideologies” (p. 349) that continue to bar Guarani-dominant students from attaining a high-quality education. Thus, education policy change to promote bilingualism was not sufficient to help these minority language students achieve the equal education of their peers, and more research and efforts need to be done to educate and inform teachers in this area of best practice to serve this group of students.

**Research on Parents’ Attitudes Toward DLEPs**

To date, significant research has been completed on parents’ attitudes toward bilingual and foreign language programs and benefits of bilingual programs (Gándara, 2015; Han, 2010; Marian & Shook, 2012; Pearson, 2007). For example, Marian and Shook (2012) unpack the many benefits of bilingualism and argue for multiple benefits of bilingualism including: improvements in learning, changes in neurological processing and structure, cognitive developments, and reduced risk of Alzheimer's and Dementia. They note that bilingual people frequently perform better on tasks that entail conflict management. In their study, they mention the classic *Stroop task* where people are asked to name the color of a word’s font. When the color and the word were matching (i.e., red is the color red) bilinguals and monolinguals had similar response times, however when the color and the word were not matching, bilingual
people often performed much better and faster than monolinguals. Moreover, Han (2010) preformed an early longitudinal study looking at children’s socioemotional trajectories from K-5th grade. Han looked at ratings given by teachers to students on self-control, interpersonal skills, and internalizing problems skills as they progressed from kindergarten to 5th grade. The study concluded that by 5th grade, bilingual students and non-English dominate students had the highest levels of approaches to learning, self-control, and interpersonal skills.

Additionally, several studies have been completed on parents’ attitudes toward various bilingual programs (Bartram, 2006; Craig, 1996; Lao, 2004; Lee, Shetgiri, Barina, Tillitski, & Flores, 2015). For instance, Lao (2004) studied 86 parents who had placed their children in a Chinese-English bilingual preschool in the US. Each parent was administered a detailed questionnaire to complete on their opinions on bilingual education, reasoning for choosing to place their children in this program, their attitudes toward bilingual education, and their expectations for their children in school and at home. The study found that parents were in strong support of Chinese-English bilingual education and in favor of bilingual education in general. Furthermore, the main reasons parents placed their children in these programs were for the practical advantages that come with being bilingual, such as “better career opportunities, positive effects on self-image, and development of skills enabling effective communication within the Chinese-speaking community,” (p. 107).

Lee et al. (2015) examined parental preferences in raising Spanish/English bilingual children and identified different factors that predisposed their decisions. They conducted focus groups with Spanish-primary language parents of children ranging from 3-7. Their results showed that overall parents wanted their children to become bilingual and many noted that it would help their children with future job opportunities and help them to keep their culture and
native language. Although parents had positive attitudes toward bilingualism and raising bilingual children, most parents preferred to have their children in English-only schools and to teach Spanish at home.

Likewise, Craig (1996) looked at white and Latino parents’ attitudes who chose to enroll their children in a local Spanish-English two-way immersion program. After administering a detailed survey, they found that both English speaking parents and Spanish speaking parents shared similar attitudes of agreement on the positive effects of bilingualism on many things including their children’s cross-cultural attitudes and enhanced future job skills. Moreover, they noted that immersion is a promising technique and program for promoting bilingualism in both language minority and language majority groups and provides equal education opportunities for both groups.

Correspondingly, Bartram (2006) studied parental influence on attitudes to language learning. She conducted surveys, interviews, and focus groups as well as written accounts from participants on their attitudes from students and their parents. She found that parents’ extent of language knowledge was a factor in their attitudes toward foreign language programs and parents with more language knowledge tended to have more positive attitudes. These positive attitudes in turn seemed to influence their children to stick with a foreign language program for a longer period of time than those with less positive attitudes.

**Gaps in the Literature**

In general, the literature illustrates a shortage of looking into a diverse group of preservice teachers’ perspectives on DLE. There is significant research completed on bilingual and specific ESL/ESOL-track preservice teachers and their views on teaching in DL programs, however there
is little research looking into monolingual and/or general-education-track preservice teachers and their attitudes and perspectives toward being a part of a DLEP (Martinez-Álvarez et al., 2017; Naqvi & Pfitscher, 2011; Oliva-Olson et al., 2017; Williams, 2017). Furthermore, there seems to be more research completed on parents and early childhood education preservice teachers in relation to DLE than general K-12 teachers (Oliva-Olson et al., 2017). Moreover, DLE schools can be an enriching environment for bilingual teachers, but likewise monolingual teachers if team teaching is employed (Soltero, 2016). Additionally, significant research has been compiled on DLEPs best practices, but not many studies address general-education-track preservice teachers’ perspectives toward working in these kinds of settings (Berbeco, 2016; Ovando & Combs, 2012; Soltero, 2016).

Hence, the gaps in the literature include: 1) missing voices from K-12 general education, preservice teachers’ perspectives toward working in DLEPs; 2) potential benefits/effects of more training for preservice teachers to better understand bilingual and DLEPs; 3) understanding K-12 general education preservice teachers’ current knowledge of local DLEPs in their respective areas of study and areas in which they would like to work in the future.

**Major Implications**

Significant research on preservice teachers’ attitudes toward working with diverse student populations begin to show a shift to strive to better align teacher education programs with a stronger focus on the best practices to serve linguistically diverse students. Although, this is a positive step in providing ELs with the education they deserve, teacher preparation programs need to go a step further and start integrating more education about DLEPs and preservice teachers’ potential to work in schools with DLEPs. Accordingly, DLEPs show competitive...
performance levels of students in comparison to monolingual English schools on test scores, while likewise boasting the benefits of learning not only an additional language, but additional cultural experiences as well (Umansky et al., 2016). Hence, the US should consider ways to create and advocate for an increased number of DLEPs in schools. DL pedagogy needs to find ways to interest and attract more monolingual teachers to visit and teach at schools with DLEPs. In the US, in general, there are significantly more monolingual teachers/preservice teachers and they should be better educated about their potential to be a vital part of DLEPs.

**Future Directions**

Largely, there is a lack of literature and research looking into general preservice teachers’ specific perspectives toward their attitudes and interest in working at schools that house DLEPs. To date, current research seems to focus on advocating for more integrated training of preservice teachers to be exposed to DL learning practices and strategies for working with EL students, which are both great aspects to continue integrating. Nonetheless, the literature is missing an important voice to this endeavor, that of the preservice teachers themselves. It is arduous to plan programs without knowing the perspectives of preservice teachers, and it is additionally challenging to understand the lack of programs in the US without investigating emerging teachers’ perspectives on the types of programs where they hope and want to teach. Notwithstanding, this gap needs to be addressed in order to better understand preservice teachers’ stance on DLE and their willingness to work or teach at schools with these programs, and the influence this may have on the number of DLEPs around the US. Ultimately, teachers are the pulse of educational programs, their every move impacts students’ success, and they ought to be exposed to a variety of potential program options during their training. While DLEPs may not
be the best fit for all preservice teachers, they may be a great fit for some, and preservice teachers deserve to be exposed well-informed.
CHAPTER 3

METHODOLOGY

Chapter three begins with a description of the methodological orientation of this research study and a discussion of the emic and etic nature of the data collected. Next, sources for data collection are explained as well as participant demographics and the study site. Then, an overview of how the data was analyzed is reviewed and research reflexivity and ontological and epistemic orientations are discussed. Following, the study significance and implication, as well as the advantages and disadvantages of the study design are expanded upon. Subsequently, reliability, validity, trustworthiness, and ethical considerations are explained. The chapter concludes with a discussion of the instrument construction and rationale.

Methodological Orientation

Mixed-methods approaches blend both quantitative and qualitative approaches to answer research question(s) that cannot be answered fully by one approach alone. Through this pairing of methods, words, pictures, and narratives from qualitative means can be utilized to add clearer meaning to numbers from quantitative data (Hesse-Biber, 2010). Research studies using mixed-methods approaches allow researchers to pair a variety of data collection methods to answer their questions and gain deeper understandings, which may allow for opportunities to generalize findings, in some cases of mixed methods research. Through this unique mixing, research results from mixed-methods studies boast triangulation of their data to examine the same dimension of the research problem through various methods (Hesse-Biber, 2010). Accordingly, some benefits
of mixed-methods include using this triangulation, attaining multiple ways to describe and display findings (i.e., pairing descriptive statistics from a survey with participants’ interview responses surrounding the survey), complementarity reached from looking at a research problem from different perspectives, and results from one method helping to inform the direction of another method (i.e., a survey informing interview questions). Nevertheless, some drawbacks of mixed-methods research include large amounts of data to analyze, challenges of methods complementing one another, integration of findings, and reaching a balance of evidence from both approaches (Creswell & Clark, 2018; Lichtman, 2013).

The mixed-methods design for this study followed a case-study with a census approach which included a pre/post survey and interviews. The study followed a case of my students taking an ESOL course and following the census approach, all students will participate in the survey portion of the study. Participants first took a survey at the beginning of their ESOL course. Next, interviews were be conducted with participants randomly, who indicated willingness to participate from their survey, to expand on their survey responses. Later, participants took a post-survey at the end of the course.

Table 4. Appropriateness of Method for Research Questions

<table>
<thead>
<tr>
<th>RQ</th>
<th>Data Method Analysis</th>
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<tbody>
<tr>
<td>R1: What impact does taking an ESOL course have on preservice teachers’ attitudes and perspectives towards dual language education?</td>
<td>The pre/post survey was used to answer this RQ to see if there was a significant change in preservice teachers’ attitudes after taking an ESOL course.</td>
</tr>
<tr>
<td>R2: Is there a significant difference in change in attitude between students taking the course online or face to face?</td>
<td>The pre/post survey was used to answer this RQ to see if there was a significant difference in preservice teachers’ attitudes depending on which section of the course they were enrolled (online or face to face).</td>
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Table 4. (Continued)

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<tr>
<th>RQ</th>
<th>Data Method Analysis</th>
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<tr>
<td>R3: How are preservice teachers’ informed about what schools have dual language programs in their area?</td>
<td>Both the surveys and interviews were used to answer this RQ. The survey contained questions asking participants about how they obtain information about local dual language programs in their area and interviews contained follow-up questions related to preservice teachers’ knowledge about local dual language programs in their area.</td>
</tr>
<tr>
<td>R4: What relationship may exist between attitudes and perspectives and preservice teachers own personal experiences with bilingualism and experiences with diversity, and/or place of origin?</td>
<td>This question was answered through the surveys and interviews. The surveys contained questions related to participants’ experience with bilingualism, diversity and where they are from. Follow-up interviews probed deeper at these topics.</td>
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More specifically, this mixed-methods research design followed an adapted sequential explanatory design as proposed by Hesse-Biber (2010). I adapted this by adding my specific qualitative and quantitative data collection types (pre/post survey and interviews) to the figure. I felt it was important to adapt it because the basic structure of Hesse-Biber’s figure gives a general overview of the type of design I wanted to follow, but adapting it to fit my specific study made the figure more specific and informative to guide my particular research study. Figure 3 displays a visual of the research design for this study.
Following a mixed methods approach to answer these research questions was the best approach to yield the most advantageous findings in order to better understand preservice teachers’ attitudes and perspectives. Through qualitative data, I was able to obtain detailed and meaningful explanations to deeper understand preservice teachers’ feelings and perspectives and how they may relate with one another. Through quantitative data, I was able to gain a broader understating of preservice teachers’ feelings and perspectives on a larger scale. Through combining qualitative and quantitative approaches, I retained insight into the issues surrounding my research questions and was able to answer them more thoroughly.

**Emic and Etic Data**

In mixed methods research designs, data can be emic, etic, or both emic and etic. On the one hand, emic data refers to information that is brought forth by the participants themselves and
includes notions such as local language and concepts used in a cultural-sharing group. On the other hand, etic data is information that represents the researchers’ interpretation of the participants’ viewpoint (Creswell, 2015). Thus, emic data tends to include first-order concepts, or concepts coming directly from a source; whereas etic data typically includes second-order concepts, or concepts that are not directly coming from a source but are being interpreted by another source (or the researcher in this case). In my research design, the data from my qualitative portion (interviews) was emic since it contained the perspective and exact words and language from the participants themselves. For instance, I used In vivo coding to analyze my participants’ responses which allowed me to code using exact phrases and wording directly from my participants. However, the quantitative portion (survey) of my data was etic since I, as the researcher, asked and proposed the survey questions and analyzed the data using descriptive coding. My data was also etic in the sense that I as the researcher, was also the instructor of my participants. Thus, my data is a combination of both emic and etic.

**Sources for Data Collection**

Sources for data collection for the research design included (1) an attitudinal scale pre/post survey and (2) interviews. The survey I created was developed and adapted from two fields of research, teacher education research and attitude research on perceived values of bilingualism (Doorn & Schumm, 2013; Larrivee & Cook, 1979; McFarlane, Hoffman, & Green, 1997; Ponterotto, Baluch, Greig, Rivera, 1998; Shin & Krashen, 1996; Surrain Aguilar, Chen, Maghooli, Shin, & Luk, n.d.; Tekin, 2016; Young & Tran, 1999). Correspondingly, I created a semi-structured interview guide after administering the pre-survey to inform interviews with participants. Interviews expanded upon topics addressed in the survey and encouraged
participants to reflect more deeply on their perceptions of DLE. Other materials used included an audio-recording device for interviews and software, Qualtrics, Atlas.ti, and SPSS for survey creation and dissemination, interview coding, and statistical analysis of the findings.

The survey was administered twice, in a quasi-experimental pre/post-test design, once at the beginning of the semester, and again at the end of the semester to see if participants’ attitudes changed throughout the course of the semester taking an ESOL course. The surveys were administered online via Qualtrics. More specifically, surveys allowed me to collect data from a large group of participants in a small amount of time, and with a small budget by electronically disseminating the surveys, and allowed me to analyze my data more efficiently with the help of an online platform to organize the results. Moreover, data from the surveys provided clear and statistical results to display my findings. Furthermore, beginning my data collection with a survey helped me to understand a general basis for my participants’ feelings and viewpoints and help inform my interview questions.

Interviews aided me to advance my research and gain a deeper understanding of participants’ individual perspectives and viewpoints, something that the survey lacked. Overall, interviews were a vital and essential addition because they helped to probe and ask questions to my participants that may not have been captured in the survey. As mentioned previously, interview questions were informed by the survey responses, which is another great feature of mixed-methods research that allows one method to inform and aid the other. Individual interviews were conducted in person with participants.

To evaluate data quality, participants’ responses were evaluated for their quality of representation of the research questions. Data quality generally refers to the characteristics and features of data to satisfy a given purpose or answer given research questions (Creswell, 2015).
Thus, data was evaluated for completeness, accuracy of answering features of the research questions, validity and reliability, and credibility and trustworthiness. Additionally, the following three questions from Hesse-Biber (2010) were used to evaluate data quality, “Does the study give a good reason and purpose for using mixed-methods, and clearly state the mixed methods steps involved in collecting and analyzing data? How well do the researcher’s findings fit the problem? Did the research capture an understanding of the issue?” (p. 886-87).

**Participants and Study Site**

The population of this research study included 24 undergraduate preservice teachers that were taking ESOL courses at the university level, 11 participants were enrolled in the F2F section and 13 were enrolled in the online section. The participants enrolled in the F2F class were a part of the Urban Teacher Residency Cohort (see section in introduction for explanation) and were receiving additional funding for their willingness to give additional mentor and volunteer hours to interning in low-income Title 1 schools. The participants from the online course were not a part of the Urban Teacher Residency program and were able to complete their field experience and internships at a wider range of schools, not specifically Title 1. All participants were interning at the elementary school level. All of the participants in this study were female, although male students would have been included within the study if they were available and chose to participate. Participants ages ranged from 20-39 and were sophomores, juniors, and seniors. In general, preservice teachers enrolled in ESOL programs in the US tend to be White, however other ethnicities in this study were represented, such as Hispanic, Asian, and African-American, and all ethnicities were welcomed and encouraged to participate. Participants in this study had heritages stemming from a variety of countries or territories outside of the US, such as Puerto Rico, Cuba, Spain, Haiti, Italia, and Greece. On the whole, this study sought not to limit
participants by age, gender, or ethnicity and does not seek specifically to analyze or report any
data based on these demographics. Participants came from a varying backgrounds ranging from
rural towns, to suburban and urban areas, the vast majority from small towns, suburbs, or major
cities in Florida, and one participant originated from another country, Haiti. Moreover,
participants varied in their language abilities. All participants spoke English fluently, and for
most it was their first language. However, a few participants were once ESL learners of English
when they were very young and were raised as bilinguals. The majority of participants were
monolingual English speakers, though most did have experience in high school learning a second
language for a year or two.

Specific inclusion criteria for participants included: undergraduate, enrolled in a
university K-12 preservice teacher program, enrolled in an ESOL course toward general-
education-teacher ESOL certification. Preservice teachers seeking specifically to become
ESL/ESOL teachers were excluded in order to gain the perspective of preservice teachers
enrolled in programs for general K-12 teaching. These criteria were chosen in order to look at the
general population of preservice teachers enrolled in ESOL courses to better understand their
perspectives on DLE and see if these perspectives and attitudes change after taking an ESOL
course. I decided to exclude preservice teachers that are on a specific track for becoming an
ESL/ESOL teacher because it is likely that they would already have very positive attitudes for
DLE and I would similarly like to gain a perspective from general preservice teachers that seem
to be missing from current literature.

The University of South Florida was the site for this research study. Moreover, sampling
procedures included recruiting participants from my own ESOL courses that I was teaching.
Emails were sent to prospective participants detailing the nature of the study and asking for
voluntary participation. I obtained a sample of 26 students to answer the survey, and 12 students to partake in interviews. Arriving at the best sample size for any given study can be a challenging task, especially for mixed-methods research. This mixed-methods study has a strong qualitative component and its fundamental goal is not to produce strictly generalizable results, but instead a case study of a particular group of students that may reflect important implications for future ESOL classes. Additionally, since this is a mixed-methods study that contains a large qualitative component, reaching saturation of participants’ responses (the point at which no new trends arise) was likewise an important goal (Hesse-Bieber, 2010). Thus, it is difficult to be able to state a priori what sample size should be selected without starting the study itself. The sample size for this study was limited by the number of students enrolled in each course (24 total). Although having a larger sample size would be desirable for this type of pre/post survey analysis, I had to work within the parameters of the number of students enrolled in each ESOL course.

Data Analysis

Mixed-methods approaches require at least two different procedures for data analysis, addressing both quantitative and qualitative data (Hesse-Bieber, 2010). The pre and post surveys were administered and analyzed online using Qualtrics to cross-tabulate and filter my results, and measure various descriptive statistics from the data (i.e., mean, median, mode, standard deviation). Descriptive statistics are techniques to allow researchers to briefly and concisely describe their data, yet they do not typically test a hypothesis (Moore, Notz, & Flinger, 2011). Next, I analyzed my data in SPSS following parametric statistics by performing a regression analysis on my data to look at the relationships and correlations that arose in my data. Paired t-tests were performed on the survey data to test the difference between the pre and post surveys. Pair t-tests were appropriate for the research since I was testing the same population with a pre
and post survey. Additionally, psychometric tests, used to assess characteristics and performance of the survey itself, were performed by calculating Cronbach’s Alpha to look at the internal consistency of the items on the survey (Moore Notz, & Flinger 2011).

Qualitative data of audio files from the interviews were transcribed and coded using thematic analysis. I first preformed coding by hand, and then with the help of Atlas.ti. participants’ interviews were transcribed and analyzed for numerous themes. These themes were used to better understand their responses and find common matters among participants past experiences and current thoughts about DLE. During the first cycle of coding, protocol coding was used to code for the responses to the interview questions. This type of coding is based on the pre-established structure of the study, such as the research questions and themes (Miles, Huberman, & Saldana, 2013). Later, I used emotional coding and In Vivo coding as I worked through the data. Emotional coding is a coding technique that labels the emotions recalled by participants. In Vivo coding is using participants own choice of words to code for different topics throughout the transcript (Miles, Huberman, & Saldana, 2013).

After both qualitative and quantitative data were analyzed, themes and findings across both sets of data were compared and contrasted. Since this study followed a mixed-methods design, it was important to blend findings from both data collection methods and draw connections between qualitative and quantitative data to answer the research questions. As Hesse-Bieber (2010) highlights, the research problem at hand should dictate whether or not mixed-methods finding from qualitative and quantitative data analysis should be written up separately and then combined into general conclusions, or integrated throughout the results section as an ongoing process. As my study follows a sequential design, I thought it would be best to first analyze the survey results, followed by the analysis of the interviews, and then draw
important connections across both methods. To mix my data, I started by analyzing and answering each research question and looked at how both methods contributed to answer my research questions. Moreover, I compared responses given in the interviews to those from the surveys and vice versa to look for arising themes in the surveys and interviews. Then, I continued to look for trends across both methods and overarching themes and conclusions illuminated by my data.

**Reflexivity**

I personally come to this issue as a second language learner of Spanish, ESL instructor, instructor of ESOL certification classes for preservice teachers, and doctoral candidate in the field of SLA. As the US becomes more and more diverse, I think it is essential for our education system to adapt and place more value on learning languages other than English. Furthermore, I sympathize with ELs who feel they need to drop their first language entirely to be successful in the US, and I believe there should more opportunities for students to have schools available where they can continue working on both languages. Language is intrinsically related to an individual’s identity and I believe students are experiencing a grave loss of identity and self when they are forced into an English-only environment and feel that their first language has lost its value.

In addition, the biggest impact influencing my desire to explore DLE and pursue helping ELs, stems from my experiences volunteering, living at, and teaching English at an orphanage in Reynosa, Mexico. I first visited this orphanage with a church group in 2010 as a senior in high school and it had a lasting impact on the way I saw speakers of other languages than English and sparked my love for the Spanish language. Upon visiting this orphanage, I forged connections with many inspiring children, adolescents, and adults who desired to learn English in pursuit of
having a better life and more job opportunities. I quickly changed my undergraduate major from Biochemistry (I was interested becoming a marine biologist someday) to Spanish with an education focus. Since my first visit, I have continued visiting this orphanage at least once a year and I spent my weekends living there over two years while I completed my MA in the Rio Grande Valley of Texas. I have had the spectacular opportunity to be a part of many adolescents’ amazing journeys from living on the streets of a poor city in Mexico, to successfully acquiring a high school degree in Mexico (something that is a very difficult task for this group of children and many people in this area), mastering English, getting into local universities, and some even acquiring travel visas to visit the US (a seemingly unbelievable dream for many of them). This orphanage, and more importantly these amazing children and adolescents, have left me with everlasting memories and inspiration to continue striving to help individuals of minority languages reach their highest potential. I continue to visit this orphanage and have stayed in contact with many individuals from the orphanage who I consider my dearest friends and family.

My prior personal, professional, and academic knowledge affects my decisions and actions as a researcher in many ways. For instance, my personal knowledge from successfully acquiring a second language motivates me to help others strive to learn other language and helps me maintain a positive outlook on learning additional languages and linguistic diversity. Had I attempted to learn a second language and been unsuccessful, I may not have such a positive outlook. As a teaching professional of ESOL courses, I have gained many experiences working with preservice teachers and learning about their different perspectives towards working with linguistically diverse students and thoughts about working in DL settings. My teaching experience influences my decisions to want to pursue investigating preservice teachers’ attitudes towards working in DL schools from engaging in classroom discussions surrounding DLE with
my past students. Additionally, my academic knowledge has set the foundation for my understanding of second language acquisition and the best strategies and techniques to use to help people learn another language and best practices for DLEPs. All of my prior knowledge influences the decisions and topics that I pursue as a researcher and also my interpretation of participants’ responses and my overall findings.

As for my research philosophy, I lean toward a critical paradigm. I believe there are multiple “selves” of a person. Or, in other words, we all have various truncated repertoires that mold and shape who we are at any given moment, around different groups or people, and in different situations. The self is not static, but fluid, changing, and ever influenced by political and social surroundings. I believe that ultimately, political and economic forces drive truth and fuel its power. For example, in the United States, power is given to the English language through political and economic means. The US is not a predominantly monolingual country by accident, keeping English as the sole and most important language of the nation is a political and economic advantage and strategy. Consequently, other languages and speakers of other languages have much less power in the US. One of my goals as a researcher is to try to challenge these political pressures and give value and importance to other languages and their speakers. My research philosophy directly impacts my research interest and interpretation of findings.

Additionally, I come to this research study, in particular, as the instructor of my participants, preservice teachers taking my ESOL course. Being in this position has both advantages and disadvantages. On the one hand, I have the unique opportunity to develop relationships with my preservice teachers, which may help them to feel more comfortable discussing their experiences and perspectives with me. However, on the other hand, it is possible they may feel nervous or partial to express their attitudes or perspectives with me since I am their
instructor and they could possibly feel their responses may have an impact on their grades in the
course. I openly acknowledge this possible conflict of interest and have worked diligently to
explain, expand, and explore the responses of my participants as thoroughly as possible, while
consciously acknowledging my role as their instructor and the possible impact it may have on the
responses they provide. Furthermore, participants have the equal space to express negative
perspectives and attitudes towards DLEPs and/or ELs throughout their responses to the
attitudinal scale questions and the open-ended response questions provided at the end of the
survey.

**Ontological and Epistemic Orientations**

Ontology, or the researchers’ assumptions about the nature of existence and epistemology, the
researchers’ perspective on the philosophy on the nature of knowledge building, are
fundamentally connected to any researcher’s reflectivity and views of the roles of the researcher
(Creswell, 2012). My views of ontology and epistemology align best with constructivism,
interpretivism, and critical theory. I think ontology, or my personal assumptions about the nature
of reality, is continually shifting and changing and adapted by myself as a researcher, and the
nature of my field of research continually building and growing. I adhere to the constructivist
perspective that realities are constructed locally and specifically. Furthermore, I think we
develop philosophies on the nature of knowledge building through social interaction and truths
are dependent on specific situations and interactions. However, I also believe, from a critical
perspective, that reality is shaped by a variety of values, such as political, social, cultural, or
economic, that crystalize over time (Lichtman, 2013). Furthermore, I view my role as the
researcher to be intertwined within my research goals, philosophies, and participants.
Additionally, I adhere that every researcher brings a certain bias to their research and I think
these biases, when clearly addressed and explained, can be used as a tool to aid researchers to engage with their topics on a deeper level.

**Study Significance and Implications**

Largely, there is a lack of literature and research looking into preservice teachers’ perspectives toward their attitudes and interest in working at schools that house DLEPs. To date, current research seems to focus on advocating for more integrated training of preservice teachers to be exposed to DL learning practices and strategies for working with EL students, which are both great aspects to continue integrating (Alfaro, Durán, Hunt, & Aragón, 2014). Nonetheless, the literature is missing an important voice to this endeavor, that of the preservice teachers themselves. It is problematic to plan programs without knowing the perspectives of the teachers, and it is also challenging to understand the lack of programs in the US without investigating emerging teachers’ perspectives on the types of programs they hope and desire to teach at. Thus, this study seeks to fill this gap and try to better understand preservice teachers’ stance on DLE and their willingness to work or teach at schools with these programs, and the influence this may have on the number of DLEPs around the US. Hence, implications of this research include learning more about the relationship between preservice teachers’ attitudes, perspectives, and knowledge levels and the amount of dual language schools in an area. In doing so, I may be able to better understand whether or not preservice teachers feel well informed about DL programs in their area and if more resources should be integrated into ESOL courses. Finally, this research may illuminate the impact or implications that providing preservice teachers with more resources for DL schools could have on their outlook towards DLE and possibly a future impact on programs in the area.
Advantages and Disadvantages of the Study Design

There are advantages and disadvantages to any research study design. My study followed a mixed methods design and nonetheless includes advantage and disadvantages. Mixed methods research designs boast many benefits, including more than one form of data collection to study the research phenomenon which may provide greater insight and deeper understandings of results. For instance, pairing a survey with follow-up interviews can help a researcher expand and develop the survey questions and probe deeper into their participants’ responses to elicit greater understandings. However, mixed methods research designs can also be time consuming and require twice the amount of analysis. Additionally, mixed methods research requires the researcher to be proficient in both qualitative and quantitative data collecting methods (Hesse-Bieber, 2010). For my study in particular, some advantages included obtaining both quantitative and qualitative data to answer my research questions. Quantitative data obtained from my study provided statistically significant results and concise numbers to explain survey responses. Qualitative data from my study provided insight into the personal lens of my participants and helped me develop a deeper understanding of their individual perspectives. Nonetheless, collecting both quantitative and qualitative data required more of time, resources, and expertise to collect and analyze my data.

Reliability, Validity, and Trustworthiness

Validity and reliability are commonly viewed as important aspects of quantitative research studies that address the legitimacy and dependability of research instruments and also findings. Validity, in short, seeks to identify whether or not the instruments measure the phenomenon that they are intended to; whereas, reliability entertains whether or not the same measures could be
repeated on the same population and obtain similar results (Hesse-Bieber, 2010). In order to address validity of my mixed-methods study, the following questions from Hesse-Bieber (2010) were addressed, “Does the study give a good reason and purpose for using mixed-methods, and clearly state the mixed methods steps involved in collecting and analyzing data? How well do the researcher’s findings fit the problem? Did the research capture an understanding of the issue?” (p. 86-87). Reliability in a mixed-methods study that has a heavy qualitative component is a challenging concept to apply. For instance, in relation to reliability in mixed-methods Hesse-Bieber (2010) notes, “The idea of even entertaining a concept of reliability in general when applied to qualitative approaches to mixed methods study design almost seems like an oxymoron, because an important goal of qualitative research is to get at multiple understandings,” (p. 89). Thus, even if the design is replicated and different results are obtained, it may not necessarily mean the study was not reliable, but instead a new layer of meaning to the problem was discovered.

Criteria for evaluating qualitative research continues to expand as the discipline evolves, and researchers continue to debate the best tools and terminology to evaluate qualitative research (Lather, 1986; Lichtman, 2013). In particular, Lather (1986) proposed the metaphor “Between a rock and a soft place” to question the way validity or quality of studies from alternative and new approaches bring to qualitative research. Hence, the rock (need for trustworthiness) and soft place (neutrality and objectivity) metaphor illustrates the need for new ways to think about validating research. Credibility and trustworthiness tend to be widespread ideas used to evaluate the quality of qualitative research. Credibility suggests that findings should be evaluated from the point of view of the participants themselves, and hence, the participants are the only ones capable of judging the credibility of results (Lichtman, 2013). To address credibility for my
study, I used member-checking with participants to ensure my findings were reflecting their responses clearly and accurately. Similarly, trustworthiness, demonstrating that the findings are sound, confirmable, creditable, transferable, and dependable, can be increased by maintaining high credibility (Lichtman, 2013). To address trustworthiness in my study I used triangulation to help increase the credibility of my findings, detailed description to show how findings may be able to be transferred to other contexts, provide an audit trail to highlight every step of data analysis and confirmability, and used an inquiry audit (having an outside colleague review my findings) to help ensure findings are consistent and dependable (Creswell, 2015).

**Ethical Considerations**

It is imperative to plan and prepare for ethical concerns that may arise in research. In my study, the biggest ethical concerns that I foresaw arising included protecting participants’ privacy and confidentiality of responses, and protecting participants’ personal data. To ensure participants privacy, confidentiality, and personal data were protected, a proposal of my study first went through an IRB review. Upon passing the IRB review, informed consent forms were administered to all participants first and foremost, and stored in a locked and secure location. Accordingly, all other data collected was stored in a locked, secure location, or on a locked and encrypted, password protected computer. As a researcher, I have an ethical responsibility toward my participants to protect their responses and it is important that I closely follow IRB protocol procedures and communicate effectively to insure all participants understand the informed consent forms and process throughout the entirety of my research study.
Instrument Construction and Rationale

I created the survey instrument used for this study and it was adapted from two fields of research, teacher education research and bilingual education research (Doorn & Schumm, 2013; Larrivee & Cook, 1979; McFarlane, Hoffman, & Green, 1997; Ponterotto, Baluch, Greig, & Rivera, 1998; Shin & Krashen, 1996; Surrain Aguilar, Chen, Maghooli, Shin, & Luk, n.d.; Young & Tran, 1999; Tekin, 2016). Table 5 shows a summary of the studies used to create the adapted survey.

Using these previous studies to create an adapted survey was necessary because none of the previous studies had surveys that measured exactly what the proposed study is seeking to measure (preservice teachers’ attitudes and perspectives towards dual language education). To measure this, the survey includes seven sections: 1) Perceived social value of bilingualism; 2) Perceived classroom value of bilingualism; 3) Social value of bilingualism and dual language education programs in US schools; 4) Perceived pedagogical implications pertaining to bilingual education; 5) Perceived Self-Knowledge Pertaining to Dual Language Programs; 6) Perceived knowledge and familiarity with local dual language programs; 7) Perceived Self-Knowledge Pertaining to Dual Language Programs. Furthermore, I decided to include a few reversal or inverted questions to add to the validity of the study. Reversal questions seek the same information from participants but only in reverse and provide a way to minimize acquiescence (Kankaraš, Vermunt, & Moors, 2011). Likewise, while adapting statements, cognitive load was taken into account and statements were revised to exactly align and suite the target population of preservice teachers. For instance, statements were tailored to use abbreviations and language that I am confident that my target population is familiar with and have seen on a regular basis. Hence, it is possible for my survey to have a greater number of statements than previous surveys since these statements are specific and comprehensive for my target population.
Table 5. Summary of Studies Referenced to Create Adapted Survey (organized by date)

<table>
<thead>
<tr>
<th>Author</th>
<th>Population</th>
<th>Purpose</th>
<th>Instrument</th>
<th>Validation of instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larrivee &amp; Cook (1979)</td>
<td>General K-12 teachers (n: 941)</td>
<td>Attitudes toward mainstreaming special-needs children</td>
<td>Attitude Scale Likert 5pt</td>
<td>Item analysis Split-half reliability (.92) 50% return rate</td>
</tr>
<tr>
<td>Karavas-Doukas, (1996)</td>
<td>Language teachers (n: 101)</td>
<td>Attitudes towards the communicative approach</td>
<td>Attitude Scale Likert 5pt</td>
<td>Item analysis Split-half method</td>
</tr>
<tr>
<td>Shin &amp; Krashen, (1996)</td>
<td>K-12 public school teachers (n: 794)</td>
<td>Attitudes toward perception of bilingual education</td>
<td>Survey Likert 5pt</td>
<td>Piloted 70% Return rate</td>
</tr>
<tr>
<td>McFarlane, Hoffman, &amp; Green (1997)</td>
<td>Foreign language teachers (n: 86)</td>
<td>Attitudes toward the general use of technology as an educational tool</td>
<td>Attitude survey Likert scale 7pt</td>
<td>Piloted High reliability</td>
</tr>
<tr>
<td>Young &amp; Tran (1999)</td>
<td>Vietnamese Parents (n: 106)</td>
<td>Attitudes toward bilingual education</td>
<td>Survey Likert 3pt</td>
<td>Survey adapted from studies on attitudes toward bilingual education of Hmong (Shin &amp; Lee, 1996) and Korean (Shin &amp; Kim, 1999)</td>
</tr>
<tr>
<td>Doorn &amp; Schumm (2013)</td>
<td>Preservice Teachers (n: 30)</td>
<td>Attitudes regarding linguistic diversity in the general education classroom</td>
<td>Survey Likert 5pt</td>
<td>Piloted</td>
</tr>
<tr>
<td>Surrain Aguilar, Chen, Maghooli, Shin, &amp; Luk (n.d.)</td>
<td>Parents who use a language other than English at home (n: 210)</td>
<td>Perceived values of bilingualism in society and for their children</td>
<td>Survey 6pt</td>
<td>Piloted</td>
</tr>
<tr>
<td>Tekin (2016)</td>
<td>Early childhood preservice teachers (All females) (n: 9)</td>
<td>Attitudes toward bilingual early childhood education</td>
<td>Qualitative Survey</td>
<td>Recursive examination of data via peer review</td>
</tr>
</tbody>
</table>
Nonetheless, it is important to think about survey fatigue and how this may play a role in how the survey is received. The National Research Center (NRC) defines survey fatigue, “when respondents become overwhelmed with questions or the number of surveys they are asked to take,” (NRC, 2017, p. 1). Survey fatigue can produce lower response rates or surveys with missing or incomplete information. The NRC recommends lessening survey fatigue by: avoiding too much redundancy throughout surveys that ask similar questions in different ways; avoid over-surveying your audience, communicate the value of the survey; and vetting the survey yourself and/or with colleagues to modify the survey before administering it (NRC, 2017).

Although some studies shared similar populations and/or purposes (i.e., Doorn & Schumm surveyed preservice teachers and linguistic diversity), no single previous study sought to measure the population and purpose of the proposed study. Nonetheless, each previous study provided unique survey questions, data analysis measures, and validity procedures that informed the creation of the survey for this study. Various questions and statements were adapted from each study that best fit the overall goals of the present study (measure attitudes and perspectives of preservice teachers toward bilingual and dual language education). What follows, is a detailed explanation and rationale of the statements adapted from each prior study.

Table 6. Adapted Statements from Larrivee and Cook (1979)

<table>
<thead>
<tr>
<th>Larrivee and Cook (1979)</th>
<th>Adapted Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many of the things teachers do with regular students in a classroom are appropriate for</td>
<td>Many teaching strategies for monolingual English students are appropriate for English</td>
</tr>
<tr>
<td>special-needs students.</td>
<td>language learners.</td>
</tr>
<tr>
<td>Regular teachers possess a great deal of the expertise necessary to work with special-</td>
<td>Regular teachers, with ESOL training, possess a great deal of the expertise</td>
</tr>
<tr>
<td>needs students.</td>
<td>necessary to work with ELLs</td>
</tr>
</tbody>
</table>
Larrivee and Cook (1979)’s attitude survey, constructed using summated ratings, was used to investigate the effect of different variables on the attitudes of classroom teachers toward mainstreaming children with special needs. The sample size was large, nearly 1,000 public school teachers across 6 states in the US and were selected using a multistage random sampling process. The attitude scale was revised after an item analysis was performed and 30 items with the highest item scale correlation coefficients were chosen to form the final version of the scale. Additionally, the split-half reliability of the revised scale was 0.92 (Spearman-Brown reliability coefficient). The analysis of the scale included step-wise multiple regression to study the effect of the variables on the teachers’ attitudes. Both of these adapted statements had to do with teacher attitudes and perception of degree of success, and were the variable that most highly correlated in the study (0.360). Although this study did not focus on bilingual education, it did stem from teacher education and provided the grounds for two statements to addressing preservice teachers’ perspectives on teaching strategies while working with dual language learners.

Table 7. Adapted Statements from Shin and Krashen (1996)

<table>
<thead>
<tr>
<th>Shin and Krashen (1996)</th>
<th>Adapted statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you believe that high levels of bilingualism can lead to practical, career related advantages?</td>
<td>Higher levels of bilingualism can lead to practical career related advantages and higher knowledge and mental skills.</td>
</tr>
<tr>
<td>Do you believe that high levels of bilingualism can result in higher development of knowledge or mental skills?</td>
<td></td>
</tr>
</tbody>
</table>

68
Table 7. (Continued)

<table>
<thead>
<tr>
<th>Shin and Krashen (1996)</th>
<th>Adapted statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>If a student is not proficient in English, do you believe the child should be in a classroom learning his/her first language (reading and writing) as part of the school curriculum?</td>
<td>Students not proficient in English should be learning in their first language as a part of the school curriculum.</td>
</tr>
<tr>
<td>If a student is not proficient in English, do you believe the child should be in a classroom learning subject matter (e.g. math, science, etc.) in his/her first language?</td>
<td>If a second language learner is in an English only classroom, they will learn English better.</td>
</tr>
<tr>
<td>Do you believe that if a second language learner is in an English-only class he/she will learn English better?</td>
<td>Students must learn English as quickly as possible even if it means the loss of their native language.</td>
</tr>
<tr>
<td>Do you believe students must learn English as quickly as possible even if it means the loss of the native language?</td>
<td></td>
</tr>
</tbody>
</table>

Shin and Krashen (1996)’s survey was created to investigate how bilingual education is perceived by teachers. 794 public school teachers (56% elementary school & 44% secondary school) participated in the survey, which was created using a 5pt Likert scale. Topics of the survey included 5 sections: 1) ESL training/credentials; 2) Number of years of teaching experience; 3) Portion of ELs in classroom; 4) Self-rating of proficiency in another language; 5) Attitudes toward bilingual education. The survey was analyzed using exploratory factor analysis via Principal Axis Factoring, correlations between support for bilingual education and teacher background were measured using multiple regression. The survey was piloted and revised. The first two questions in the table showed substantial agreement with the underlying principles of bilingual education (85% and 71% respectively). The third and fourth questions received slightly above 50% agreement (54 and 56% respectively) and pose an interesting question to ask preservice teachers to see if they will have similar agreement or more/less than the teachers in
Shin and Krashen’s study. The final two questions provided good examples of inverted questions (41% and 31% agreement respectively) to check the validity of participants’ responses.

Table 8. Adapted Statements from McFarlane, Hoffman, and Green

<table>
<thead>
<tr>
<th>McFarlane, Hoffman, and Green (1997)</th>
<th>Adapted statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with technology makes me nervous</td>
<td>Working with ELLs makes me nervous.</td>
</tr>
<tr>
<td>I feel confident with my ability to learn about technology</td>
<td>I feel confident about my abilities to work with ELLs.</td>
</tr>
<tr>
<td>I don’t expect to use technology much at work</td>
<td>I don’t expect to be asked questions from parents about dual language schools in my area.</td>
</tr>
</tbody>
</table>

McFarlane, Hoffman, and Green (1997)’s pre/post attitude survey was created to study attitudes of 86 foreign language teachers toward the general use of technology as an educational tool. Their survey was created on a 7pt Likert scale ranging from not true-very true. Correlations from the pre and posttest were measured and significant correlations among the pre and post test scores were found. A pilot study was conducted prior to administering the survey and showed high reliability (Cronbach alphas of .92 and .95). The three adapted statements were most relevant to the present study and all showed significant pre/post correlations. McFarlane, Hoffman, and Green also used a scale ranging from “Not all true of me to Very much true of me” which inspired the “Not like me to Very much like me” scale which two sections of the present survey use.
Table 9. Adapted Statements from Ponterotto, Baluch, Greig, and Rivera (1998)

<table>
<thead>
<tr>
<th>Ponterotto, Baluch, Greig, &amp; Rivera (1998)</th>
<th>Adapted statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students should learn to communicate in English only.</td>
<td>Students should learn to communicate in English only.</td>
</tr>
<tr>
<td>I can learn a great deal from students with culturally different backgrounds</td>
<td>I can learn a great deal from students with culturally and linguistically different backgrounds.</td>
</tr>
<tr>
<td>Regardless of the makeup of my class, it is important for students to be aware of multicultural diversity.</td>
<td>Regardless of the makeup of my class, it is important for students to be aware of multicultural and linguistic diversity.</td>
</tr>
<tr>
<td>I find teaching a culturally diverse group of students rewarding.</td>
<td>I find teaching a culturally diverse group of students rewarding.</td>
</tr>
<tr>
<td>Multicultural training for teachers is not necessary.</td>
<td>Linguistic diversity awareness or ESOL training for teachers is not necessary.</td>
</tr>
<tr>
<td>Multicultural awareness training can help me to work more effectively with a diverse student population.</td>
<td>Linguistic diversity or ESOL training can help me to work more effectively with a diverse student population.</td>
</tr>
</tbody>
</table>

Ponterotto, Baluch, Greig, Rivera (1998) created a survey using 5pt Likert scales to develop and assess 220 teachers’ multicultural awareness and sensitivity. Surveys were analyzed using Chang’s Test of connotatively consistent versus connotatively inconsistent items, an item analysis was performed, and factor structuring. The survey was also piloted with advanced graduate students and received a coefficient alpha score of .82. The chosen statements from Ponterotto, Baluch, Greig, and Rivera to be adapted for the present survey displayed significant correlations and best fit the studies purpose and provided statements directly related to teachers and multicultural awareness that could be easily manipulated to fit into the survey’s theme of dual language education and promoting linguistic diversity.
Table 10. Adapted Statements from Young and Tran (1999):

<table>
<thead>
<tr>
<th>Young and Tran (1999)</th>
<th>Adapted statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>It would be confusing Vietnamese students to have classes in Vietnamese and English at the same time.</td>
<td>It would be confusing for English language learners (ELLs) to have classes in their first language and English at the same time.</td>
</tr>
<tr>
<td>Bilingual education allows children to keep up in subject matter while acquiring English.</td>
<td>Bilingual education allows children to keep up in subject matter while acquiring English.</td>
</tr>
</tbody>
</table>

Young and Tran (1999)’s survey investigated 106 Vietnamese parents’ attitudes toward bilingual education. The survey followed a 3pt scale and included 5 Demographic questions (gender, length of residency, educational level of father/mother, family income), followed by 3 sections: 1) Language used in the family/proficiency level of parents; 2) Attitudes toward enrolling children in bilingual vs English only classroom; 3) Attitudes toward statements of rationale of bilingual education. An analysis of variance and Chi square were performed. The authors do not mention whether or not the survey instrument was piloted, however the survey was adapted from studies on attitudes toward bilingual education of Hmong (Shin & Lee, 1996) and Korean (Kim, Shin, & Carey, 1999) parents. The first adapted statement, an inverted or negatively written statement, received significant findings (34.7% agreement and 65.3% disagreement) and provides a unique and relevant scenario for preservice teachers to think about in regards to dual language education. The second statement received significant and high levels of agreement among parents (81%) and is also a relevant and meaningful statement to ask preservice teachers.
Table 11. Adapted Statements from Doorn and Schumm (2013):

<table>
<thead>
<tr>
<th>Doorn and Schumm (2013)</th>
<th>Adapted statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>When possible, it is best for students to maintain their native language, as well as</td>
<td>When possible, it is best for students to maintain their native language alongside</td>
</tr>
<tr>
<td>learn English.</td>
<td>learning English.</td>
</tr>
<tr>
<td>Bilingual education allows minority language speakers to resist assimilation and avoid</td>
<td>Bilingual education allows minority language speakers to resist assimilation and</td>
</tr>
<tr>
<td>learning the dominate language.</td>
<td>avoid learning the dominate language.</td>
</tr>
<tr>
<td>The United States is unlike many other multilingual nations of the world and would</td>
<td>The US would benefit from developing more K-12 dual language programs.</td>
</tr>
<tr>
<td>benefit from developing more bilingual programs for students at all age levels.</td>
<td></td>
</tr>
<tr>
<td>Proficiency in not only English but also another language or languages should be</td>
<td>Proficiency in another language should be promoted for all students in the US.</td>
</tr>
<tr>
<td>promoted for all students in the United States.</td>
<td></td>
</tr>
<tr>
<td>Because of current and future demographic trends in our nation, all individuals</td>
<td>All preservice teachers should be trained to work with ELLs</td>
</tr>
<tr>
<td>preparing to be teachers in the United States should be trained to work with English</td>
<td></td>
</tr>
<tr>
<td>Language Learners (ELL) and should receive English for Speakers of Other Language (ESOL)</td>
<td></td>
</tr>
<tr>
<td>endorsement/certification.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All preservice teachers should be well informed about dual language programs in</td>
</tr>
<tr>
<td></td>
<td>their local area.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Doorn and Schumm (2013)’s questionnaire, following a 5pt Likert scale, was created to
investigate 30 preservice teachers’ attitudes toward linguistic diversity in the general education
classroom. SPSS was used to determine the mean level of agreement for the questionnaire items.
The questionnaire was designed with assistance of faculty members with expertise in language
learning, literacy, and instruction, and preservice teacher education, and using information from
the *Working Group on ELL Policy* website and was piloted. All of the chosen adapted statements
from Doorn and Schumm received fairly high means scores and fit the purpose of the present study, as well as the population (preservice teachers), however many statements were very wordy and have been revised for quicker and more comprehensible readability.

Table 12. Adapted Statements from Surrain Aguilar, Chen, Maghooli, Shin, and Luk (n.d.)

<table>
<thead>
<tr>
<th>Surrain Aguilar, Chen, Maghooli, Shin, &amp; Luk, n.d.</th>
<th>Adapted Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking more than one language will help my child understand people from different cultural backgrounds</td>
<td>Speaking more than one language will help children better understand people from different cultural backgrounds.</td>
</tr>
</tbody>
</table>

Surrain Aguilar, Chen, Maghooli, Shin, and Luk (n.d.)’s survey looked at 210 parents’ (who use a language other than English at home) perceived values of bilingualism in society and for their children. Two scales were created, one measuring parents’ perceptions of bilingualism and another measuring parents’ perceptions of bilingualism pertaining to their child. Findings showed that both scales were strongly positively correlated. Additionally, scales had strong internal reliability and received high Cronbach’s alphas (.88 and .89). The statement adapted from this survey was unique to any other survey I looked at and posed a relevant question for preservice teachers and their perspectives regarding dual language education.

Table 13. Researcher Created Statements

<table>
<thead>
<tr>
<th>Created Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would be interested in working in a school with a dual language program.</td>
</tr>
<tr>
<td>In the future, I could see myself working in a dual language school.</td>
</tr>
<tr>
<td>I see myself as someone comfortable with teaching linguistically diverse students.</td>
</tr>
<tr>
<td>In the future, I think I will be even more comfortable with teaching linguistically diverse students.</td>
</tr>
<tr>
<td>I am aware of multiple dual language programs in my area.</td>
</tr>
<tr>
<td>If asked by parents, I could recommend a local dual language program for their child off the top of my head.</td>
</tr>
<tr>
<td>All teachers who teach at schools with dual language programs must be bilingual.</td>
</tr>
</tbody>
</table>
Table 13. (Continued)

Created Statements

<table>
<thead>
<tr>
<th>Created Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monolingual English teachers can be an asset to schools with dual language programs</td>
</tr>
<tr>
<td>I cannot teach at a school with a dual language program if I only speak English.</td>
</tr>
<tr>
<td>It is important for me, as a future teacher, to be well informed of dual language programs in my area.</td>
</tr>
<tr>
<td>I wish I knew more about dual language programs in my local area.</td>
</tr>
<tr>
<td>Knowledge about local dual language programs is not important for my future as a teacher.</td>
</tr>
<tr>
<td>I see myself as someone comfortable with talking to parents about dual language programs in my area.</td>
</tr>
<tr>
<td>When I think about the future, I hope to know more about dual language schools in my area.</td>
</tr>
<tr>
<td>I wish I knew more about dual language programs in my local area.</td>
</tr>
</tbody>
</table>

These statements were created after I had reviewed the relevant literature and studies containing surveys addressing attitudes and perspectives in the fields of bilingual education and teacher education, and was still missing statements to answer questions regarding preservice teachers’ attitudes and perspectives specifically toward working at a DL school. Furthermore, many of these statements include aspirational elements, which are particularly relevant and important aspects to ask preservice teachers who differ from in-service teachers since they do not have teaching experience yet and are still aspiring and thinking about their future teaching career. Hence, it is significant to ask preservice teachers about their future aspirations and the creation of these statements were necessary to address this. I piloted these statements with a subset of the study’s population and also consulted experts in the fields of teacher education and bilingual education to review the statements, which helps to increase the content validity of the statements.
Content Review of Survey

To heighten the content validity of my survey instrument, I consulted 3 of my fellow ESOL instructors to review my survey. They had insightful remarks and critical feedback.

After reviewing my peers’ feedback, I made revisions based on their comments to better my survey. First, various small proof-reading edits were made, such as maintaining consistency with capitalization and use of periods in each question. Next, a demographic section was added at the beginning of the survey, all three suggested adding this, and I believe it is an important thing to add to gain more insight into my participants’ background. Additionally, one reviewer suggested I add the opportunity to go back in the survey and include a progress bar at the top of the survey, and I revised the survey to include both of these elements. Two reviewers provided feedback on a statement (Higher levels of bilingualism can lead to practical career related advantages and higher knowledge and mental skills) mentioning that they thought it may be better as two individual statements, and accordingly I split this statement into two statements. Finally, three short response questions, suggested by reviewers, were added: Have you ever worked, volunteered, or observed teaching in a dual language program? Were you ever educated in a dual language program? Do you know anyone who was educated in a dual language program? These additional questions provide a space for participants to have the option to reflect and elicit more information if they choose about their personal experiences with DLE, which is relevant to the goals of this study and could help with guiding interviews taking place after the surveys. All in all, the content reviewers gave great insight and helped to me to better tailor the survey to meet the needs of my participants.
**Piloted Survey Results**

In order to test the validity of my survey instrument itself before administering it to my study population, I piloted the survey with 7 past preservice teachers that have taken my ESOL courses. After filing and receiving approval from the IRB office, I emailed 20 of my past students for their optional and voluntary participation in piloting my survey, and I additionally asked for them to provide any feedback about the layout/platform of the survey itself that may be useful for revisions. 12 students responded, however only 7 students completed the survey in full. In reference to the survey design, overall, students noted that the survey platform was easy to take and navigate from their computers and/or mobile phones and that the language of the survey was clear and easy to understand.

To analyze my participants’ responses to the survey items, I used SPSS to calculate various descriptive statistics and calculated the reliability of the survey itself by calculating Cronbach’s Alpha. Table 6 displays the mean and standard deviation scores from each agreement statement in the survey. Table 7 reflects the calculated Cronbach’s Alpha.

Table 14. Descriptive Statistics from Pilot Study

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Avg Mean</th>
<th>Standard Deviation</th>
<th>Avg Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 1</td>
<td>4.86</td>
<td>-</td>
<td>0.378</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.14</td>
<td>-</td>
<td>1.345</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.00</td>
<td>3.75</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.71</td>
<td>-</td>
<td>0.756</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.14</td>
<td>-</td>
<td>0.378</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.86</td>
<td>-</td>
<td>0.690</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.86</td>
<td>-</td>
<td>0.378</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.00</td>
<td>4.344</td>
<td>0.00</td>
<td>0.2136</td>
</tr>
<tr>
<td></td>
<td>5.00</td>
<td>-</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.00</td>
<td>-</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Section 2</td>
<td>4.86</td>
<td>-</td>
<td>0.378</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.86</td>
<td>-</td>
<td>0.378</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.71</td>
<td>4.785</td>
<td>0.488</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.71</td>
<td>-</td>
<td>0.488</td>
<td>1.732</td>
</tr>
</tbody>
</table>
After checking the range of all responses to the 33 survey items to ensure that all values given were within the range of the 1-5 scale, I computed various descriptive statistics. Table 5 reflects the individual item mean, average mean, individual item standard deviation, and average standard deviation scores for each survey item and is organized by survey sections. On average, the mean scores reflected most of my general anticipations of participants’ responses and the standard deviations additionally seem to be relatively low. For instance, many items had means of 5, or very close to 5, indicating strong participant agreement and congruency. Furthermore,
statements purposely written in a reversed manner typically received lower scores closer to 1, as anticipated.

Table 15. Cronbach’s Alpha

<table>
<thead>
<tr>
<th>Section</th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Survey</td>
<td>0.695</td>
<td>33</td>
</tr>
<tr>
<td>Section 1</td>
<td>0.539</td>
<td>4</td>
</tr>
<tr>
<td>Section 2</td>
<td>0.543</td>
<td>2</td>
</tr>
<tr>
<td>Section 3</td>
<td>0.923</td>
<td>4</td>
</tr>
<tr>
<td>Section 4</td>
<td>0.676</td>
<td>8</td>
</tr>
<tr>
<td>Section 5</td>
<td>0.730</td>
<td>7</td>
</tr>
<tr>
<td>Section 6</td>
<td>0.567</td>
<td>5</td>
</tr>
<tr>
<td>Section 7</td>
<td>0.594</td>
<td>7</td>
</tr>
</tbody>
</table>

Cronbach’s alpha is used to assess the internal consistency of a set of items (Research Data Services & Sciences, 2018). After computing the Cronbach’s Alpha for all of the 33 statements in the survey, I met with a specialist at C.O.R.E in the measurement department at USF and she suggested I compute the Cronbach’s Alpha for each section of the survey. Computing the Cronbach’s Alpha for each section allowed me to see how each section correlated individually. Some sections, such as sections 3 and 5 showed fairly positive and high correlations. Whereas, the other sections showed lower numbers for the Cronbach’s Alpha. Overall, the Cronbach’s Alpha obtained for all survey items (0.695) is acceptable for the small pilot study, as Cronbach’s Alpha’s between 0.65-0.8 (or higher) are generally seen as acceptable, although not necessarily desirable (Research Data Services & Sciences, 2018).

Students likewise had insightful comments for the open ended questions. Table 16 summarized their open-ended responses.
Table 16. Piloted Survey Results to Open-ended Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there anything else you would like to add about your perspectives toward DLE?</td>
<td>I feel like I do not know what dual language programs are available locally</td>
</tr>
<tr>
<td></td>
<td>I had not much training I can apply as a preservice teacher. I need more knowledge and application on DLE</td>
</tr>
<tr>
<td></td>
<td>I think that DLE would help ELL students substantially more than they are now- it would provide more equitable opportunities for them to learn and grow without as much frustration as they would feel strictly in an English speaking classroom</td>
</tr>
<tr>
<td>Are there any other questions you think should have been included in this survey?</td>
<td>There could have been questions about teaching content to students who are English language learners or CRT</td>
</tr>
<tr>
<td></td>
<td>Where do I get information about dual language programs in my area?</td>
</tr>
</tbody>
</table>

Table 16 reflects students’ responses to the two open-ended questions included in the survey. These responses highlighted much of my anticipated themes that may arise from these questions, such as feelings of uncertainly about local DLE programs and lack of training and knowledge about DLE. Additionally, participants posed interesting ideas of questions to add, such as an open-ended question about where they find information about DLE.

In sum, piloting my survey helped me gain valuable insight into my participants’ potential responses, mindset, and understanding of my survey questions. I was also able to test the use and analysis features of using Qualtrics to administer and analyze my survey results. Through piloting my survey, I have been able to increase the validity of my instrument and find areas to make revisions to better the survey overall.
CHAPTER 4
RESULTS

This chapter will discuss the results of the pre and post survey and interviews with preservice teachers pertaining to their attitudes and perspectives towards DLE and ELs as they progress through a one semester ESOL course. In the first section, a summary of the results is given in a concise table format to review how the results answered each of the study’s research questions. Next, quantitative results are discussed separately, followed by a detailed explanation of qualitative results. The chapter concludes with a brief summary of both quantitative and qualitative results.

Data Results Summary

This chapter will provide an overview of the results from this study. To begin, quantitative and qualitative results targeting each of the guiding research questions will be discussed. Later, both quantitative and qualitative results will be examined in depth in two separate sections. Finally, a summary of the overall results will be considered to conclude this chapter.

Table 17. Summary of Research Questions and Results

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Quantitative Results</th>
<th>Qualitative Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1: What impact does taking an ESOL course have on preservice teachers’ attitudes and perspectives towards dual language education?</td>
<td>Overall positive shift in attitudes Total mean scores from pre survey increased in post survey (159.95-&gt; 164.54), however t-test reflected that the difference was not statistically significant Nonetheless, totals still increased to reflect a positive shift</td>
<td>All participants, who were interviewed, expressed experiencing a positive shift in their attitudes and perspectives Participants’ responses showed unique intensities of this shift with specific stories and examples of how their attitudes shifted and changed Many participants explained that they felt more prepared and knowledgeable to work with ELs and towards the prospect of DLE</td>
</tr>
<tr>
<td>Research Questions</td>
<td>Quantitative Results</td>
<td>Qualitative Results</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>R2. Is there a significant difference in change in attitude between students taking the course online vs. face to face?</td>
<td>The F2F group showed a greater increase in attitudes than the online group, however it was not calculated to be statistically significant. F2F group increased from 159 to 170. Online group decreased by roughly 1pt from 160.69 to 159.84 from pre to post, which was not statistically significant and virtually reflects no change.</td>
<td>More participants from the F2F class volunteered to be interviewed. All participants (11) from F2F class participated in interviews, voluntarily, whereas, 3 (out of 13) participants from the online class participated in interviews. F2F participants, on the whole, seemed to have more detailed examples and explanations for how their attitudes and perspectives changed. Online class participants seemed to have less opportunities to work with ELs in their internships than the F2F group. Generally, participants mentioned that they have not been informed about local schools with DLEPs, apart from an activity that they conducted within this course that had them perform a web-search for local programs. Only one student mentioned knowledge of a local DLEP from their own means/experience from a family member who had a child in the local program. All other participants mentioned not getting information from anyone else in their program/local interning schools about DLEPs. Place of origin seemed to play an interesting role on participants’ attitudes and perspectives. Participants from rural areas with little or no ELs seemed to experience greater and higher expressed attitude increases towards ELs and DLE. Rural area origins also tended to reflect participants having few or no experiences with bilingualism or much diversity until they moved to an urban area to start school. Participants from urban areas still showed positive shifts in attitudes, but at a lesser intensity compared to those from rural places. These participants seemed to experience a positive shift in greater awareness and more reflection towards ELs and DLE and comparing/reflecting upon their own past experiences with their own bilingual backgrounds or having ELs in their schools growing up.</td>
</tr>
<tr>
<td>R3: How are preservice teachers informed about what schools have dual language programs in their area?</td>
<td>Pre survey: 2/24 answered that they agree with the statement, “I am aware of multiple dual language programs in my area”, all other responses were either strongly disagree, disagree, or undecided. Post survey: 4/24 answered that they agree with the statement, “I am aware of multiple dual language programs in my area”, all other responses were either strongly disagree, disagree, or undecided.</td>
<td></td>
</tr>
<tr>
<td>R4: What relationship may exist between attitudes, perspectives, and preservice teachers own personal experiences with bilingualism and experiences with diversity, and/or place of origin?</td>
<td>Participants from urban locations noted the smallest increase from pre/post survey, two responses stayed the same, and one decreased. Participants from suburban areas scores all increased from the pre to post survey by either a few or several points. Participants from rural areas reflected two distinct trends. Some scores increased by several points, others decreased by a few points.</td>
<td></td>
</tr>
</tbody>
</table>
Quantitative Data Results

Survey Results

Table 18. Paired Samples Statistics Pre and Post Total

<table>
<thead>
<tr>
<th>Pair</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total_Pre</td>
<td>159.9583</td>
<td>24</td>
<td>14.20802</td>
<td>2.90020</td>
</tr>
<tr>
<td>Total_Post</td>
<td>164.5417</td>
<td>24</td>
<td>17.94188</td>
<td>3.66237</td>
</tr>
</tbody>
</table>

Table 19. Paired Differences Pre and Post Total

<table>
<thead>
<tr>
<th>Pair</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total_Pre - Total_Post</td>
<td>4.58333</td>
<td>25.34787</td>
<td>5.17411</td>
<td>Lower -15.2868</td>
<td>-0.886</td>
<td>23</td>
<td>0.385</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Upper 6.12013</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 19 shows there was a positive increase from the pre to the post survey in the total means score for the survey, however after performing a paired t-test, this difference was determined not to be statistically significant, as the p-value obtained (0.385) is larger than 0.05. Nonetheless, total mean scores still increased, from 159.95 to 164.54 (as shown in Table 10), reflecting a positive shift in participants’ attitudes overall.

Table 20. Pared Samples Statistics F2F

<table>
<thead>
<tr>
<th>Pair</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2F_Total_Pre</td>
<td>159.0909</td>
<td>11</td>
<td>11.94533</td>
<td>3.60165</td>
</tr>
<tr>
<td>F2F_Total_Post</td>
<td>170.0909</td>
<td>11</td>
<td>18.75342</td>
<td>5.65437</td>
</tr>
</tbody>
</table>
Table 21. Pared Differences F2F

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2FTotal_Pre - F2FTotal_Post</td>
<td>-11.000</td>
<td>18.91560</td>
<td>5.70327</td>
<td>Lower -23.70767 Upper 1.70767</td>
<td>-1.929</td>
<td>10</td>
<td>.083</td>
</tr>
</tbody>
</table>

As shown in Table 20, the results reflect a positive increase from the pre-survey to the post-survey for the F2F class of 11.000 pts, from 159.09 to 170.09. This increase is not statistically significant with a calculated p-value of 0.083, which is greater than 0.05, as indicated in Table 21. This increase still demonstrates that participants from the F2F class had an increase in attitude levels from the pre to post survey even though it was not calculated to be statistically significant.

Table 22. Paired Samples Statistics Online

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online_Total_Pre</td>
<td>160.6923</td>
<td>13</td>
<td>16.33189</td>
<td>4.52965</td>
</tr>
<tr>
<td>Online_Total_Post</td>
<td>159.8462</td>
<td>13</td>
<td>16.48659</td>
<td>4.57256</td>
</tr>
</tbody>
</table>

Table 23. Paired Samples Test Online

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OnlineTotal_Pre - Online_Total_Post</td>
<td>.84615</td>
<td>19.22605</td>
<td>5.33235</td>
<td>Lower -10.77203 Upper 12.46434</td>
<td>.159</td>
<td>12</td>
<td>.877</td>
</tr>
</tbody>
</table>

The results reflect a decrease from the pre-survey to the post-survey for the online class of less than 1tpt (0.84615) from 160.69 to 159.84, as shown in Table 22. This decrease was not statistically significant with a calculated p-value of 0.877. This decrease is so minimal and not
statistically significant so much that it demonstrates that participants from the online class virtually had no change in attitude levels from the pre survey to the post.

Table 24. Comparing F2F vs Online p-values

<table>
<thead>
<tr>
<th>Class</th>
<th>Pre</th>
<th>Post</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2F</td>
<td>159.09</td>
<td>170.09</td>
<td>.083</td>
</tr>
<tr>
<td>Online</td>
<td>160.69</td>
<td>159.84</td>
<td>.877</td>
</tr>
</tbody>
</table>

As previously mentioned, the F2F class’s attitudes increased by several points, whereas the online class showed a slight decrease of less than a point, illustrating virtually no difference between the pre and post survey for the online group. This noticeable distinction highlights the visible difference between the F2F class and online class, even though neither were statistically significant findings. The survey data reveals that the F2F classes’ attitudes increased in a positive manner, whereas the online classes’ attitudes did not increase. Thus, the F2F class experienced greater and more positive attitude shifts than the online group.

**Cronbach’s Alpha**

Table 25. Cronbach’s Alpha

<table>
<thead>
<tr>
<th>Section</th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Survey</td>
<td>0.725</td>
<td>41</td>
</tr>
<tr>
<td>Section 1</td>
<td>0.575</td>
<td>6</td>
</tr>
<tr>
<td>Section 2</td>
<td>0.567</td>
<td>5</td>
</tr>
<tr>
<td>Section 3</td>
<td>0.925</td>
<td>4</td>
</tr>
<tr>
<td>Section 4</td>
<td>0.655</td>
<td>8</td>
</tr>
<tr>
<td>Section 5</td>
<td>0.776</td>
<td>7</td>
</tr>
<tr>
<td>Section 6</td>
<td>0.577</td>
<td>7</td>
</tr>
<tr>
<td>Section 7</td>
<td>0.654</td>
<td>4</td>
</tr>
</tbody>
</table>
Cronbach’s Alpha increased slightly for the full survey from the pilot study in all sections except section 4. The calculated Cronbach’s Alpha for the full survey, 0.725, is not exceptionally high; however, did increase from the pilot study.

Survey Open-Ended Questions Results

Table 26: Q: Have you ever worked, volunteered, or observed teaching in a dual language program?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>11</td>
<td>45%</td>
<td>I have not, no, not yet, my community never had any I have not had the opportunity I have worked as a substitute teacher in a DL program in the past I have observed many classrooms where students are gathered for ELL practice</td>
</tr>
<tr>
<td>Yes</td>
<td>13</td>
<td>54%</td>
<td>I observed a school in Costa Rica I have observed in my mom’s class, she is a certified ESOL teacher</td>
</tr>
</tbody>
</table>

As reflected in Table 26, more participants, thirteen, had experienced a DL program in some way (worked, volunteered, or observed) than not, eleven. Of the students who had experienced a DL program before, most mentioned experiences of observing programs and one mentioned having the opportunity to substitute teach in a school with a DL program. Those who had not experienced a DL program mentioned reasons such as not having the opportunity to encounter a DL program yet in their academic career due to geographical restrictions.
Table 27. Q: Were you ever educated in a dual language program?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Descriptions</th>
</tr>
</thead>
</table>
| No       | 21        | 87%     | No, I took 5 years of Spanish from middle to high school but it was voluntary  
No, this is my first time being educated about it. At the time (when in K-12 school) I was not familiar with these kinds of programs  
No, I have not been in a DL program yet in my career  
I took Spanish for 12 years  
No, but I took Spanish classes  
N, I have never experienced DL in school  
No, strictly English |
| Yes      | 3         | 12.5%   | Yes, all through elementary and middle school |

Only a handful, three, of participants responded yes to being educated in a dual language program, as displayed in Table 27. The majority that noted that they were not educated in a dual language program mentioned, however, that many of them experienced language classes, mainly Spanish, throughout their education. Another mentioned that when she was growing up she really did not know that dual language programs even existed since there were no local programs around her.

Table 28. Q: Do you know anyone who was educated in a dual language program?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Descriptions</th>
</tr>
</thead>
</table>
| No       | 16        | 66.6%   | Yes (ESOL classes in my elementary school)  
One of my family members  
The children I nannied for went to a Montessori school and would come home from their kindergarten class saying “hello” and “I’m hungry” as well as other different words such as “orange, ice cream, and fork” around the house in Spanish. They seemed to be grasping the concept easily hearing the different languages around them in the classroom |
| Yes      | 8         | 33.3%   | |

More participants did not know of anyone who was educated in a dual language program than those who did, as noted in Table 28, Sixteen participants noted not knowing anyone, whereas eight mentioned knowing someone who participated in a dual language program. Of the participants who did
know someone in a DL program, examples from nanny jobs, their personal education background, and their internships were referenced.

Table 29. Q: After Taking an ESOL course, how comfortable are you with ESOL students?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Quite</td>
<td>2</td>
<td>8.3%</td>
<td></td>
</tr>
<tr>
<td>Not very comfortable, but more confident</td>
<td>1</td>
<td>4.1%</td>
<td>Still not very comfortable, but definitely more comfortable than I was before taking this course</td>
</tr>
<tr>
<td>Comfortable but not fully confident</td>
<td>1</td>
<td>4.1%</td>
<td>I am comfortable but not fully confident</td>
</tr>
<tr>
<td>Somewhat</td>
<td>6</td>
<td>25%</td>
<td>Fairly comfortable I am somewhat comfortable. I will become more comfortable as I progress</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I am semi comfortable, I feel more equipped with tools to work with ESOL students but I know I still have a lot to learn.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>More comfortable than I was before this course. I am aware of different strategies that I can take place to be the most beneficial to the student</td>
</tr>
<tr>
<td>More comfortable than before</td>
<td>4</td>
<td>16.6%</td>
<td>More comfortable but I still need to learn more to feel comfortable in myself to teach ESOL students</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>More comfortable that I started More comfortable than with no knowledge at the beginning</td>
</tr>
<tr>
<td>Comfortable</td>
<td>4</td>
<td>16.6%</td>
<td>Gained a lot of confidence in this course I feel confident in my ability to teach ESOL students</td>
</tr>
<tr>
<td>Very Comfortable</td>
<td>5</td>
<td>20.8%</td>
<td></td>
</tr>
<tr>
<td>Was comfortable before course</td>
<td>1</td>
<td>4.16%</td>
<td>Even before the course I was comfortable with ESOL students</td>
</tr>
</tbody>
</table>

Table 29 highlights participants noted varying degrees of comfort with ESOL students after taking an ESOL course. A few mentioned not feeling comfortable, but feeling more confident and a couple mentioned not being comfortable. Nonetheless, the majority of participants revealed higher levels of comfort and heightened confidence from the course to work with ESOL students in the future.
Table 30. Q: After taking an ESOL course, how comfortable are you with the prospect of dual language education?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undecided</td>
<td>1</td>
<td>4.16%</td>
<td></td>
</tr>
<tr>
<td>Fairly/somewhat comfortable</td>
<td>6</td>
<td>14.4%</td>
<td>Fairly comfortable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Somewhat comfortable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6/10</td>
</tr>
<tr>
<td>More comfortable</td>
<td>4</td>
<td>16.6%</td>
<td>I am getting more comfortable to it</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>More comfortable, but not fully</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>More comfortable than before</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I am more open to it and looking forward to ESOL 2 and learning more about ESOL</td>
</tr>
<tr>
<td>Pretty Comfortable</td>
<td>1</td>
<td>4.16%</td>
<td></td>
</tr>
<tr>
<td>Comfortable</td>
<td>3</td>
<td>12.5%</td>
<td>Very comfortable, I learned a lot about different programs throughout the local area to better assist ELL learners</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I think DL education is very important and I am very comfortable with it</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I would be very interested in learning more and potentially working in a DL environment</td>
</tr>
<tr>
<td>Very Comfortable</td>
<td>9</td>
<td>37%</td>
<td></td>
</tr>
</tbody>
</table>

Similar to the previous question, participants noted an array of comfort levels towards the future prospect of DLE, as reflected in Table 30. Only one participant noted feeling undecided, the rest of the participants responded from somewhat comfortable to very comfortable. Participants mentioned specifically feeling more comfortable that they did before taking the course, learning a lot, and looking forward to future ESOL courses to learn even more.
Table 31. Q: Is there anything else you would like to add about your perspectives toward DLE?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>3</td>
<td>12.5%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>14</td>
<td>58%</td>
<td>I can’t wait to learn more in my next two ESOL courses</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I would like to know more in order to be more comfortable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>It may be tough to teach at a DL school considering I am not proficient in</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the Spanish Language, however, it would be interesting to learn more about</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DL programs</td>
</tr>
<tr>
<td>Desire to learn more about ESOL students and</td>
<td>3</td>
<td>12.5%</td>
<td>DLE is a great concept that will lead to student success</td>
</tr>
<tr>
<td>DLE</td>
<td></td>
<td></td>
<td>I believe that it is important for ESOL students to have access to DLE</td>
</tr>
<tr>
<td>Importance of DLE</td>
<td>2</td>
<td>8.3%</td>
<td></td>
</tr>
<tr>
<td>Desire to experience DLE hands on</td>
<td>1</td>
<td>4.16%</td>
<td>I would like to experience a DL school first hand</td>
</tr>
<tr>
<td>Praising instructor</td>
<td>1</td>
<td>4.16%</td>
<td>Professor Kylie Ross did an excellent job of sparking my interest in ESOL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>students teaching and learning. She is very knowledgeable at explaining</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>content until she knew that we understood it. She explained the material</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>in more than one way if I didn’t understand right away. She made class very</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>interesting.</td>
</tr>
</tbody>
</table>

Participants had a variety of additional information that they added about their perspectives towards DLE as reflected in Table 30. Some mentioned that they were eager to learn more in their sequential ESOL courses (ESOL 2 and ESOL 3). Others noted that they thought DLEPs were important programs that help lead to student success and that ESOL students in particular should have access to more DLEPs. One student mentioned the desire to experience a DL setting first hand. Finally, one participant used this space to praise me, the professor of the course and commented on my ability to spark her interest in ESOL, knowledge base, and ability to explain material in diverse ways.
Qualitative Data Results

In this section, participants’ responses from interviews will be discussed in depth to highlight trends from the qualitative portion of this study. Pseudonyms are used to protect the identity of each participant. This section begins with a brief description of overall trends, following by a detailed exploration of each trend with quotes and direct lines from participants’ interviews.

Overall Tends from Interviews

Interviews with participants yielded insightful discussion and an overall positive shift in attitudes among participants towards DLE and EL students. All participants interviewed noted a positive progression through the ESOL course and with their perspectives and attitudes towards DLE and EL students. That said, participants had unique intensities of this shift and many distinct stories and examples that they shared. For instance, many participants explained that after taking the
course, they felt more prepared and knowledgeable to work with ELs and felt more confident than they did at the beginning of the semester. Others mentioned feeling hopeful and equipped to work with ELs and also positive towards the prospect of possibly working in a DL school someday. Moreover, all interview participants mentioned positive experiences with taking ESOL I and shared examples of how the course specifically helped them.

Another reoccurring theme from interviews included the impact of participants’ cooperating teachers (CTs) on their views of EL students and bilingual education. Furthermore, it seemed that participants who had many ELs in their interning classrooms and were able to see how their CT interacted with them up close seemed to show greater positive shifts in attitudes than those who did not have a lot of ELs in their interning classrooms. Controversy, participants with less or no ELs in their field experiences seemed to have more of a negative effect or neutral effect on participants’ abilities to connect with the course material and attitudes towards ELs. Additionally, participants showed desires to visit and/or experience teaching in a DLE setting. Some mentioned that the prospect of having a field experience at a school with a DL program would be a good opportunity for them to really see how DL programs function and provide a space for them to use more of the strategies they learned throughout the course. Likewise, participants explained lacking knowledge of local DLE programs. Some remembered a few programs locally that they learned about from an ESOL class activities, however, only one student knew of any local DLE programs in the area before the course.
Detailed Exploration of Major Trends

Shifting Perspectives

As previously mentioned, participants highlighted a variety of perspectives towards DLE and EL students and their personal testimonies and examples will be described in this section. Tilly (pseudonyms are used for all participants) reflected that her perspectives and attitudes greatly shifted throughout the course to help her see the large need for more DL programs to be present in local schools and mentioned that the course opened her eyes to DL learning completely, as she had not even known what a DL program was before beginning the course. Similarly, Maya mentioned not knowing much about DL programs before the course and that her perspectives changed towards seeing the benefits of providing ELs academic content in their first language and how it would have been beneficial for children she worked with in her own internship. Gia, notwithstanding, came into the course with a background of substitute teaching at DL school in the past and noted that her perspectives changed to become even more positive about DL education after she noted learning about the current research in the fields of SLA pointing to the success and enhancement for ELs to be a part of DL programs, and she mentioned that she thinks DL could be the “next big thing” in education. Bre noted how her perspectives shifted positively to see the benefits of DL programs to help students build confidence and maintain their cultures; she stated, “I think it’s kind of like anybody’s culture or their language no matter what, Spanish or whatever, is something that they have to hold on to, it’s something that makes them, them...so I think if you’re like—no more of your native language- then it just takes away from what they know and who they are.” Jeane came into the course seeing the benefits of DLE as a bilingual herself, and noted that her perspectives stayed relatively the same, but that she could see the benefits even more for EL students to have the opportunities to take part in DLEPs. Amanda
noted how her perspectives shifted to see DL programs in a more positive light and how they could be especially helpful for the school where she was interning and had a high concentration of EL students; moreover, she noted the importance of children to keep their first language and stated, “I think it’s important to keep your first language, I mean that’s you, that’s where you came from and that’s your language so I think getting extra practice with your first and second language is definitely a benefit.”

Devany, as a bilingual herself, noted how her perspectives grew in a positive way as she was able to reflect on her own experiences as a previous EL student when she was in elementary school and noted that DL programs could be especially helpful to help prevent EL students from falling behind in coursework. Kayla noted a large shift in her perspectives to a more positive view of ELs and seeing DL programs as beneficial for both minority and majority language students and that they provide great opportunities to compare and contrast language and cultures, something she thinks is missing in most public schools today. Kit, similarly, noted a large shift in her perspectives and mentioned how the course helped her realize that the little Spanish background that she had could be really useful to help ELs in the classroom and that more DL programs in local schools could benefit ELs academically, socially, and emotionally to provide more support and mentors for children with first languages other than English. Dee reflected that her perspectives changed positively by seeing resources provided to her EL students in her internship and how if they had even more, like a DL program, they could be thriving and not just surviving in school.

On a similar note, Nina reflected upon the help that she saw her EL students receiving in the classroom and mentioned that she felt more positive towards ELs and DLE and that she thought that this also reflected a positive shift in education in general compared to the resources
that these types of students were most likely receiving 20 years ago. Brandy noted her perspectives changed in a positive way, but that she thinks she may not be well suited to ever work in a DL school. Carissa mentioned that her perspectives likewise changed in a positive light, but that she still felt like she wanted to know more about DL schools and how she may be able to work at one day, and that she feels more positive towards working directly with ELs in the classroom.

**Past Experiences**

Some participants mentioned different ways that their past experiences influenced how their perspectives and attitudes towards DLE and ELs shifted throughout the course. Tilly noted that she grew up not even knowing what a DL program was and did not see any DL programs in her environment (white, middle class rural area) growing up, although she acknowledged that neither she (or her family) took or even felt the initiative to look for this type of program either, even though her family is of Cuban descent and both of her parents speak Spanish. Maya shared a similar experience and noted how she grew up in a small town where there were no DL programs and how having this background really showed her a drastic view of the different types of DL programs that exist. Bre shared a similar background to Tilly and Maya, and mentioned that since she has little past experiences with ELs, her eyes were opened to the different resources now available; she stated, “I had no idea about them (ELs), like growing up I remember the ESOL students got pulled like basically into like a closet somewhere where there were extra desks and they would work with someone.”

On a different note Gia and Devany mentioned that their backgrounds, growing up as bilinguals, helped them to reflect upon their own bilingual experiences and be able to relate to
ELs and remember what the experience of being in a classroom and not understanding the language of instruction feels like. They both mentioned how their past experiences helped them to develop greater empathy for ELs and positivity for DL programs. Similarly, Nina talked about her experiences being a substitute teacher working with many EL students and how these past experiences helped her to see how beneficial DL programs could be for ELs in particular.

**Class Influence**

Participants highlighted various ways the ESOL course impacted and influenced their perspectives and attitudes towards DLE and EL students. Tilly mentioned how specific class activities had opened her eyes to how ELs feel and remembered vividly activities in the course where she actively was put in a role of what it felt like to be an EL in a classroom and not be able to understand the target language of a lesson. The class drastically changed her perspective from thinking that EL students were choosing to not understand, to developing empathy to have more patience to help her future ELs find the best ways to learn and master content and language skills. For example, she stated, “Before I felt like they (ELs) understand somewhat and they’re choosing not to understand or they’re just not following along and that they don’t have the potential but they really do! They’re just confused and need extra support.” Notwithstanding, Maya mentioned that she had never came in contact with ELs before taking this course and it helped her to see different techniques to help teach ELs. Cindy, shared that a major influence from the class was achieving a greater understanding that ELs come from a wide variety of language backgrounds, and not solely Spanish. She, like Tilly, additionally mentioned understanding the frustration of not knowing what was going on in class when you do not understand the language of instruction and developing more empathy for ELs.
Similarly, Gia noted how the class has impacted her and her views of students in general and how there are strategies she has gained from the course to help different groups of students. She stated, “I thought you would just teach, and now I know in the case of ESOL students there are strategies and there are ways and there is proven research of the best things to help them learn. This class has changed my views for the better.” In a similar vein, Bre mentioned how she feels she has developed knowledge and understanding of many ways to engage ELs in lessons and class and since she did not really know much about ELs before taking the course, and she feels much more equipped to help them in the future. Additionally, Jeane noted the course helped her see practical strategies and illuminated the benefit to use a student’s first language to help facilitate learning. She mentioned how she was taught, even when she was in K-12 school, that Spanish should not be spoken in the classroom, but in her own internship she started to see teachers utilizing students’ first languages and learned throughout the course how using a student’s first language, when one has the capability to do so, may be very helpful and beneficial to the student. Likewise, Amanda mentioned that the course taught her different ways to help teach and help ELs solve problems, such as modeling, doing hands-on activities, and using different strategies to master content. She likewise noted learning to be more patient and help ELs use their first language to an advantage to help with their second language, similar to Jeane. Parallel to Amanda, Kit noted how the course helped her to connect strategies and approaches that they learned throughout the semester into her internship and how to best help EL students. Overall, she highlighted that ESOL I taught her how to adjust herself to help ELs in the classroom and learn which strategies and activities were most beneficial.

In a different vein, Dee noted how the course helped her become more and more aware of the need for more DL programs, especially for specific populations in the local area, like
children of migrant farm workers. Additionally, she felt she learned many accommodations that she can make within the classroom for ELs and that ELs do not always have to be pulled out of the classroom, as she previously thought before taking ESOL I, and that there is always something that can be tried to help ELs. Comparably, Kayla revealed that the course impacted her positively and helped her feel more confident and equipped with the tools to know how to better approach working with ELs in her future classroom. One major thing the course taught her, she mentioned, was, “EL students want to learn just as bad, if not more than native English learners and I think it’s really nice to see, especially having a student that I work with every day in my field experience, work so hard.”

On a different note, Devany mentioned how the class took her down memory lane and back to kindergarten to remember how it felt when she was an EL, which also made her think about how important ESOL programs are in schools to help make sure no children are lost. She talked about how she enjoyed the class because she was able to connect with her own personal experiences with interning and the course work. A major takeaway from the course that Devany mentioned was thinking about looking at the student’s point of view when teaching. She highlighted an activity that we did in class where I spoke entirely in Spanish for a small mock-lesson and this reminded her to always think about how her ELs, in particular, may feel being in a classroom that they may not understand anything that is being communicated verbally.

Finally, Nina and Brandy mentioned that they enjoyed the online resources in the course and liked the textbook. Nina talked about having a positive influence from the course and especially the textbook was useful and helpful. She mentioned that she likes online classes and thought that this course in particular was set up and organized well. Conversely, Brand noted that she does not really like online classes, but thought that the format for this class was well
organized and her interaction with the instructor, myself, helped her learn more about ESOL strategies.

**CT**

Participants mentioned different ways in which their CTs influenced them throughout the semester in their ESOL course, and those who had ELs in the classroom at their internships seemed to have more positive experiences than those without ELs in their interning classrooms. Tilly, Maya, Cindy, Gia, Bre, Amanda, Devany, Dee and Kit had similar experiences with their CTs and all noted positive influences from their CTs (most with limited Spanish skills) when they tried to use Spanish as much as they could in the classroom to help their EL students. Specifically, Maya mentioned how it was a relief to see her CT using Spanish in the classroom to help when she could, since she had experienced people telling her that she had to use only English in the classroom. Devany revealed examples from seeing her CT communicate with parents of ELs who only spoke Spanish and she saw that these parents appreciated her CTs effort to try to explain and communicate with them in the best way that she could using their native language. Likewise, Dee specified that her CT opened her eyes to the fact that there are so many other methods besides verbal communication that can be used to communicate with all students, and especially ELs.

Nina, Brandy, and Carissa noted feeling their experience with their CTs was rather neutral and not positive nor negative. They highlighted that they did not have any ELs in their interning classrooms so they were not able to see their CTs using strategies that they were learning in class very often. Likewise, Jeane found herself in a classroom without any ELs and in turn felt like her CT did not influence her much in terms of DLE or ELs. However, Jeane, a
bilingual herself, was able to help out during conference night at her interning school and helped other teachers with their parent-teacher conference translating. This helped her to see the importance to have ways to communicate with students’ parents, especially ELs.

**Future Teaching**

Most participants that were interviewed, noted being open to the prospect of working at a school with a DL program in the future as a team-teacher (where they could teach in their dominate language), yet some noted they did not think they would be equipped to even teaching as a team teacher. For instance, Tilly mentioned that she had aspirations to someday teach in a DL program if she could develop her Spanish better. She noted, “I would love teaching there (DL school) if I knew both languages because I feel like that’s an asset to every student even students who are learning English.” She noted that she felt inadequate to teach in even a 50/50 DL program even as a team teacher since she has limited Spanish abilities. Similarly, Brandy highlighted that she would not want to teach in a DL school, even as a team teacher, unless she worked on developing a second language. Kit, on a similar note, thinks since she does not have a strong background in another language, such as Spanish, that she probably would not be a good fit for a DL program and that students would best benefit from having two teachers that are both bilingual in the two languages.

In a different vein, most participants spoke positively about the opportunity to teach in a DL setting and highlighted how it would be a great opportunity and experience. Maya, Cindy, Gia, Bre, Jeane, Amanda, Dee, Kayla, Devany, and Nina all mentioned that they would take an opportunity if it arose to work in a DL program. Maya, Cindy, and Gia mentioned that it would be a great experience to grow and develop as teachers to teach in a DL program that is very
different than their current internships. Bre highlighted that she would be willing to work in a 50/50 DL program, despite feeling not too familiar with other languages apart from English and noted that it would be a good environment to experience and be exposed to the different resources available for ELs. Amanda revealed that she would not see any problem with teaching in a 50/50 DL school and would view it as a rewarding challenge. Dee said she would be interested in working in a 50/50 DL program, but thinks that it would come with a lot of patience, but thinks it would be a worthwhile thing to try. Kayla noted that she would definitely be interested in working in a DL 50/50 program, despite her feelings that she does not have a great background in Spanish. She stated, “I think I would love that because I mean that would give me as a teacher the chance to learn from the students which I value a lot and definitely it would be something foreign to me, but I think as an educator I would benefit from that and that it would leave a great impact on students.” Devany likewise pictures herself teaching in a DL school and thinks that it would not only benefit the children, but also herself, and provide her with another opportunity to engage her Spanish skills. She shared, “I feel like for me, it’ll (working at a DL school) help me keep my heritage alive. I don’t see myself going outside of the US to live anytime soon so it’s (Spanish) something I want to keep and not lose.”

**Knowledge of Local DL Programs**

Nearly all participants talked about little to no knowledge of local DL programs, apart from learning about a few from a specific course assignment. Tilly, Maya, Cindy, Gia, Bre, Amanda, Dee, Kayla, Kit, Devany, Nina, Brandy, and Carissa all mentioned not having any prior knowledge of any local DL programs and only learned about a few examples from course assignments that required them to search the internet for local programs. For instance, Kit stated,
“I don’t know of any, except for when we did that assignment that made use search for some, and even then I didn’t find a lot. If I didn’t search, I would not have known about any since I haven’t been informed about any of these programs from anyone in my program.” Similarly, Amanda shared, “I’m unaware of any besides the ones we searched for in this class and that just shows that more programs are needed! In my internship class 13 out of 16 students were ELs and they could’ve benefited from DL programs.”

Jeane was the only participant with some knowledge of local DL programs. She noted that she has knowledge of one local program that a family member attends, but other than that does not know of any other local programs. She additionally revealed that she was not told about any schools with DL programs offered until she researched them for this course, and this was disturbing to her since she is a bilingual herself. She mentioned that it would be helpful to be given more information about places that she could teach at, especially as a bilingual, that are different from a traditional public school setting.

Attitude

All participants who were interviewed revealed that their attitudes had shifted in a positive way towards ELs and DLE. Kit, Kayla, Amanda, and Dee noted feeling more positive because they felt greater levels of confidence from the skills they acquired in the course to work with ELs. Similarly, Brandy, Nina, Carissa, Gia, Bre, Cindy, and Tilly mentioned that they felt more positive about working with ELs in the future since they course helped them to become more prepared and equipped with DL and ESOL strategies. Devany, Jeane, and Gia, all bilinguals, mentioned how they were already positive towards ELs before the course, but they felt even more positive about the prospect of working in a DL setting in the future someday.
**DL Field Experience**

When asked about their perspectives towards having a field experience at a school with a DL program integrated into their degree program, or ESOL course, participants’ generally expressed positive thoughts and attitudes, with some variety of opinions about length and time requirements. Many participants mentioned that having a DL field experience would be beneficial to them to see the variety of DL techniques and programs that they learn and read about during their ESOL course come to life in a real classroom setting. For example, Maya mentioned, “Yeah that (DL field experience) would be so cool, just to see it because there’s only so much that you can understand about it from reading and looking it up, so to see it actually in action would be great.” Jeane noted that she thought it would be very beneficial to have a field experience at a DL school, especially since she did not have any ELs in her interning classroom unlike the majority of her classmates, hence it was harder for her to try out the strategies she was learning in class. Likewise, she mentioned that it would be nice to see DL programs up close and in the field and not just read about them. Gia talked about the benefits of having a DL field experience to her included being able to see how things worked in real time, since, in her opinion, EL students are “going to be at almost every school in the future,” so it would be a good opportunity to “get ahead of the times” and see innovating teaching strategies. Brianna, Amanda, Kayla, Nina, and Brandy all shared similar perspectives that having a DL field experience would be beneficial to see how these types of programs function, see strategies they learn in the course being used in a classroom, and to get a feel for what it may be like to work in a DL setting.

One participant had an interesting perspective about having a DL field experience and how it would not only be very beneficial to her to gain experience and strategies to help ELs, but likewise for her fellow classmates to be exposed to a different mode of teaching and mindset.
Dee stated, “Some of our preservice learning students are closed minded to the fact that I only know English so I can only teach in English and my students can only learn English because that’s the only language I’m proficient in- but if we were exposed to a DL program, I think it would really open our eyes to see that you don’t have to speak another language for your students to learn in another language too.” In a similar vein, Kit noted that she thought that having a field experience at a DL school would help all preservice teachers to gain perspective and think deeper about being aware and respectful of all students, especially ELs and what they are going through and help preservice teachers to acquire the resources, materials, and strategies needed to best help ELs.

Notwithstanding, some participants thought having a DL field experience would be beneficial, but only for a small period and not for the length of an entire year or full semester. For instance, Cindy mentioned how she thought it would be beneficial to have a small field experience at a DL school to see how things work in person, but not for the entire year. Devany shared a similar perspective and posited that a field experience at a DL school would be especially beneficial for preservice teachers who already know two languages, but for others that are monolingual it may be boring to have it for an entire semester, so having a small, mini DL field experience may be better for some, she stressed.

An Interesting Case from the Interviews

Two participants, who were self-identified English-Spanish bilinguals, ended the course with rather distinct perspectives and attitudes towards their futures careers as K-12 educators. Both of these participants were raised bilingual, speaking English at school and maintaining Spanish at home with their family. When asked about their future teaching aspirations, one was very positive towards DLEPs and desired to be able to teach at one someday. This participant,
Devany, mentioned how teaching at a DL school would not only help her students, both native English speakers and non-native English speakers (in her opinion), but also help her by providing an additional space for her to use her second language (Spanish) skills. She noted that although she considers herself a bilingual, she feels like her pool of people to communicate with in Spanish is dwindling and she mainly only speaks Spanish with her relatives, and that teaching in a DL school would be a great opportunity for her to likewise maintain her second language skills.

Controversy, the other bilingual participant, Jeane, while still having a positive attitude towards ELs and DL programs in general, was much less interested in working in a DL school in the future. This participant mentioned that she would not “rule out” working at a DL program, it is not something that she would “seek out”, unlike Devany who mentioned she would seek out a position at a DL school. Her reasoning for not wanting to seek out a teaching position at a DL school centered around the desirable location of the school and not wanting to work at a Title 1 school, which was an interesting comparison between her and the other participants (most of which had positive experiences doing their internships at Title 1 schools). Title 1 schools and ELs are not a focus of this dissertation, however, the do provide an interesting future topic to think about in the field preservice teachers and ESOL.

**Summary of Quantitative and Qualitative Results**

To summarize, quantitative and qualitative results from the pre and post survey and interviews provided valuable insight into preservice teachers’ perspectives and attitudes towards DLE and ELs. Quantitative survey data demonstrated an overall positive shift in participants’ attitudes throughout the semester of taking an ESOL course and a particularly interesting increased shift in positive attitudes from the F2F class of preservice teachers. Qualitative interview data
provided deeper explanations from participants as to why and how their attitudes and perspectives changed and insight into preservice teachers’ knowledge of local DL schools. The quantitative and qualitative data from this study harmonized together to most thoroughly tackle the guiding research questions of this study.
CHAPTER 5
DISCUSSION, IMPLICATIONS, LIMITATIONS, AND FUTURE DIRECTIONS

This chapter begins with a discussion of four main findings from the results: the difference in survey results between the F2F and online groups; the overall positive shift in attitudes and perspectives; participants’ deficiency of local DLEPs knowledge; and participants’ place of origin and attitude shifts. Throughout each discussion section, connections to the theoretical underpinnings of this research and important findings are forged. Following the discussion, implications and limitations for the study’s findings are highlighted. This section closes with insight into future directions illuminated from the discussion, implications, and limitations.

Discussion of Important Findings

Difference Between F2F and Online Groups

One intriguing finding from this research included calculating a notable, yet not statistically significant, difference between F2F participants’ pre and post survey responses compared to online participants’ survey responses. To review, the F2F group showed an increase in pre to post survey results by several points, whereas the online group showed a slight decrease of less than a point. The intriguing difference may highlight the potential benefit that the F2F group of participants may have received from having on-campus, in person interactions with their instructor and classmates as well, and more importantly from having a course that was designed
with more social interaction and many opportunities for group work and learning from one another throughout each class meeting. This brings up the question as to whether or not there is a benefit for partaking in an ESOL class F2F versus online, and what about the course design of each of these courses makes the assignments more relatable, relevant, and encourages the greatest amount of social interaction and opportunities for students to construct their learning from each other as well as their own current and past experiences. Although much further and more in-depth research is needed, the results from the pre and post survey do illuminate an intriguing gap between the perspectives and attitudes of the students taking the class online or F2F.

Furthermore, participants in the F2F class were more eager and expressed greater willingness to voluntarily participate in interviews. This could have been for a variety of reasons, such as feeling a greater connection to their instructor, myself, as we got to know each other over the semester, but it could have additionally occurred from other factors such as the convenience of scheduling interviews directly following class times in our classroom space and not having to try to schedule a time and place outside of class. Nonetheless, all participants in the F2F class signed up and participated in voluntary interviews; whereas, only three of the participants in the online class did so.

Likewise, the difference in survey results between the F2F and online class could align with sociocultural theory and constructivism and the different social connections students make in a F2F class versus online setting due to the course design of the F2F class which was structured to have more group and partner assignments and more structured time for synchronous class discussion. As noted in the theoretical framework for this study, sociocultural theory and constructivism follow notions that learners need to interact socially and construct their own
learning in multiple ways and use various social tools (Lantolf & Pavlenko, 1995; Vygotsky & Rieber, 1988). The results from this study may suggest in some ways that the participants in the F2F class had deeper levels of social connections from their physical and real-time interactions with each other and their instructor, which were structured from the course design of assignments, such as weekly group presentations, that may have impacted their learning throughout the course. As Evans (2017) reminds us, “Human interactions and environments have significant influence on shaping teacher knowledge and capacity,” (p. 308), it is curious to think about how the course design of a F2F class versus online class may influence the way in which preservice teachers interact and learn ESOL training material and in doing so develop different perspectives and attitudes relating to DLE and EL students. The F2F class course design was structured for more real-time discussion activities where students could share their past experiences and debate how these experiences were shaping their current attitudes and perspectives during each class meeting. Whereas, the online class’s course design, although still providing a platform through discussion boards for similar exchanges, was an asynchronistic environment where students could comment and post discussions/comments at their own leisure, but did not have space for many real-time discussions. The asynchronistic nature of online learning still provides a space for discussion, however, it is much different than the synchronous discussion of a F2F class. In many ways there are benefits to online discussions (i.e., time to prepare detailed responses and rebuttals, time to research, and less pressure from being behind a screen), but there are significant drawbacks, such as the lack of quick, instantaneous discussion which prompt students to think quickly and make connections from their background and experiences to contribute to a synchronized discussion.
The survey results from this study may suggest that the F2F group of students, in this particular study, experienced greater overall shifts in positive attitudes throughout the semester of taking this ESOL course and seem to make the case that the course design allowed for more assignments and class interaction that included concurrent, physical interactions with the instructor and classmates could potentially have a positive influence on preservice teachers’ attitudes and perspectives. It is important to highlight again, however, that the difference between the F2F group and online group was not statistically significant and more research is needed with similar and larger populations of preservice teachers to reach clearer conclusions. It is also important to highlight that the results from this study are influenced by my own personal teaching decisions and approaches, and more research should be done to look into how other ESOL instructors may tackle teaching their ESOL courses F2F and online. Furthermore, it is notable to reiterate that the difference between the F2F and online course surveys was not statistically significant and more research is needed to determine concrete findings.

**Overall Positive Shift in Attitudes and Perspectives**

Another finding encompassed the overall positive shift in attitudes and perspectives that were revealed in the interviews, and the total pre and post survey scores. Participants noted feeling relieved, better prepared, more confident, and increasingly equipped to work with ELs and potentially in a DL setting in the future. It is likewise inquisitive how all participants interviewed expressed positive sentiments toward ELs and DLE and none expressed outright negative feelings or perspectives in their interviews. That said, many participants had positive feelings towards DLE but not all thought they would be a good fit for a DL school. It is important to remember the dynamic of these interviews were between myself, their instructor, and the
participants, my students, and even though no extra credit or grade penalties of any kind were administered, the nature of an instructor and student relationship in itself may have ensued overtly positive responses. However, students who did participate in interviews showed positive attitudes in their surveys alongside their interview responses. Nonetheless, this cultivated relationship throughout the semester may have created a unique space for students to feel comfortable to talk about their experiences and perspectives with someone that they already know and are used to being around as opposed to an unknown interviewer. Furthermore, the nature of participants’ responses which included things like past experiences, perspectives, and attitudes, may have been deeper and more genuine while talking with someone they are acquainted to instead of an unfamiliar interviewer as well.

Nevertheless, the positive attitude and perspectives participants shared may shed an important light on incoming teachers’ perspectives. It is encouraging to see a group of preservice teachers who hold positive attitudes towards DLE and EL students; and in turn a group that seems to have developed strong senses of empathy towards helping students of a linguistic minority reach their greatest potential. ESOL classes, such as the one in this study, are important spaces that help preservice teachers to develop this empathy, knowledge, strategic skills, and confidence to learn more about DLE and how to help ELs. Although this ESOL course could be improved, the study results demonstrate that overall the course devises a positive influence on the perspectives and attitudes of the preservice teachers taking the course.

Furthermore, one important aspect of this ESOL course, and study, was encouraging students to persistently reflect upon their past experiences and current teaching internships and use these reflections in their assignments and discussions. Building and developing a self-reflection process is important for preservice teachers to grow and carry alongside them into their
future teaching practices. To return to insights from Thomas Farrell (2016), preservice teachers gain a better understanding of their own personal and exterior theories when they develop a routine reflection practice. Participants from this study reflected deeply upon their experiences with the course, their teaching internships, and past experiences while completing course assignments, participating in interviews, and completing both the pre and post surveys. As an ESOL instructor, I hope that these preservice teachers will carry the reflection practices that they learned throughout their ESOL course with them onto their future courses and beyond to their future classrooms.

### Lack of Local DLEPs Knowledge
Furthermore, a finding from this study stressed the lack of knowledge that preservice teachers possess of local DL programs. Throughout the study, all but one participant mentioned only being informed from a specific ESOL course assignment about local DLEPs. Thus, nearly all of the participants had no prior knowledge of any local schools with DLEPs. None were given any information about schools with DLEPs by their programs at the university while they were assigned their internship placements at local schools or while meeting with advisors and planning their course/degree plan. Participants learned about DLEPs solely from an ESOL course assignment that prompted them to search for them online, and had they not been required to do this search, they, most likely, would still not know about any local DLEPs in their area. This disconnect in itself shows the lack of connection between local DLEPs and university teacher preparation programs, and correspondingly the lack of DLEPs in the area in which this study was executed.
It is intriguing to entertain the question as to why these participants have such little knowledge about local DLEPs and that they did not seem to have any support outside of the course for the prospect of teaching or doing an internship at a school with a DL program. Arguments could be made that there are so few DLEPs in the local area that mentioning them to preservice teachers that are not in a specific bilingual teacher preparation program would be minuet, or that the university teacher preparation program already has connections with other schools that are sufficient to meet the internship needs for their cohorts of preservice teachers. However, it is increasingly important to think about how bilingual and DLE stand in terms of societal value in mainstream society and how this may impact preservice teachers’ knowledge of local DLEPs.

In mainstream K-12 education in the US, DLEPs, although gaining momentum in recent years as education policies shift, still seem to be underrepresented, undervalued, and underfunded, and likewise appear to be somewhat hidden to general education track preservice teachers. As critical theory is an essential underpinning theoretical foundation to this research, questions arise about the injustice of this underrepresentation and lack of information that preservice teachers seems to be missing out on concerning being informed about local DLEPs or having opportunities to intern at schools with DLEPs. The results from this study highlight a gap that exists between knowledge, at its smallest level of simply knowing that a certain type of school exists in a local area and incoming teachers’ awareness. Preservice teachers in this study were not informed about any of the schools in their area with DLEPs, although be there few, and the one preservice teacher who did have knowledge of one school acquired that knowledge from a family member with children attending the school. Preservice teachers in a teacher preparation program ought to be better informed about all different types of schools in their local areas and
provided with a wealth of different and unique opportunities to intern at schools with DL programs and other unique programs alike. It is difficult to forge and sustain connections with diverse types of local schools. However, universities, teacher preparation programs, ESOL certification programs, and local schools all need to strive to develop stronger and better alliances to help give preservice teachers’ more authentic opportunities to practice their teaching skills with diverse groups of learners, like ELs in a DL setting, for instance.

**Place of Origin and Attitude Shift**

Moreover, a final point of interest from the results was the relationship between participants’ place of origin and the corresponding shift in their perspectives and attitudes. Participants from suburban and rural areas with little past experiences with diversity and/or bilingualism seemed to experience the greatest positive shift in perspectives and attitudes. Whereas, participants from urban areas seemed to have less of a shift and maintain their already positive experiences and attitudes with diversity and bilingualism. The group of participants from urban areas may help to explain why some participants did not show much change in their pre and post survey scores, nearly all participants that maintained the same score from pre to post or increased or decreased by less than a point or two were from urban areas with the greatest amount of experience with bilingualism and diversity. Participants from urban areas seemed to affirm their already positive attitudes towards ELs and DLE, which resulted in little increase from their pre to post surveys.

During class discussions, participants from all of these different places of origin, rural, suburban, and urban, brought unique and diverse perspectives to course dialogues. Moreover, group work and environments where participants could learn socially was emphasized throughout the course with the emphasis of sociocultural theory and constructivism posing that
people learn best in social environments where they can use their background knowledge to construct their learning (Lantolf & Pavlenko, 1995; Vygotsky & Rieber, 1988). Throughout taking their ESOL course, the participants did many group tasks, reflected and discussed as a group regularly, thus creating and constructing their learning socially and using their background knowledge and experiences to grasp new connections and ideas. This social learning could also be seen in participants’ interview responses which often included them referencing one another and each other’s experiences to help build a point or illustrate a story. For instance, Jeane and Devany (both bilinguals in English and Spanish) mentioned each other throughout their interviews and compared each other’s backgrounds and interning experiences. Through these thoughtful comparisons they were each able to delve deeper into their own understandings and perspectives, using their social learning experiences to grow as individuals.

**Implications**

Research regarding preservice teachers provide great insight into the future of the field of education, as the subjects of this research, soon to be teachers, will go on to shape and transform classrooms. Hence, implications from preservice teacher research are especially intriguing since they provide insight into training aspects that can carry a ripple effect into the future field of education. Implications from this particular research study yield important elements for ESOL certification programs and preservice teacher preparation programs alike. Moreover, reflecting upon implications is a transformative practice that seeks to try to identify why something changed. In this particular research study, the F2F class seemed to change more than the online course and this change will be reflected upon. Firstly, the difference between the F2F and online groups’ pre and post survey results begs to question what is the most beneficial mode of course
delivery, and course design with in the delivery mode, to promote preservice teachers’ success and positive attitude development towards ESOL materials, EL students, and DLE? Although there are benefits and drawbacks to administering any course in an online format or F2F format, the basis of this study, for this particular subject and group of students seemed to favor a F2F approach.

The approach seemed to be favored due to the course design, not necessarily the course delivery mode, but the addition of more class assignments and activities that were structured in the F2F section that provided for more opportunities for preservice teachers to interact socially with one another and me as their instructor. Additionally, the insight into the difference between the F2F and online class brings to light recommendations regarding how teachers may change and adapt their teaching approaches and course design to best suit a F2F or online course. In this particular research study, I adapted my teaching approaches to try to incorporate as much group work and social interaction in the F2F section as much as possible, in particular because I believe that the more meaningful social interactions students can have within the class, the better and that students should learn from one another and each other’s past experiences as much as possible. Thus, I adapted my teaching style and the course design to incorporate many group assignments and in-class participation involving partner and group work. Whereas, the online section followed a much more autonomous course design that was more of self-guided work, even though they still had opportunities for asynchronous discussion and opportunities to interact with me through discussion and comments, I structured much fewer opportunities for interaction in the online course than the F2F course, mainly for time and convenience and the nature of online learning which allows for more autonomous learning in general when compared to F2F.
When reflecting upon the course design of the online course in particular, I noticed I did not make enough conscious effort to create more opportunities for more social interaction within assignments or insert myself more into the students’ discussions. My online course consisted mainly of asynchronous discussion posts as the main mode of discussion and social interaction among the students and only occasionally would I interject my voice into the discussions. Tolu (2013) underscores the importance of creating, “well-designed collaborative learning activities,” that encourage learner and instructor engagement in online course design to be a fundamental component of creating an effective community in online courses (p.1049). If I were to teach these two courses again in the same semester, I would try harder to involve more group work and social interaction in the designing of assignments and interact more with my students in discussion boards as well. This study was not able to find statistically significant results comparing the F2F and online groups which followed different course designs, but more research needs to be completed on comparing F2F and online ESOL course designs to better understand the benefits and/or consequences of either course design to best prepare future teachers. Additionally, more research needs to be completed on ESOL instructors and how they adapt their teaching styles to online and F2F counterpart courses and course design.

Secondly, the positive shift in attitudes and perspectives that participants demonstrated from the surveys mean scores increasing and interviews could imply that ESOL courses are beneficial to help advocate for educational success for minority language students and provide a foundation for preservice teachers to think and reflect on their own perspectives towards DLE and EL students in their future teaching careers. The more optimistic attitudes and perspectives that these preservice teachers developed over the course of their semester may help demonstrate the importance of providing teacher candidates with specific courses dedicated to ESOL matters
and strategies. Moreover, this ESOL course appeared to likewise have a positive influence on helping preservice teachers develop personal reflection practices to contemplate their past teaching and learning experiences and how they relate to helping ELs in the classroom and in thinking about what types of schools they desire to teach at in the future.

Thirdly, preservice teachers’ lack of knowledge of local DLEPs illuminated by this study may illustrate a disconnect between local DLEPs with teacher preparation programs and ESOL certification programs. This particular group of preservice teachers, in this specific local context had very little knowledge of local programs or schools with DL programs in place. Participants mentioned receiving little information from their teacher preparation programs about schools with diverse programs, such as a DL program. Furthermore, preservice teachers highlighted their desires to learn more about and be provided with information about local DL programs in their areas. Several preservice teachers in this study mentioned that they saw a need for a DL program in their interning schools and many noted that they wished they had the opportunity to experience a DL program first hand. These desires are not currently being met by their teacher preparation program, nor their ESOL certification program. As mentioned previously, local schools, teacher preparation programs, and ESOL certification programs should be working harder to try to bridge this gap and provide unique and diverse types of field experiences for preservice teachers in local schools. It is difficult for preservice teachers to simply read about strategies and program models in a textbook and not have the opportunity to experience their learning first-hand at a DL program. More partnerships need to be made with schools that do have DLEPs to provide opportunities for preservice teachers to have the chance to see how a DL program functions and see EL students in a DL environment. Many participants of this study mentioned how they had opportunities to work with ELs in a mainstream, English centered, K-12
school, but they wished they could see these same ELs in a DL classroom and see how different their education may be with resources in their first and second language. Again, it is important for preservice teachers taking an ESOL course to see and physically experience as many of the strategies and types of programs that they learn about throughout the course as possible so they can grow and expand their teaching repertoires.

Fourthly, participants place of origin and amount attitude shift shed light on considerations that teacher educators should keep in mind, especially ESOL educators. Preservice teachers coming from rural and suburban backgrounds seemed to have the least experiences with diversity and DLE, especially when compared to their peers from urban backgrounds. Responses from participants in this study could help demonstrate the importance for teacher educators to get to know their students’ backgrounds and how these diverse backgrounds may play a role in their connecting with one another and their comprehension of course subject matter. Moreover, when teacher educators have a better understanding of where their students come from and what kinds of experiences they possess with diversity and bilingualism, they are more adept to help facilitate meaningful discussions and group work to utilize students with different backgrounds to grow and learn from one another. Participants in this study came from a wide variety of different backgrounds and experiences with diversity and DLE, and I, as their instructor, tried to utilize their background knowledge to help one another and connect more deeply with the course material. Teacher educators ought to find ways to learn about their preservice teachers’ backgrounds and actively seek to utilize their backgrounds to help foster learning individually and in groups.

It’s also important to think about how students from urban areas that possess a wealth of experiences with diversity and bilingualism can be challenged and encouraged to share those
experiences with their peers. Some participants in this study that were in this situation seemed to be less challenged throughout the course, while others seemed to take course assignments to the next level on their own and challenge themselves to reflect upon their past experiences. For instance, one participant who was from an urban area, bilingual family, and had many experiences with diversity shared much of her experiences with the rest of the class on a regular basis and in her interview talked about how the course helped her to reflect more deeply upon her own experiences with diversity and how she could use them to help others. Whereas, another student from a similar background, bilingual, urban background, and many experiences with diversity and bilingualism, seemed to be more reluctant to share her experiences and mentioned how her family often times tried to “fit in” with mainstream society as much as possible that she felt less compelled to sort of expose her diverse background. All in all, preservice teachers’ need to feel that their unique and diverse backgrounds are valued, meaningful, and relevant to contribute to the meaningful discussions and the course community at large.

Furthermore, the results from this study illuminate some implications for teacher preparation program directors. Teacher preparation program directors, although they may already be overwhelmed with the work it requires to maintain internship placement connections, seem to have a shortage of connections with any local schools in the area that do have a DLEP in place. Some reasonable directions for teacher preparation program directors to help increase connections with local DLEPs include: taking the pulse of the local community every couple of years to see what types of schools offer unique and diverse programs (like DLEPs); partnering with ESOL graduate students to find out which schools in the area have DLEPs in place and/or stellar ESOL programs for K-12 students; and looking into embedding a specific field experience requirement at a DL school. If teacher preparation program directors could do a small case study
looking into what new schools and/or new programs within schools have started every couple of years, they may develop greater insight into new and diverse programs that they could help preservice teachers to connect with and intern at wider varieties of local schools and unique school programs. DL schools, in particular, sometimes experience quick turnover and new programs are trialed in targeted areas for a variety of reasons (sometimes for a location with a high majority language speaker population or the reverse, in an area with a high minority language speaker population), and sometimes these programs survive and flourish, other times they last only a year or two and then a different program will arise in a different area. Hence, it is important for teacher preparation program directors to survey their local school areas every couple of years to see what programs are around for their preservice teachers to experience a rich internship training.

Moreover, conducting this check on local programs may be easier if teacher preparation program directors tried to partner with ESOL graduate students. Partnerships could be forged between the two departments to possibly integrate assignments or field experiences for ESOL graduate students to seek out and visit schools with local DL programs and report their findings back to teacher preparation program directors. Additionally, and probably least feasibly, teacher preparation program directors could look into embedding a specific field experience requirement at a DL school for their preservice teachers. This requirement would only be possible, and contingent on there being a flourishing DL program locally available to preservice teacher to complete this field experience. Nonetheless, in ideal conditions, this field experience may prove to be valuable and insightful for preservice teachers to experience the information that they learn about within their text books about how DL programs work in a real-life setting. Since, most preservice teachers from this study noted they would like to experience a DL program in person,
it would be worth trying to implement this type of field experience requirement provided the programs were available.

In sum, as a researcher and ESOL instructor, I learned many things from completing this research study and the study’s implications. Fundamentally, I was delightfully surprised by how many of my preservice teachers, especially the monolingual English speakers, expressed a positive outlook and perspective towards someday working in a DL setting. I had anticipated that if I had bilingual preservice teachers, that they would be willing and feel positive towards working in a DL setting in the future, but I did not think that so many of my monolingual preservice teachers would feel excited and interested in working in a DL setting in the future. I enjoyed talking with my preservice teachers about their specific and detailed discoveries and insights that they noticed developing throughout the course and how their perspectives towards ELs seemed to become more and more positive throughout the course. Their development of more empathy that they showed in interviews, especially, was a highlight for me and something that made me feel proud as their instructor to have played a small role in possibly helping them see ELs in a different light. My research has helped me reflect upon my own perspectives that more DL programs in the US are needed and that preservice teachers, monolingual and bilingual, have the capacity and possibly the desire to flourish in DLEPs settings.

**Limitations**

Research without limitations is like a paragraph without sentences; research of any kind always has corresponding limitations and this study is no different. Limitations in one sense can be seen as limiting factors that restrain a study in one way or another, but they can also be seen as guiding parameters to individualize a study and provide a template for growth of new and
different proceeding studies. For the present study, limitations include many things such as the number of participants, duration of the study and financial funding, survey instrument limitations, the nature of the particular groups of students in the online and F2F classes, the geographical location of the study, and the instructor-student relationship fostered throughout this study.

To elaborate, the number of participants in this study was 24, a substantial amount for a qualitative study, but a relatively small amount to make any generalizable statements of quantitative data. Although, it is important to note that concluding with generalizable results was not a goal of this study, solely to make connections and analyze a particular case of students. Nonetheless, future studies of similar types may consider having a greater number of participants, especially in quantitative surveys in order to obtain larger sample sizes and more generalizable statistical results. The duration of the study could also be seen as a limitation. The study took place over a 15-week semester long course, which is sufficient time to learn new course content, however since students’ attitudes and perspectives were being looked at, it may be more beneficial to have a longer study that continues to look at how their attitudes and perspectives change or maintain after another semester after the course has finished. In addition, it is difficult to simply measure the impact of only one course over one semester and this study should be seen as a stepping stone that needs much further research and future studies.

The specific location in which this study took place could similarly be a limitation in its own right. A focus of this study was to look at participants’ knowledge of local DLEPs and this location has only a few programs. Thus, the results of a similar study may be entirely different if the study took place in a region that had many DLEPs already in place. Furthermore, the financial means of the study were limited, which influenced the way in which surveys were
administered and interviews were conducted. Had the research had more financial funding, it is possible more participants could have been recruited to participate or compensated for their time to participate in interviews.

Another limitation may have included the online administration of the pre and post survey. Qualtrics was used to administer the surveys and even though it is a useful platform for surveys and can be used on a computer or mobile device, some participants may not prefer to take surveys online and would have liked to take one in person instead. Due to time and funding constraints, all surveys were administered online, but perhaps participants may have responded differently if they were given the option to take it online or in person. Furthermore, the survey in itself may have been too lengthy, each construct featured too many statements that could have fatigued participants. Though the survey was piloted before being administered and revised accordingly after getting feedback from the pilot study, it was quite lengthily and a few participants mentioned this at the end of the course. The length of the survey may have limited the scope of responses from participants and may have caused many to experience survey fatigue (NRC, 2017). Moreover, surveys are self-reporting instruments that make assumptions that participants are accurately reporting their attitudes and perspectives, which could likewise be a limitation of the study. Additionally, the headings from the survey were quite overwhelming and featured too much academic jargon that may have confused or overwhelmed participants and could be revised to better suit the participants.

Other limitations include the nature of the particular group of participants in the online and F2F classes. Each of the participants is a unique individual with diverse backgrounds and prior experiences and knowledge that they brought to the class and study. This should not be seen as a limitation, but a cautioning that the results of this study do reflect a specific group of
students experiences and reflections and cannot be generalized to that of all preservice teachers or college students.

Likewise, the instructor-student relationship fostered between myself and my preservice teachers throughout the semester may be seen as a limitation in the sense that their responses may not have been as genuine since I was their instructor. In some ways, this relationship is simply the “nature of the beast” that takes place with this type of case study research and is unavoidable. Nonetheless, it is still a limitation since my students may have felt coerced to perform in a certain way to appease me as their instructor and their responses may have reflected what they thought I wanted to hear. Moreover, students may have felt they needed to adhere to what was socially desirable in their responses in their surveys and/or interviews. Nevertheless, it is important to think about the benefits of conducting studies like this with one’s students and the plethora of knowledge and insights that may arise.

**Future Directions**

Research regarding preservice teachers is on the forefront of the field of education and much more needs to be accomplished and studied. Preservice teachers will leave their institutions and carry on the knowledge and skills they learn into local and national schools. Hence, research focusing on preservice teachers and their attitudes and perspectives towards ELs and DLE is important to continue advancing as well, as the US continues to see an influx of ELs in K-12 schools. Some tangible ideas for future research regarding this subject include longer case studies following preservice teacher cohorts as they progress through ESOL certification classes, larger studies focusing solely on pre and post surveys of preservice teachers’ attitudes towards DLE and ELs, more in-depth analysis of ESOL courses administered online in comparison to
their F2F counterparts, investigations into local communities partnerships or lack of partnerships with local schools that have DL programs, and future studies interviewing teacher preparation program directors, CTs, and principles.

Conducting a longer case study that follows preservice teacher cohorts as they progress through all of their ESOL certification classes could provide greater insight into how their perspectives shift, change, and transform as they become more aware of the different strategies and best practices to help ELs in their classrooms. Moreover, a longer case study may provide for a comprehensive opportunity to look into the relationships that preservice teachers develop with the other members of their cohorts and how these relationships may influence their learning and experiences towards DLE and ELs. Furthermore, a case study looking into preservice teachers’ progression through a set of ESOL courses, and not just one course like this study looked at, could give awareness to which ESOL topics have the greatest impact on their perspectives and attitudes and if there are gaps in their learning that need to be addressed, such as lack of support about local DL schools.

Administering a study which focuses on the survey portion of this study may provide larger sample of findings that could be analyzed using a wider variety of statistical analysis. Having a larger sample size could help to complete a study with more generalizable findings that may help speak to a broader population of preservice teachers. This type of future study could be useful to help other institutions with similar ESOL courses for their preservice teachers to look at how their classes are impacting their future teachers.

Completing a study with the specific focus of looking at the differences between the same ESOL course being administered online and F2F could provide insightful findings to illuminate which delivery mode impacts preservice teachers in a more positive way. Although students all
have their own personal preference for online or F2F classes, and institutions and programs likewise do not always have much say over which classes can be offered F2F or online, it is important to look at how the content of the same course may be influencing its students in different ways from the mode of delivery. Moreover, conducting this type of study could help ESOL courses to try to bring in more elements of F2F classes, for instance, that may help their counterpart online classes to influence students in a similar and more positive way. Furthermore, it could be interesting to look into how individual teachers change their teaching approaches and course design to teach an ESOL course online or F2F and what impact this change in approach and course design may have on the students.

Future studies researching the connections between local schools and partnerships with teacher preparation programs and ESOL certification programs could provide insight into where strong relationships already exist and where better relationships could be forged. Education should not be a truncated system that breaks off into segmented sections, rather it should be a fluid cycle that regenerates, revisits, and builds relationships between one level and the next. Local schools ought to have more support from teacher preparation programs and likewise teacher preparation programs should seek out wider varieties of local and diverse interning opportunities for their teacher candidates.

In addition, such studies could look into interviewing teacher preparation program directors, CTs, and principles could provide more insight into a larger spectrum of these different stakeholders. Interviewing teacher preparation program directors may help researchers to better understand what is currently being done to ensure preservice teacher candidates are receiving diverse field experience opportunities and the challenges that have been encountered in the past with trying to forge more diverse networks of schools for internship opportunities. Speaking with
CTs could provide greater understanding into the internship experiences of preservice teachers and the challenges that CTs face while supervising preservice teachers and how they work with ELs and use ESOL resources in their classrooms. It may be worth while conducting interviews with principles of local schools that have DL programs, or have had them in the past, to gain awareness about how they have connected with interning teachers in the past and what their future aspiration may be and how university teacher preparation programs may be able to forge new connections with diverse types of schools.

From a less tangible and broader view, a future direction for this research includes advocating for DLE and minority language rights for EL students in mainstream K-12 schools and beyond. Moreover, it is imperative to increase efforts to educate preservice teachers in ESOL courses about the injustices that many EL students are faced with while they are in mainstream K-12 schools that may lack ESOL resources. The more knowledge, awareness, and empathy that preservice teachers are able to gain from courses that prepare them to work with linguistically diverse populations of students, the better equipped they will be to guide future generations of EL learners into educational success and beyond.
REFERENCES


ESOL I Syllabus. *ESOL Department*, University of South Florida, Tampa, FL.


APPENDIX

Attitudinal Scale-Preservice Teachers' Perspectives on Dual Language Education

Welcome! This is a survey for preservice teachers to investigate their perspectives and attitudes toward dual language education (DLE). There are seven sections with a variety of statements inquiring about your agreement or disagreement toward different aspects of DLE and bilingualism. The survey should take about 5 minutes to complete. Thank you for your willingness to participate!

Demographic Questions

Instructions: Below is a list of 5 demographic questions. Please answer each question to the best of your ability.

Gender
- Male (1)
- Female (2)
- Other (3)

Ethnicity: ________________
Age: ________________
Zip Code: ________________

Current Academic Year
- Freshman (1)
- Sophomore (2)
- Junior (3)
- Senior (4)
- Other (5)

Which ESOL I section are you enrolled in this semester?
- Face to face section (1)
- Online section (2)
1) Perceived Social Value of Bilingualism

Instructions: Below is a list of 5 statements dealing with social values of bilingualism. Read each statement and indicate your agreement or disagreement.

<table>
<thead>
<tr>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Undecided (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>When possible, it is best for students to maintain their native language alongside learning English. (1)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Bilingual education allows minority language speakers to resist assimilation and avoid learning the dominate language. (2)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Higher levels of bilingualism can lead to practical career related advantages. (3)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Speaking more than one language will help children better understand people from different cultural backgrounds. (4)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Students should learn to communicate in English only. (5)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Higher levels of bilingualism can lead to higher knowledge and mental skills. (6)</td>
<td>o</td>
<td>o</td>
<td>o</td>
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</tr>
</tbody>
</table>
2) **Perceived Classroom Value of Bilingualism**  
*Instructions:* Below is a list of 5 statements dealing with classroom values of bilingualism. Read each statement and indicate your agreement or disagreement.

<table>
<thead>
<tr>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Undecided (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>It would be confusing for English language learners (ELLs) to have classes in their first language and English at the same time. (1)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>I can learn a great deal from students with culturally and linguistically different backgrounds. (2)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monolingual English students can learn a great deal from students with culturally and linguistically different backgrounds. (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regardless of the makeup of my class, it is important for students to be aware of multicultural and linguistic diversity. (4)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>I find teaching a culturally diverse group of students rewarding. (5)</td>
<td></td>
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</tr>
</tbody>
</table>

3) **Social value of bilingualism and dual language education programs in US schools**  
*Instructions:* Below is a list of 4 statements dealing with social values of bilingualism in the US. Read each statement and indicate your agreement or disagreement.

<table>
<thead>
<tr>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Undecided (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>The US would benefit from developing more K-12 dual language programs. (1)</td>
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<tr>
<td>Proficiency in another language should be promoted for all students in the US. (2)</td>
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<tr>
<td>All preservice teachers should be trained to work with ELLs. (3)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>All preservice teachers should be well informed about dual language programs in their local area. (4)</td>
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</tbody>
</table>
4) Perceived Pedagogical Implications Pertaining to Bilingual Education

*Instructions*: Below is a list of 8 statements dealing with pedagogical implications of bilingual education. Read each statement and indicate your agreement or disagreement.

<table>
<thead>
<tr>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Undecided (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students not proficient in English should be learning in their first language as a part of the school curriculum. (1)</td>
<td></td>
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</tr>
<tr>
<td>If a second language learner is in an English only classroom, they will learn English better. (2)</td>
<td></td>
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</tr>
<tr>
<td>Students must learn English as quickly as possible even if it means the loss of their native language. (3)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Bilingual education allows children to keep up in subject matter while acquiring English. (4)</td>
<td></td>
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<tr>
<td>Many teaching strategies for monolingual English students are appropriate for English language learners. (5)</td>
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<tr>
<td>Regular teachers, with ESOL training, possess a great deal of the expertise necessary to work with ELLs. (6)</td>
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</tr>
<tr>
<td>Linguistic diversity awareness or ESOL training for teachers is not necessary. (7)</td>
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<td></td>
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</tr>
<tr>
<td>Linguistic diversity awareness or ESOL training can help me to work more effectively with a diverse student population. (8)</td>
<td></td>
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</tr>
</tbody>
</table>
5) Perceived Self-Knowledge Pertaining to Dual Language Programs

*Instructions*: Below is a list of 7 statements dealing with your self-knowledge of dual language programs. Read each statement and indicate if it is like you or unlike you.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not like me (1)</th>
<th>Somewhat like me (2)</th>
<th>Unsure (3)</th>
<th>Like me (4)</th>
<th>Very much like me (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with ELLs makes me nervous. (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel confident about my abilities to work with ELLs. (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel confident with my ability to learn about dual language education programs. (3)</td>
<td></td>
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</tr>
<tr>
<td>I would be interested in working in a school with a dual language program. (4)</td>
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<tr>
<td>In the future, I could see myself working in a dual language school. (5)</td>
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</tr>
<tr>
<td>I see myself as someone comfortable with teaching linguistically diverse students. (6)</td>
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</tr>
<tr>
<td>In the future, I think I will be even more comfortable with teaching linguistically diverse students. (7)</td>
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</tr>
</tbody>
</table>

6) Perceived knowledge and familiarity with local dual language programs

*Instructions*: Below is a list of 7 statements dealing with your knowledge and familiarity with local dual language programs. Read each statement and indicate your agreement or disagreement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Undecided (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am aware of multiple dual language programs in my area. (1)</td>
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<tr>
<td>If asked by parents, I could recommend a local dual language program for their child off the top of my head. (2)</td>
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</tr>
<tr>
<td>I don’t expect to be asked questions from parents about dual language schools in my area. (3)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>All teachers who teach at schools with dual language programs must be bilingual. (4)</td>
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</tbody>
</table>
Monolingual English teachers can be an asset to schools with dual language programs. (5)

I cannot teach at a school with a dual language program if I only speak English. (6)

It is important for me, as a future teacher, to be well informed of dual language programs in my area. (7)

### 7) Future Aspirations toward Dual Language Programs

**Instructions:** Below is a list of statements dealing with your self-knowledge pertaining to dual language programs. Read each statement and indicate your agreement or disagreement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Undecided (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I wish I knew more about dual language programs in my local area. (1)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Knowledge about local dual language programs is not important for my future as a teacher. (2)</td>
<td></td>
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</tr>
<tr>
<td>I see myself as someone comfortable with talking to parents about dual language programs in my area. (3)</td>
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<td></td>
</tr>
<tr>
<td>When I think about the future, I hope to know more about dual language schools in my area. (4)</td>
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</table>

8. Have you ever worked, volunteered, or observed teaching in a dual language program?

________________________________________________________________________

________________________________________________________________________

9. Were you ever educated in a dual language program?

________________________________________________________________________

________________________________________________________________________

10. Do you know anyone who was educated in a dual language program?

________________________________________________________________________
11. Is there anything else you would like to add about your perspectives toward DLE?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

12. Are there any other questions you think should have been included in this survey that you did not see?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Thank you for participating in this survey! If you have any questions or concerns, feel free to contact Kylie Ross: kylieross@mail.usf.edu