

RESPONDING TO THE FLORIDA TEACHER STANDARDS FOR THE ENGLISH
AS A SECOND LANGUAGE ENDORSEMENT: A STUDY OF
ELEMENTARY PRESERVICE TEACHERS' PERCEPTIONS

by

Cheryl Shamon

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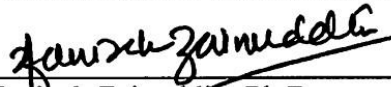
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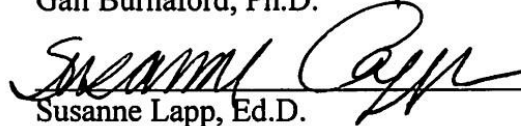
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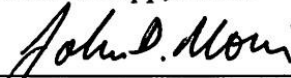
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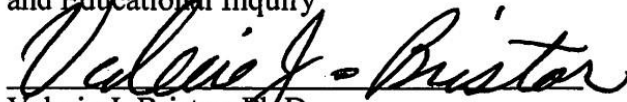
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ABSTRACT

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Title: Responding to the Florida Teacher Standards for the English as a Second Language Endorsement: A Study of Elementary Preservice Teachers' Perceptions

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The purpose of this study was to examine preservice teachers' (PSTs) perceptions regarding their knowledge of the English as a Second Language (ESOL) domains as suggested in the Florida Teacher Standards for English as a Second Language Endorsement (FTSEE), their beliefs regarding the types of assessments and assignments that provided them with the best method of understanding the ESOL domains, and other factors they perceived as influencing their understanding. This mixed methods study collected both quantitative (survey) and qualitative (interview) data. Study participants were elementary education majors enrolled in an ESOL infused program model. Findings from the study indicated that PSTs had an overall understanding of the ESOL domains and were prepared to incorporate a wide variety of instructional strategies and methods into their lesson plans. While culturally competent, they had not yet developed the understanding of how to take an advocacy approach to empower their students in both the school and community.

While some PSTs demonstrated a basic understanding of the components of oral language and literacy development in ELLs, many had not yet obtained an in-depth understanding of the specific language thresholds at each language proficiency level nor understanding of the grammatical and linguistic complexities of spoken and written English. These findings imply that further development is needed so that PSTs are better prepared in the following competencies: the ability to write language objectives across the content areas based on the output of oral and written language; the ability to select the appropriate instructional strategies, curriculum, and materials based on language proficiency levels; and the ability to interpret and make informed decisions based on ELLs' assessment results.

PSTs valued assignments and activities that allowed them to integrate their own knowledge base into scenarios that might actually occur when they become teachers, or reflected scenarios encountered in teaching situations. They valued opportunities to observe and work with ELLs in the field and desired more opportunities to work with a larger variety of language proficiency levels and ages. Outside influences such as jobs, own school experiences, knowledge of another language, and societal interactions also contributed to their ESOL knowledge.

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CHAPTER 1: INTRODUCTION

Demographics and Second Language Learners

According to the demographics provided by the U.S. Department of Education (USDOE, n.d.), 8.5% of the students enrolled in public education during the 2012-2013 school years received some type of English language services. Demographic projections provided by The Center for Public Education (*Changing Demographics at a Glance*, 2012) indicate that the Hispanic population will increase by 167% by the year 2050. During the 2014-2015 school year, approximately 9.5% of students enrolled in grades Kindergarten through Grade 12 were categorized as limited English speakers (LEPS) according to the Florida Department of Education (FLDOE, 2015). These projections pose tremendous educational challenges to public school districts responsible for educating a large percentage of students who are English Language Learners (ELLs) and for university teacher education programs responsible for training preservice teachers (PSTs).

Background and Policy of Florida Teacher Standards for ESOL Endorsement

As a result of a lawsuit filed in Florida in 1990 by the Multicultural Education Training and Advocacy (META) group, Florida public schools were required to provide English as a Second Language (ESOL) services to their students in Grades K-12. By 1996 all teachers with ELLs in their classroom were required to obtain the Florida Teacher Standards for ESOL Endorsement (FTSEE) or complete 300 hours of staff

development training either through their school district or university program (Hite & Evans, 2006). It was not the intent of these standards to train all teachers to be ESOL specialists, rather to give them some insight to second language learners (Govoni, 2011). The endorsement contained five domains and 25 standards that were modeled after best practices in the area ESOL instruction based on the recommendations made by the Teachers of English as a Second or Other Language (TESOL) professional organization.

The five domains included in the FTSEE 2010 (see Appendix A) are Culture, Language and Literacy, Methods of Teaching ESOL, Curriculum and Materials Development, and Assessment. As a result, all universities in the state of Florida offering a certified teacher education program were required to integrate the endorsement standards into their teacher education programs. The universities had the option of teaching the five domains as separate classes, or infusing them (Infused Program Model) into the methods subject area courses (FLDOE, 2001). Currently the majority of public and private institutions are following the Infused Program Model (FLDOE, personal communication, October 1, 2012).

Statement of the Problem

As the population of second language learners continues to increase in the state of Florida it is pertinent to provide future teachers with the proper training to work effectively with this population. As a result, since 1997, all accredited teacher education programs in the state of Florida are required to include an ESOL component, following the guidelines stated in the ESOL Endorsement Standards, as a part of their curriculum (FLDOE, 2001). This study examined PSTs' perceptions of their knowledge of the ESOL standards as suggested in the FTSEE, their beliefs regarding the assessment activities and

assignments that provided them with the best method of understanding the ESOL domains, and other factors they perceived as influencing their understanding of the ESOL domains.

Significance of the Problem

As stated earlier, many ELLs in the United States are currently receiving English language services in schools. This projected increase of ELLs poses implications for all educators responsible for educating and increasing graduation rates as most states are in the process of adopting more rigorous standards such as the Common Core Standards (CCS). Commencing in 2011 the state of Florida transitioned from the Florida comprehensive assessment test of (FCAT), to the FCAT.2 for students in Grades 3 through 10. Students at middle school and high school levels are also now required to take the end-of-the-course assessments (EOC) to assess their content knowledge in the areas of algebra, biology, geometry, U.S. history, and civics (FLDOE, 2014). In order to prepare and increase academic achievement for ELLs, it is appropriate for future teachers to become knowledgeable about the field of language acquisition and how language and literacy are developed (Brisk, 2008; Cartiera, 2006) so that ELLs will be successful on these types of assessments. It is also important for future teachers to understand that due to economic and social segregation, many language minority students are geographically, economically, and linguistically isolated from mainstream neighborhoods that often have higher student achievement (Freeman & Freeman, 2009).

There is a plethora of research that examines how classroom teachers perceive their ESOL training at both the district and university levels (Baecher, 2012; Faez & Valeo, 2012; Harper, de Jong, & Platt, 2008), as related to their practice as teachers in the

classroom. There is, however, a paucity of research or literature that investigates how PSTs' perceive their knowledge of the specific ESOL content knowledge taught in their coursework prior to entering the field. In addition there is little research that examines the assessment activities and tasks that PSTs believe provide the best method of understanding the ESOL content knowledge taught in the teacher training coursework. It is important to include input from PSTs so that the curriculum, content, and components of teacher education programs can continue to improve (Lo, 2009; Smith, 2005) for both the teacher trainee and the stakeholders responsible for educating future teachers. In addition, the results of this research may help to enhance teacher education programs that employ faculty who may not be experts in the field of ESOL instruction and assist in evaluating the effectiveness of the current assessment activities and assignments that are currently in place. Hopefully the results of this study can help to open dialogue between stakeholders at institutions responsible for training PSTs to work with ELLs.

Theoretical Framework

Current research in ESOL suggests that there are certain pedagogical and knowledge skills that all teachers should possess in order to be effective teachers of ELLs in mainstream classrooms (Coady, Harper, & de Jong, 2011; Hollins, 2011; Janzen, 2007; Wong Fillmore & Snow, 2000). The literature also suggests that PSTs are better prepared to work with ELLs when they attend a teacher education program that contains components and curriculum specifically designed to train them to work with ELLs (Cochran-Smith, 2003; Costa, McPhail, Smith, & Brisk, 2005). The framework that will be discussed next identifies the content knowledge and pedagogy that is pertinent to prepare PSTs to teach ELLs.

This study, and subsequent data analysis, was informed by a framework (Figure 1) developed by Coady et al. (2011). This framework also compliments the FTSEE and was used as a guide, in conjunction with other current literature, to examine the knowledge identified in the research as pertinent for PST training and to analyze the research questions. Coady et al. (2011) based their framework on a synthesis of current literature and research regarding best practices to develop teacher quality in the field of preparing teachers to work with ELLs. Their framework contains three broad interrelated categories (called *Dimensions*) that identify the content knowledge, skills, and dispositions of effective teachers preparing to work with ELLs. Within the three broad dimensions the authors identify many factors. The three dimensions are: Teacher Background and Experiences, Teacher Knowledge of Teaching and Learning Processes of ELLs, Teacher Knowledge of ELLs as Learners.

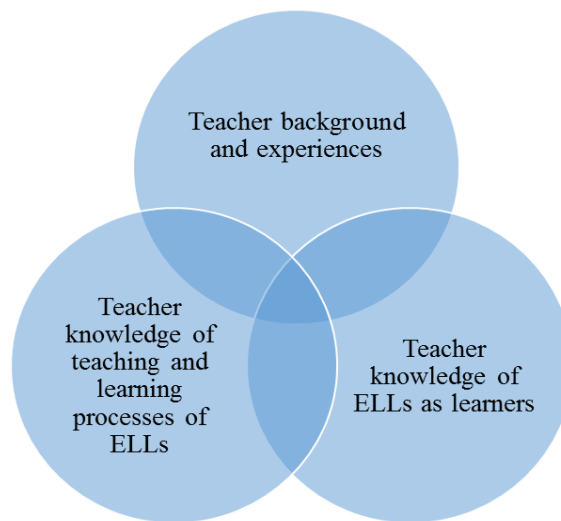


Figure 1. Characteristics of quality teachers of ELLs. Originally published in: Coady, M., Harper, C., & de Jong, E. J. (2011). From preservice to practice: Mainstream elementary teacher beliefs of preparation and efficacy with English language learners in the state of Florida. *Bilingual Research Journal*, 34(2), 223-239. Reprinted with permission from the National Association of Bilingual Education, (<http://nabe.org>).

Dimension 1: Teacher Background and Experiences

Hollins and Guzman's (2005) meta-analysis examined the complex interaction between teacher candidates' experiential backgrounds (personal biographies and past experiences with diverse populations) and what they were taught in the context of their coursework. Their findings suggested that the experiential backgrounds of PSTs often presented barriers when they attempted to integrate what they had learned in their coursework with their personal beliefs about diverse populations. Teacher preparation and varied experiences with diverse students has been cited as one way of increasing PSTs' knowledge and understanding of cultures and languages different from their own (Coady et al., 2011; Cochran-Smith, 2003) as well as providing opportunities for them to examine their own sets of beliefs and attitudes towards diverse students (Commins, & Miramontes, 2006; Garcia, Arias, Harris Murri, & Serna, 2010).

Findings suggest that teacher education programs that include a field experience component with diverse populations contribute positively to PSTs views towards diverse students, influence their willingness to teach in urban areas, and contribute to changes in PSTs' dispositions (Hollins & Guzman, 2005; Jimenez, & Rose, 2010). In addition PSTs' personal experiences with learning another language can also influence their approach to teaching English ELLs (Borg, 2003; Busch, 2010). Assessment activities and assignments designed to encourage PSTs to expand their knowledge and beliefs about ELLs and learning another language will be examined in the survey and interviews.

Dimension 2: Knowledge of the Teaching and Learning Processes of English

Language Learners

Understanding the learning process of ELLs has been identified as an important factor in preparing all teachers to work with ELLs. Therefore it is pertinent for future teachers of ELLs to understand the components of the English language, pedagogical knowledge of second language acquisition theories, strategies for modifying and adapting the content to make it comprehensible, and adapting or selecting appropriate materials (Coady et al., 2011; Kiely & Askham, 2012; Wong Fillmore & Snow, 2000; Yates & Muchisky, 2003).

Through understanding that language is a system made up of many components, teachers preparing to work with ELLs must demonstrate proficiency in English and model the appropriate forms of English in order to support their students' acquisition of English. This entails teaching PSTs the components of language (linguistics) so that they can help their future students develop strong oral language skills. The importance of developing oral language competency has been identified as a key factor in teaching ELLs to successfully read, write, and communicate in English (Kiely & Askham, 2012; Samson & Collins, 2012).

Preservice teacher candidates must also understand the process of second language acquisition and how languages are learned. While acquiring a second language, follows a similar trajectory as acquiring the first language, there are notable differences that are pertinent to understand in order to effectively teach students who are developing English (Brisk & Harrington, 2007). Preservice teacher candidates should also understand the theories of second language literacy development (speaking, reading, and writing)

and the many variables that determine how ELLs become literate in a second language (August & Shanahan, 2008; Coady et al., 2011; Wong Fillmore & Snow, 2000). Their knowledge base should also include information about the influences of their students' heritage language on learning and literacy levels so that language abilities in both languages are accurately understood (Coady et al., 2011; FTSEE, 2.2. a).

Last, PSTs of ELLs must have knowledge of the appropriate teaching methodologies and instructional strategies designed specifically for this population. Knowledge of these types of strategies and teaching methods are required by the FTSEE. PSTs must also possess the skills and knowledge on how to make English comprehensible in the content areas through the use of specific methodologies, materials, and assessments that are designed specifically for ELLs (Coady et al., 2011; Echevarria & Vogt, 2010; Met, 1999). Coady et al. refer to this as having an “understanding that language is both the content and the median for student learning” (2011, p. 226).

Preservice teacher candidates should be exposed to the many different types of content-based teaching models and strategies that are designed to help ELLs understand content area subject matter. Content-based instruction and sheltered English are just two of the content models cited in the literature as effective when teaching ELLs. While they may follow slightly different approaches and have different names, these approaches are designed to teach ELLS the content and grade level materials in a way that is meaningful and comprehensible (Coady et al., 2011; Coleman & Goldenberg, 2009).

Dimension 3: Teacher Knowledge of ELLs as Learners

Preservice teacher candidates must have an understanding of their ELLs' linguistic and cultural backgrounds in the context of teaching and learning in attempt to integrate their students' prior knowledge and cultural backgrounds into their teaching practices and curriculum (Coady et al., 2011; Flor Ada, 1995; Janzen, 2007; Johnson, 2009). This entails providing PSTs opportunities to participate in assignments, activities, and discussions that help them to understand and to take advantage of the cultural and linguistic resources that ELLs bring to the classroom. By developing an understanding on how to use their future students' culture and backgrounds as "a foundation for new learning" (Brisk & Harrington, 2007, p. 28), ELLs are better equipped to build linguistic and cognitive connections.

Preparing PSTs to instruct diverse learners at different language proficiency levels requires adapting curriculum, selecting appropriate materials, and modifying traditional methods (Coady et al., 2011; Valdes, Bunch, Snow, Lee, & Matos, 2005). It is important for PSTs to know and understand the theories and research regarding how languages are acquired and how to apply this knowledge in their future teaching situations. Future educators of ELLs should also have an overall understanding of multiple types of assessments as related to language proficiency levels, program placement, and academic evaluation of ELLs. Assessment should be viewed as a process of collecting information, interpreting the results, and making decisions about the curriculum and instruction (Genesee & Hamayan, 1994) for ELLs. The FTSEE requires PSTs to have knowledge and training on the research and theories pertaining to second language acquisition and learning. This study examined these components in the survey and interview questions.

Last, cultural variables can also influence the development of language and literacy and are an integral part of the FTSEE requirements for teacher certification. Literacy and language development begins long before a child arrives in school and is influenced by a variety of factors that continue throughout a lifetime. Influences from home, socio-cultural, and instructional environments all contribute to literacy and language learning experiences (Lesaux, Geva, Koda, Siegel, & Shanahan, 2008). PST training should address how socio-cultural and linguistic identities can be used as resources for teaching and as methods of connecting their prior knowledge to the curriculum. This requires the ability to apply certain teaching strategies and methods in order to integrate these identities into the curriculum (Brisk & Harrington, 2007; Coady et al., 2011).

Purpose of the Study

The purpose of this study was threefold. First this study examined elementary PSTs' perceptions of their knowledge of the ESOL domains as suggested in the FTSEE. Secondly, this study examined those assessment activities and assignments believed by PSTs to provide the best method of understanding the ESOL domains as specified in the FTSEE. Last, this study examined other factors perceived by PSTs as influencing their understanding of the ESOL domains.

This research investigated the following research questions:

1. What are PSTs' perceptions regarding their knowledge and understanding of the ESOL domains as specified in the FTSEE?
2. Which assessment activities or assignments do PSTs report provide them with the best method of understanding the ESOL domains as specified in the FTSEE?

3. What other factors do PSTs believe influence their understanding of the ESOL domains as specified in the FTSEE?

Definitions

English as a Second Language (ESOL). The second or other language that a person speaks in addition to his/her native language.

Infusion Model. A curriculum model that infuses Methods of Teaching ESOL, ESOL Curriculum and Materials Development, Cross Cultural Communication, Understanding Applied Linguistics, and Testing and Evaluation of ESOL into teacher education methodology courses at the university undergraduate level for teacher candidates seeking certification in the state of Florida (FLDOE, 2001).

Cross-Cultural Communications. The Five Essential Elements of Cultural Competence—assessing cultural knowledge, valuing diversity, managing the dynamics of difference, adapting to diversity, institutionalizing cultural knowledge (Quezada, Lindsey, & Lindsey, 2012).

Culture. The values, traditions, worldview, and social and political relationships created, shared, and transformed by a group of people bound together by a common history, geographic location, language, social class, religion, or other shared identity (Nieto & Bode, 2012).

English Language Learner (ELL). For the current study an ELL is a person who is learning to speak English in addition to their native or other language.

Societal or dominant language. The language used for communication in the public domain and in schools.

Critical Theory. For the current study, critical theory is viewed as “education that is intimately linked to ideologies shaped by power, politics, history, and culture” (Darder, 2003 p. 35).

Multicultural Education (MCE). The seven basic characteristics of MCE are antiracist education, basic education, important for all students, pervasive, education for social justice, education is a process, and education is critical pedagogy (Nieto & Bode, 2012).

Methods of Teaching English to Speakers of Other Languages. Any method of instruction that meets the educational needs of second language learners in the classroom. These methods of instruction must include the five standards as cited in the ESOL endorsement.

ESOL Curriculum and Materials Development. Educational curriculum and materials in the subject areas that are specifically developed to meet the educational needs of second language learners. These curriculum and materials must meet the criteria as noted in the five standards of the ESOL endorsement.

Assessment. Any assessment materials including, but not limited to quizzes, tests, assessments, standardized tests, oral tests, and portfolios. These assessments must meet the criteria as noted in the five standards of the ESOL endorsement.

Preservice teacher. Any undergraduate student pursuing a teaching degree at the university level.

CHAPTER 2: LITERATURE REVIEW

Overview

The first section of the literature review examines the educational policies specific to this research and discusses the ESOL theories and research that support the five domains stated in the FTSEE. Next it examines the role of teacher candidates' knowledge and beliefs of diverse populations, ESOL teacher training program models, teacher cognition and language teaching, PSTs' perceptions of their knowledge and preparedness to teach ELLs, and best practices for assessment in PST education. Last, university faculty and interdisciplinary teaching and their commitment to the teaching of diversity are examined.

Policy-Background to the Florida Teacher Standards for the English as a Second Language Endorsement

The Florida Consent Decree (or the META Agreement) mandate was a result of a 1990 class action lawsuit against the state of Florida for failing to make accommodations in instruction for ELLs in the public schools. As a result, the mandate required ESOL training for all teachers in Florida who have one or more ESOL students in their classroom. In 2010 the FTSEE were approved by the FLDOE (2010) and all teacher candidates pursuing certification were required to complete the requirements in order to obtain certification. The FTSEE consists of five domains organized around the set of performance standards that specifically addresses the support and training of teachers to work with ELLs early childhood through Grade 12 and were informed by national and

state experts in the ESOL profession (Govoni, 2011). Any university offering teacher certification early childhood through Grade 12 must provide PSTs with 15 semester hours of class work that covers the five required domains of: Culture (Cross Cultural Communication), Language and Literacy (Applied Linguistics), Methods of Teaching ESOL, ESOL Curriculum and Materials Development, and Assessment (FLDOE, 2001). Initially universities had the option of offering the requirements as five separate stand-alone classes; however, as of August 2013 all state approved teacher education programs were required to follow the state approved infusion model. Most universities have two or three stand-alone ESOL courses and integrate the remaining standards into the teacher education coursework. Most often, reading, language arts, science, social studies, art, and music methods courses are infused with the standards (Govoni, 2011). In addition all programs must include ESOL field placements at different points during the program.

Domain 1: Culture (Cross-Cultural Communication)

As mandated in the FTSEE, PSTs must have an understanding of cultural identity, the role of culture in society, and the effect of culture on language development and academic achievement in preparation to teach ELLs. Domain 1 of the FTSEE is Culture. For the purpose of this work, culture is defined as: “The values, traditions, worldview, and social and political relationships created, shared, and transformed by a group of people bound together by a common history, geographic location, language, social class, religion, or other shared identity” (Nieto & Bode, 2012, p. 158) and was selected because it most closely aligned with the Performance Indicators as cited on the FTSEE.

Following the civil rights movements during the 1960s (Sleeter, 2005), the integration of culture into the education curriculum was historically contained under the

umbrella of MCE, and was deemed important enough to be included in most state certification policies related to teacher education (Goldenberg, Rueda, & August, 2008). Ladson-Billings and Brown (2008), in their extensive review of literature on curriculum and cultural diversity, found that the majority of research studies conducted from 1970 to 2004 that examined diversity did not specify any racial or ethnic groups specifically in their search and constructed diversity in the aggregate thus assuming anyone who was diverse was the same. The FTSEE standards specify that that ELLs should be viewed as diverse learners who have individual and cultural group identifications.

According to some research (Miller, Strosnider, & Dooley, 2002; Morrier, Irving, Dandy, Dmitriyev, & Ukeje, 2007; Neumann, 2010), most university teacher education programs include a MCE component; however the programs and curriculums often vary in design, breadth, quality, and depth. In addition, the philosophical beliefs and theoretical frameworks integrated into MCE teacher education programs are often a source of debate at universities and often contain a variety of perspectives regarding what should be included (Banks, 2006). These varying beliefs can be influenced by the political climate, current policies, philosophical beliefs, and the role of diversity in education that is prevalent in society at any given time (Banks, 1993; Nieto & Bode, 2012). While dissonance exists in the field, most experts in the field (Nieto & Bode, 2012; Sleeter & Grant, 1987) concur that MCE is not about celebrating holidays, eating ethnic foods, and learning about other ethnic groups.

Landmark work published by Banks in critical theory has greatly influenced the landscape of MCE for over 35 years and has contributed many of the current curricular and program design models present in universities today. According to Banks, educators

must examine the types of “knowledge that should be taught in a multicultural curriculum” (p. 11) and empower students to understand by whom, and how that knowledge is constructed (Banks, 1993). Additional work done by Sleeter and Grant (1987) and Nieto and Bode (2012) position well with Banks’ research. They propose that social equity, social change, and cultural pluralism can only be achieved if schools are reformed to reflect diversity. They view critical pedagogy as the underlying basis for social change. How does a MCE program framed in a critical stance affect teacher knowledge and PSTs training to work with language learning and school achievement for ELLs of diverse backgrounds?

By taking a critical approach to teaching ELLs, students are encouraged by their teachers to share their knowledge and counteract the notion that “knowledge [is] private property belonging only to some and not to others” (Flor Ada, 1995, p. 172). This approach also aligns closely with Cummins’ (1986) theoretical framework that posits when minority students’ languages, cultures and communities are positioned in the school, a sense of empowerment and legitimization is created, therefore increasing academic achievement and language learning (Nieto & Bode, 2012; Pennycook, 1999; Sleeter, 2005). In addition language and culture must be understood as one entity since both share a relationship because what is said in every form of language carries with it different meanings depending on the socio-cultural images associated with the word(s) (Jiang, 2000). As a result, ELLs believe that when their language is legitimized, educators are able to build home/school connections and encourage parental involvement (Flor Ada, 1995). As identified in the literature, parental involvement and empowerment

is integral part of a child's education and has been linked to increased academic achievement, learning, and motivation (Griffith, 1996; Watkins, 1997).

While intentions to promote equality among diverse populations may be genuine and supported by MCE teacher education policies, curriculum, and programs, ultimately, “change is dependent upon the extent to which educators, both collectively and individual, redefine their roles with respect to culturally diverse students and communities” (Cummins, 1995, p. 152). MCE teacher education programs grounded in critical theory can help to support PSTs by developing an understanding of cultural identity, the role of culture in society, and the effect of culture on language development and academic achievement in preparation to teach ELLs.

Domain 2: Language and Literacy (Applied Linguistics)

Second language learners have been part of the landscape of education in this country since its inception, and various approaches, discourses, and philosophies regarding how to educate them have been influenced by the socio/political climates of the times. Given the fact that most ELLs in the state of Florida do not receive support in their native language at school, it is the goal of the FTSEE to train PSTs to work effectively with this population in order to increase achievement in language and literacy. This position is situated in the research done by Slavin and Cheung (2003) at The Center for Research on the Education of Students Placed at Risk. They found that the “quality of the instruction is at least as important as the language of instruction” (p. 40). According to Harper et al. (2008), ELLs should be instructed according to their needs and not instructed through “curriculum and instruction developed for native English speakers with little or no differentiation to address ELLs’ unique second language and literacy

development characteristics” (p. 277). This view is also supported by Commins & Miramontes (2006).

What standards has the state of Florida determined to be necessary in order to train PSTs to support ELLs in the subject areas of language development and literacy? The Florida endorsement requires PSTs to demonstrate knowledge of second language acquisition and literacy theories, understand the components of oral language development, and understand the components of literacy in order to support ELLs in the school.

Language. The support and development of the students’ native language both linguistically and in the subject area of reading/ language arts in some school districts across the nation is commonly referred to as bilingual education. Although often cited in the literature as beneficial both academically and cognitively for ELLs (Abu-Rabia & Seigel, 2002; Bialystok, 2001; Brisk & Harrington, 2007; Carlisle, Beeman, Davis, & Spharim, 1999; Jimenez, Garcia, & Pearson, 1996; Ollers & Eilers, 2002), bilingual education programs are not supported by most school districts in the state of Florida. Nevertheless, knowledge and understanding of the research related bilingualism is mandated in the FTSEE (2.2.a. 2.3.b.) and important for PSTs to understand.

As students’ progress through school language becomes more complex, vocabulary more embedded, and the context of the language in the content areas become more complicated and dependent on higher levels of English language proficiency (Genesee, Lindholm-Leary, Saunders, & Christian, 2005; McKeon, 1998; Valdes et al., 2005). It is imperative that ELLs develop strong oral language skills in English because oral language competency plays a pivotal role in the development of literacy and is

relative to their success in reading/language arts (Coleman & Goldenberg, 2009; Lesaux et al., 2008). Furthermore, as a student's oral language proficiency develops, so do his/her abilities to further acquire more complex language learning strategies (Genesee et al., 2005). With regard to teacher education programs, Valdes et al. (2005) caution that attention to language development "cannot be limited to content and pedagogy courses intended for teachers of language arts or even to required courses in reading in the content areas" (p. 167) but they must consistently be modeled by all faculty.

While acquiring a second language, follows a similar trajectory as acquiring the first language, there are notable differences that are pertinent for PSTs to understand in order to effectively teach students who are developing English. It is important to note that "bilinguals do not function as two monolinguals shutting off one language while using the other, but as an integrated individual with two active languages affecting each other and serving as efficient resources for communication" (Brisk & Harrington, 2007, p. 8). Furthermore, all students come to school from diverse backgrounds and varying English proficiency levels, and PSTs must take these considerations into account so that language abilities in both languages are accurately understood (FTSEE, 2.2.a).

Landmark research done by Cummins commencing in the 1970s, reported that acquiring and becoming competent in a second language can be influenced by many factors and it can take anywhere from 5 to 7 years for a student to acquire academic English (Collier, 1989; Cummins, 1980). This concept has tremendous implications for teachers and ELLs as often students are exited from support programs such as ESOL pullout programs, or individual language tutoring before they are competent enough to compete academically with their English speaking peers. As a result, students are often

misdiagnosed with learning disabilities and placed in remedial reading/language arts programs (Echevarria & Vogt, 2010; Reyes & Vallone, 2008).

Consequently, it is vital that PSTs understand the difference between language that is conversational language (Cummins, Mirza, & Stille, 2012), and language that is related to academic achievement. Cummins refers to the language that most ELLs initially acquire in conversations as basic interpersonal communication skills (BICS), and in general most students quite easily acquire this type of language. In contrast, cognitive academic language proficiency (CALP) is the type of language necessary for second language learners to develop in order to succeed academically in all content areas. In order to develop CALP, ELLs must be involved in both reading and writing activities that develop strong vocabulary and language proficiency so that they can progress and keep up with their English speaking peers (Cummins et al., 2012).

How can teachers build CALP with their ELLs? Teaching vocabulary in the content areas is one strategy cited in the research that contributes to academic achievement and enables ELLs to more fully participate in classroom discussions and interactions with text (Carlo et al., 2004). As students advance through the grade levels vocabulary becomes less context embedded and more decontextualized.

Decontextualized language presents the greatest challenge for students acquiring a second language because it is not embedded in the context of the discussion or lesson (McKeon, 1998), and therefore more difficult to understand. Therefore it is important for ELLs to become more proficient in their speaking abilities because ELLs who demonstrate a wider command of language learning strategies and are able to monitor their language, are better prepared to ask for clarifications, assistance, and use comprehension strategies

effectively (Genesee et al., 2005). Often misconceptions exist regarding the academic proficiency of ELLs who have a strong CALP. It is believed that they do not need as much explicit language instruction as lower functioning ELLs (Nutta, Mokhtari, & Strebel, 2012). Contrary to this belief, it is pertinent that they continue to receive explicit language instruction that is embedded into the content areas.

Classrooms that are communicative in nature provide students with more opportunities to practice with partners and in groups therefore developing the appropriate use of language depending on the context of the discussion (Coleman & Goldenberg, 2009; Lightbrown & Spada, 2006; Valdes et al., 2005). For this reason, ESOL coursework should instruct teacher candidates on how to develop language skills that promote higher order cognitive abilities and academic language proficiency (Genesee, Geva, Dressler, & Kamil, 2008).

Perhaps presenting the greatest challenge for educators is the fact that many students come to school speaking a variety of languages each containing its own unique linguistic system of phonology, morphology, syntax, semantics, and pragmatics, (FTSEE, 2.1.b.). These components of language, often called applied linguistics, are important for PSTs to understand when working with multiple languages in the same classroom (Wong Fillmore & Snow, 2000). Phonological skills (the ability to recognize the sounds of a language), syntax (phrase and sentence structure), and morphology (structure of the words) can vary depending on the heritage language of the student. While PSTs cannot be expected to know the phonetic and syntactic structures of other languages, they need to recognize that students may incorrectly apply the rules from their heritage language until they are competent enough in English to apply the rules correctly (Genesee et al.,

2008). However, PSTs should have an understanding of semantics (word/sentence meaning) and pragmatics (the effect of content on language) of English and know how to explicitly teach the grammatical elements of English and the social conventions of conversation (Coleman & Goldenberg, 2009; Wong Fillmore & Snow, 2000; Freeman & Freeman, 2009; FTSEE, 2.1.d.; Valdes et al., 2005).

Knowledge of second language acquisition theories and understanding applied linguistics, while important to helping ELLs develop competence in English, are only two components of an ESOL preservice program. This research study supports the contention that socio-cultural values and beliefs and individual differences play an influential role in second language acquisition. For this reason, PSTs should be aware that all students come into the classroom with communicative skills that have been developed outside of school (McLaren, 1998) and that are usually not the language of the dominant society. This implies that PSTs must identify with and apply knowledge about sociocultural and sociopolitical variables that influence language learning and facilitate student achievement (FTSEE, 2.2.c.). Johnson (2009) encourages educators to think of language as a social practice that helps students to make sense of an experience, and in addition as a cultural tool that can be used to share experience and cultural knowledge (Flor Ada, 1995; Reyes & Vallone, 2008).

How do sociocultural theories apply to PSTs in the classroom? PSTs should capitalize on their students and their cultures as resources and use the student's culture as "a foundation for new learning" (Brisk & Harrington, 2007, p. 28). Students are intrinsically motivated to learn another language and better able to build cognitive connections when the learning encourages active participation, is culturally relevant, and

integrates the students' prior knowledge. While the goal of ESOL instruction is to prepare students to become academically successful in English reading and language arts, it is also important to validate the students' heritage language with the additional goal of increasing parental and community participation (Wong Fillmore & Snow, 2000; Flor Ada, 1995).

Finally, as in any learning situation, all students come to school with underlying cognitive academic abilities that vary from student to student, and therefore effect how well and quickly a language is learned (Genesee et al., 2008). As in any subject area, understanding the learner variables of the individual student, and adjusting accordingly, is the sign of a knowledgeable teacher (FTSEE, 2.2.d.).

Literacy. The concept of literacy and the definition of literacy mean different things to different people, but in alignment with the FTSEE, literacy involves the acts of speaking, reading, and writing. As note earlier, second language learners tend to score lower on national tests of reading comprehension in English than do their monolingual counterparts. This holds great implications for PSTs and the university faculty responsible for their education. As noted in the FTSEE Standard 3, PSTs should demonstrate and understand the components of literacy and apply the theories of second language literacy development to support ELLs learning.

This implies an understanding of the many variables that determine how students become literate in a second language. For example, PSTs must understand how the students' native language, sociocultural, and sociopolitical variables can influence literacy in English. In addition it is pertinent to understand the relationship between literacy in the first and second languages in order to facilitate literacy in bi-literate

students. Last, it is imperative for the teacher to demonstrate knowledge of the components of language (phonology, morphology, syntax, and semantics) and their link to literacy, which is often a weak link in PST training (Wong Fillmore & Snow, 2000).

As stated previously, socio-cultural theories have informed the researcher's view of language and literacy development. Literacy development begins long before a child arrives in school, and is influenced by a variety of factors that continue throughout a lifetime. Influences from the home, socio-cultural, and instructional environments all contribute to literacy and learning experiences (Lesaux et al., 2008; Valdes et al., 2005). Perez (2004), in her review of the literature, suggested that reading, writing, and language be viewed as part of a larger social dimension in that literacy is not isolated from specific contexts, rather it is embedded in multiple discourses. This position is also supported in the work done by Brisk and Harrington (2007). They further report that teachers should have an understanding of how literacy is viewed, used, and valued in different societies.

What are the implications for PSTs who will have bi-literate students in their classrooms? Students who are literate in their heritage language benefit from instruction from a teacher who understands research in bilingualism, language transfer, knowledge of student literacy levels in the heritage language, and strategies to best optimize prior knowledge (FTSEE, 2.2d.). Many studies suggest that native language support contributes to certain aspects of transfer from the native language to English (Thomas & Collier, 2002) and supports cognitive development (Bialystok, 2001). In their landmark report to the National Literacy Panel on Language Minority Children, and Youth, August and Shanahan (2008) found that with the exception of one study, students who were able to read strategically in one language were able to also read strategically in the other

language, consequently correlating positively to reading performance. While most PSTs will not be providing heritage language support, recognizing, understanding, and encouraging bi-literate students to capitalize on their bi-literacy skills will greatly increase reading achievement.

Increasing student achievement on standardized tests is a goal in most school districts. Historically ELLs have lagged behind their English-speaking peers in academic achievement, especially in reading (Laija-Rodriguez, Ochoa, & Parker, 2006). This implies that PSTs must have specific knowledge about how to instruct diverse language learners to prepare for standardized assessments. ELLs require a large repertoire of skills to become successful in English reading comprehension and are greatly challenged on standardized tests. Findings from the studies reviewed by August and Shanahan (2008) reported that vocabulary knowledge, listening comprehension, syntactic skills, and the ability to define words were all positively related to ELLs' successful reading comprehension.

Mixed methods research done by Jimenez et al. (1996) showed that strong vocabulary development in both the native and English languages assisted strong bilingual readers and greatly contributed to their reading comprehension (Table 1). Most noteworthy, their research suggested that even though bilingual students focused more than their English-only peers on unknown vocabulary, they were able to employ a variety of strategies in order to figure out the meaning of the words. The data suggested that bilingual students used the following strategies to become successful readers: word substitutions from their native language, application of cognates, direct translation from the native language, and inferred meanings.

Table 1

Selected Research That Informs Reading Comprehension in Bilingual Students

Section	Jimenez et al., (1996)	Carlisle et al., (1999)	Abu-Rabia & Siegel, (2002)
Research question/purpose	What do successful Latino readers know about reading? What strategies do they use?	Do native & second lang. voc. & degree of bil. contribute to performance on a metalinguistic (ML) task? Do native & second lang. voc. & ML development at word levels predict reading comp.?	What is relationship between reading, writing, phonological, syntactic, orthographic (ORTHO) & working memory in English & Arabic?
Methods	Mixed Methods: Prompted & unprompted think alouds, prior knowledge assessments, questionnaires, interviews, document analysis, CTBS scores in reading (English)	Quantitative: Standardized tests, Peabody Picture Skills, Woodcock Johnson, Test of Auditory Analysis, 2 subtests of CAT	Quantitative: Wide Range Achievement test, Woodcock Reading, Engl. & Arabic Oral cloze, visual tests, working memory, reading, pseudo words, spelling, oral cloze
Literature review context	Sociocultural aspects of bilingualism (bil.) Receptive vs. productive language (lang.) in reading comprehension (comp.) Metacognition and reading	Cognitive benefits of bilingualism ML development Two lang. threshold hypothesis Literacy Acquisition Academic Eng. & phonological awareness	Linguistic interdependence hypothesis Script dependence hypothesis Bilingual reading PHONO awareness

(table continues)

Table 1 (*continued*)

Section	Jimenez et al., (1996)	Carlisle et al., (1999)	Abu-Rabia & Siegel, (2002)
Results	Successful readers are aware of relationships between languages, less successful don't use both languages to advantage English only readers rely on prior knowledge strategies for unknown vocabulary (Voc.)	Voc. development related to ML & voc. knowledge contributes to both lang., degree of bil. contributes to formal definitions in Span., not Eng. both lang. contribute to voc. & PHONO in Reading Comp. in Eng. Weak word levels may contribute to poor reading comp.	High correlation between reading in Eng. & Arabic, English reading, memory, & lang. skills suggest variation may not be due to lang., consistent w/interdependence hypothesis, phono. skills correlate w/word recognition in both lang., disabled readers evident in both lang.

Findings from the research conducted by Carlisle et al. (1999) suggested similar results (Table 1). They looked at bilingual Spanish students most of whom were not literate in their heritage language whose language of instruction was English. Using quantitative methodology, their findings suggested that early development and knowledge of vocabulary in both the heritage and English languages contributed positively to metacognitive performance (the ability to define words in both Spanish and English), the quality of vocabulary definitions in both languages, and reading comprehension in English. Also of interest to the researcher of this study, Abu-Rabia and Siegel's (2002) findings suggested a high correlation between reading skills in English and Arabic in the areas of phonological skills, and word recognition skills, even though the orthographic systems were not the same (Table 1). For these reasons, key components of a preservice teaching program designed to improve reading achievement must include the following; recognition of the importance of the students' heritage language while building on the foundation of that language, increased vocabulary

development in the content areas, and capitalizing on language transfer strategies (FTSEE, 2.2.b.).

As aforementioned, components of language, often called applied linguistics, are important for PSTs to understand when working with multiple languages in the same classroom. While the scope and depth of applied linguistics and literacy is often regarded as too complex to integrate entirely into PST training coursework, it is pertinent to understand and apply a few of the concepts with the goal of facilitating ELLs' literacy development in English (Wong Fillmore & Snow, 2000; Valdes et al., 2005). First, successful readers are aware of the relationship between their native language and English, and they use strategies such as cognates, transfers, and observations to figure out unknown vocabulary in order to enhance their reading comprehension (August & Shanahan, 2008). Some ELLs may also understand word order (syntax) and may construct written and oral sentences incorrectly in English. PSTs should understand how to correct and point out the differences because specific feedback is helpful in recognizing and learning from errors (Coleman & Goldenberg, 2009; Freeman & Freeman, 2009; Lightbrown & Spada, 2006). Therefore it is appropriate for PSTs to encourage ELLs to apply their preexisting literacy skills to English literacy tasks while acknowledging the value of their native language and taking an additive perspective to their academic growth and success (Brisk & Harrington, 2007).

Currently there is a paucity of research on the instructional practices or methodologies to facilitate the transfer of written text (Barletta, Klingner, & Orosco, 2011) as well as research focused on the writing practices of diverse students in their home and communities (Durgunoglu & Goldenberg, 2011). Wong Fillmore and Snow

(2000) noted that many teachers are reluctant to correct grammar on their students' writing because they are insecure about their own grammatical skills. However, experts in the field concur that by specifically teaching ELLs the components of writing and by building content knowledge prior to writing is an effective method to increase student achievement (Brisk & Harrington, 2007; Wong Fillmore & Snow, 2000). This means that students must be made aware of the elements of writing, such as: point of view, organization of the content, genre, and elements of punctuation and purpose.

Writing activities also present teachers with another avenue for increasing vocabulary development and developing syntactic awareness with their ELLs. As discussed in the earlier research findings, building large vocabularies and providing ELLs with frequent and meaningful opportunities to practice and apply new words in the context of writing must be a priority. Lightbrown and Spada (2006) reported that incorporating vocabulary into writing activities is another method in which vocabulary can be reinforced and supported. According to Lightbrown & Spada (2006), cognates are also more easily identified by students when they are in written versus spoken form. While studies on literacy show various levels of transfer between various forms of written language (Bialystok, Luk, & Kwan, 2005), some writing systems (orthography) can pose limitations and specific skills may not transfer (Wong Fillmore & Snow, 2000). Therefore, by helping pre-teachers to understand the general components of language, university faculty can assist their students to focus attention on the similarities as well as the differences between the languages. Finally, writing should be given equal importance with reading, which is often not the case in schools (Barletta et al., 2011).

Domain 3: Methods of Teaching English as a Second Language

In many states, standardized tests are used to measure educational benchmarks and have greatly influenced the types and quality of programs that have been employed by school districts. While these tests provide outcome in terms of data, they fail to take into account the many variables that can influence the outcomes. According to Hakuta (2011), standards-based policies do not focus on the language of instruction for bilingual learners, rather on the outcomes of the learning. The context, in which learning takes place in a school, is often not considered because standardized programs are designed with a “one size fits all” approach. Consequently the individual classroom teacher is left to determine which contextual factors will exert the greatest influence on her/his ability to teach students to the most optimal level. De Jong and Harper (2005) encourage educators to “understand the cultural and linguistic assumptions behind the instructional techniques [as] these activities can be ineffective when used without modifications for ELLs” (p. 112). Preparing PSTs to instruct diverse learners in a standards-based program is challenging at best, and requires adapting and modifying traditional methods to meet the specific needs of this population.

What does the current research identify as appropriate methodologies for supporting diverse learners in standards-based learning environment? First, PSTs must hold high expectations for all learners, but be knowledgeable on how to make adjustments according to proficiency levels (Brisk & Harrington, 2007; Bunch, Abram, Lotan, & Valdés, 2001). Second, they must understand how to organize and adapt each lesson specifically for ELLs and be able to explain the purpose of the content to their students. For example, integrating prior knowledge activities into the lesson during the

planning process will greatly contribute to student success (Echevarria & Vogt, 2010). Third, teachers should clearly model what they would like the students to do, give students precise feedback, and ample time to practice the material (Brisk & Harrington, 2007; Coleman & Goldenberg, 2009). Last, in addition to content objectives, specific language learning objectives must also be included.

In addition to standardized tests, teachers must also support ELLs' access to the core curriculum by teaching English through academic content (FTSEE, 2). In the teacher education literature, this method is commonly referred to as Content-Based Instruction (CBI) or Sheltered English.

CBI was informed by the landmark work done by Krashen (2009). Drawing on the work done by Chomsky (as cited in Joseph, Love, & Taylor, 2001, p. 131) on first language acquisition, Krashen (2009) proposed a model for second language acquisition called the Monitor Model. This model was based on a series of five hypotheses and greatly influenced the landscape of second language teaching. He proposed that second language acquisition occurs when students are exposed to language that is comprehensible but slightly more difficult than the language that the student is accustomed to learning. This also builds on the concept of scaffolding because students are supported as they learn something new or more difficult, while relating new knowledge to prior knowledge (Echevarria & Vogt, 2010). There are many different types of CBI models and while they may follow slightly different approaches, they are designed to teach ELLs the content and grade level standards using English (Coleman & Goldenberg, 2009; Met, 1999).

One model, proposed by Bunch et al. (2001), offers a content-based instructional approach that can be applied and adapted to meet the needs of ELLs at all proficiencies and grade levels. They propose that the following conditions are necessary for effective learning in school contexts with ELLs: a rigorous and accessible curriculum, access to linguistic and academic peer resources, an explicit focus on academic language development, and teachers who have appropriate preparation and support (Bunch et al., 2001). Due to the structure and components of content-based instruction, learning strategies can be directly integrated into the curriculum and subject content, thus providing the students purposeful opportunities to internalize and transfer the content into independent learning contexts (Bunch et al., 2001; Echevarria & Vogt, 2010; Grabe & Stoller, 1997). For example, the strategies of summarizing, scanning, decoding, inferring and skimming can be applied in all content areas and transferred into a multitude of learning environments and situations (Met, 1999).

In addition, CBI teaches ELLs to listen, speak, read, and write while integrating and participating with native English speakers in core curriculum in all subject areas. And most importantly, teaching methodologies that incorporate the components of content-based instructional can easily be adapted to students of all age levels and language levels and are easily integrated into the teacher training methods coursework (Valdes et al., 2005). Consequently it is critical that all PSTs be able to demonstrate knowledge of, and be able to apply, the components of CBI in their classroom assignments, discussions, and activities.

Domain 4: ESOL Curriculum and Materials Development

Domain 4 specifically states that PSTs understand and apply strategies for ELLs that support their learning in a standards-based curriculum. The FTSEE recognizes that students come from diverse backgrounds and academic levels, and challenges teachers to plan for instruction that embeds assessment, employs scaffolding strategies, adjusts for learning styles, and is student centered (FTSEE, 4.1.a.b.e.). It is imperative for PSTs to understand that most students do not receive additional support in English via a pullout ESOL program; therefore, they are the sole providers of English language instruction even in a standards-based curriculum. PSTs should also understand that all students must have access to the same curriculum and therefore be knowledgeable on how to make adaptations to a standards-based curriculum to ensure equal access (Commins & Miramontes, 2006).

There are many ways in which teachers can adapt and modify a standards-based curriculum and materials to meet the needs of diverse learners while simultaneously building English language competencies. First, PSTs should be knowledgeable on how to adapt and modify material in the initial stages of curriculum planning, but remain flexible and open to modifications based on the students' needs and academic progression. Teaching materials should be carefully and purposefully selected and checked beforehand for cultural biases (Echevarria & Vogt, 2010). Rubrics for evaluating the cultural appropriateness of materials are readily available and should be provided to PSTs in their reading/language arts methods classes. In an atmosphere of standardized testing and scripted learning, it is pertinent that students are exposed to a variety of multicultural literature that reflects a large variety of genre, languages, and cultures. Through the use

of a quality evaluation tool PSTs can feel confident that their selections will enhance the learning in their classrooms.

Second, as noted earlier, PSTs must understand the specific cultural experiences and linguistic knowledge of his/her students and use these experiences as resources when planning curriculum and materials (Christensen, 2000; Flor Ada, 1995; Park & King, 2003; Sleeter, 2005). This approach empowers students to become stakeholders in the curriculum, and it becomes grounded in their experiences and lives and encourages participation (Barletta et al., 2011; Christensen, 2000; Darling-Hammond et al., 2005; Met, 1999). Christensen (2006), an educator known for challenging teachers to adapt curriculum based on their students, noted that standardized curriculums often teach writing in a technical and formulaic method according to prompts, rather than encouraging students to write about ideas that matter to them. The work of Christensen is supported by the review of research conducted by Barletta et al. (2011).

Barletta et al. (2011), in their review of research, found that repeated writing activities, such as prompts, did not improve writing with ELLs, rather outcomes tended to improve when the students wrote about topics of personal interest to them. Thematic teaching is supported in the literature as a strategy to adapt curriculum and materials to make them interesting and relevant to ELLs. As noted by Freeman and Freeman (2009), thematic teaching is a powerful teaching strategy to use with bilingual and ESOL students because it integrates academics across a variety of content areas using a variety of resources. Through the creation of thematic units of study, the teacher is able to build bridges and close gaps in a standards-based curriculum that supports learning across the subject areas (Janzen, 2007; Thomas & Collier, 2002).

Third, understanding and planning for the inclusion of specific English language acquisition strategies in the curriculum is the basis for adapting curriculum to make it language sensitive (Hansen-Thomas, 2008). As stated previously, most students only receive English language instruction in their classroom; therefore, it is imperative that the curriculum specifically addresses the English language as an area of instruction. This position is supported by Met (1999), in that when planning a content-based lesson, the ESOL strategies and English language teaching that occurs are just as important as the content itself. This involves planning a curriculum that sets clear goals, states specifically what will be taught, gives frequent assessments, and re-teaches content as needed (Coleman & Goldenberg, 2009; Echevarria & Vogt, 2010).

Last, scaffolding is an important concept for PSTs to understand when planning curriculum and selecting materials for ELLs (Cirino, Pollard-Duradola, Foorman, Carlson, & Francis, 2007; Echevarria & Vogt, 2010; Hansen-Thomas, 2008; Pawan, 2008). Echevarria and Vogt (2010) refer to scaffolding as a support for learning that enables the text to become comprehensible for ELLs, and it allows for teachers to respond to various levels of language proficiency, vocabulary, and conceptual knowledge (Cirino et al., 2007). It also builds on students' prior knowledge and experiences and helps them make connections to their own experiences (Barletta et al., 2011). Cultural scaffolding is also a term that implies expanding and choosing teaching materials and literature that includes relevancy to diverse learners in that it builds meaningful instruction through the use of culturally relevant materials (Pawan, 2008).

There are a variety of researchers and curriculum specialist that have suggested strategies that can be used to modify the curriculum and materials to make them

accessible and relevant to ELLs. In addition, there are many ways in which materials can be modified, enriched, and supplemented to successfully meet English language and literacy learning objectives. Teachers working with ELLs in a standards-based curriculum must make sure that the curriculum is focused on the needs of the student and the teacher should employ the strategies that make the curriculum comprehensible and linked to the students' background knowledge (Echevarria & Vogt, 2010).

Domain 5: Assessment (ESOL Testing and Evaluation)

The FTSEE Domain 5 requires PSTs to have an overall understanding of assessments as they relate to the placement and evaluation of ELLs from diverse backgrounds. It challenges teachers to identify, develop, and use a wide variety of standards and performance based assessment tools to inform instruction and access student learning (FTSEE, 3). In addition the mandate specifies that PSTs have an understanding of language proficiency assessments and how they are used for placement into programs as required by district, state, and federal guidelines. This research will not address language placement assessments as they are specific to district guidelines, which are not in the scope of this research. However, this research did examine the components of Domain 5 that pertain to those assessment topics as they relate to best practices for diverse students of varying English proficiency levels. First the issue of large-scale assessments was examined and the challenges they present to students in the process of acquiring academic English.

How should PSTs view assessment? Assessment should be viewed as a process of collecting information, interpreting the results, and making decisions about the curriculum and instruction (Genesee & Hamayan, 1994). Assessments should also be

embedded in the curriculum, planned by teachers, and must be focused on providing teachers with the information necessary to support student centered teaching (Darling-Hammond, 1994). This implies that PSTs must understand that the assessment of ELLs is an integration of language and content and the goal of the assessment should be to reflect the academic, social and personal achievement of the students (Genesee & Hamayan, 1994). These types of assessments are referred to as performance assessments and can be an integral part of monitoring and assessing ELLs' language development (Pierce & O'Malley, 1992). Student portfolios, anecdotal records, and self-assessments are a just a few examples of these of performance assessments. By viewing assessment in this frame of reference, teachers can better meet the needs of the ELLs who may be gifted, or require special education services in addition to English language learning (FTSEE, 5.1e). Assessment that is student centered also allows integration of the psychological and sociocultural factors that are factors when working with diverse learners (FTSEE, 1). When the sociocultural factors of assessment are considered, interactions between the parents, teachers, and students are created, therefore empowering all stakeholders to becoming involved in the academic goals (Commins & Miramontes, 2006).

The FTSEE standards expect PSTs to understand the issues and ramifications of large-scale academic assessments as a result of the No Child Left Behind Act of 2001 and the implications of data interpretation on diverse learners. While large-scale assessments provide outcome in terms of data, they fail to take into account the many variables influence outcomes. Standardized assessments put large amounts of pressure on school districts and classroom teachers to include ELLs in the testing pool in order to receive increased funding (Kieffer, Lesaux, Rivera, & Francis, 2009) without considering the

complexity of the assessment for ELLs (Pappamihiel & Walser, 2009). Furthermore, when the tests are not appropriately designed, and students are not tested under the correct conditions, then the language demands of the assessment may negatively influence the ELLs' performance (Kieffer et al., 2009; Russell, 2011). Due to these variables, large-scale data may not reflect the academic knowledge that the ELL truly possesses.

It is pertinent for PSTs to understand how to provide ELLs with the appropriate accommodations for ELLs based on the current research, without lowering the academic demands of the content. According to the research done by Abedi, Courtney, Mirocha, Leon, and Goldberg (2005), some ELLs may increase achievement if they are provided with testing accommodations. The treatments cited in the research were: bilingual dictionaries, English dictionaries, linguistic modification on test items, and testing ELLs in the standard conditions for English only speakers.

Abedi et al. (2005) also studied the effectiveness of testing accommodations for ELLs in Grades 4 and 8 in science and reported that use of an English dictionary was the most significant accommodation for raising test scores in Grade 4, while linguistic test modifications were the most significant for eighth-grade students. The study adjusted for the following variables: length of time in the United States, initial grade placement in school, primary language at home, and ability to understand spoken English. The researchers found that bilingual dictionaries did not contain enough academic language or in-depth word definitions, therefore, causing students to spend too much time looking up words that did not exist.

It is essential for PSTs to understand the importance of knowing more than just the language level of their ELLs when evaluating assessment scores. It is possible that the receptive language competency (ability to comprehend oral and printed language) may surpass the students' productive language competency (ability to express themselves orally or in writing in their second language) therefore not giving the teacher a valid understanding of the student's knowledge and learning (Jimenez et al., 1996).

As a consequence of low standardized tests scores, ELLs are often retained at a grade level or do not matriculate from high school (Darling-Hammond, 1994). While standardized assessments are required, they do pose many limitations for ELLs; therefore, it is important for PSTs to acknowledge the limitations of these types of assessments, while incorporating alternative forms of assessment into the curriculum with the goal of obtaining an accurate view of student learning. While not universally defined, teacher based assessment practices, authentic assessment, or alternative assessments usually imply those types of assessments that are more context or classroom based and often teacher created (Davison & Leung, 2009). Teacher based assessment implies that teachers not only know the curriculum and content of the subjects that they are teaching, but also they know how their students learn (Darling-Hammond, 1994).

Davison and Leung (2009) offer PSTs a four component framework that can be used in the classroom to plan teacher based assessments centered on the best assessment practices found in the literature. Teachers should plan assessment, collect information about student learning, make a professional judgment, and provide appropriate feedback or advice. In following a model such as this type, PSTs are provided with ample

opportunities to use formative (informative and frequent) and summative (formal and planned) assessments based on the needs of their students (Davison & Leung, 2009).

There are types of tools and techniques that PSTS can use to inform instruction and make assessments more accessible to ELLs. Students should be flexibly grouped using a variety of strategies depending on the linguistic needs and proficiencies of the students while providing a wide variety of linguistic experiences (Commins & Miramontes, 2006; Genesee & Hamayan, 1994). By grouping and creating assessments that integrate language and content, teachers can get a better understanding of their students' abilities to communicate in a variety of contexts (Genesee & Hamayan, 1994). Ultimately, the individual classroom teacher is left to determine which factors will exert the greatest influence her/his ability to teach students to the most optimal level, which is why it is important for PSTs to demonstrate understanding of the purposes and limitations of assessments (FTSEE, 5.1d.).

Teacher Candidates' Knowledge and Beliefs of Diverse Populations

Although not directly addressed in the research questions of this study, PSTs' knowledge and beliefs of diverse populations are important to examine because all candidates in the state of Florida seeking elementary teaching certification are required to have the ESOL endorsement. While educational policies and teacher education programs often dictate the curriculum and are responsible for training teacher candidates to work with diverse students, it is just as important to examine how teacher candidates perceive and understand their ethnic identities and beliefs towards diverse populations (Clark, Jackson, & Prieto, 2011; Garcia et al., 2010).

Hollins and Guzman (2005) conducted a meta-analysis of the current research on preparing teachers for diverse populations. Their findings suggested that most of the studies were inconsistent and inconclusive, did not include enough longitudinal or large-scale studies, and were underfunded. They found that the majority of the MCE classes offered at the university level were not integrated into the mainstream teacher education curriculum, and teacher candidates did not always apply what they learned in their MCE coursework, into their own classroom teaching experiences. In addition Hollins and Guzman (2005) examined studies of preservice programs that included activities to reduce prejudice in PSTs. The findings suggested that these studies produced mixed results because the majority of the studies were short term and did not study the long-term effects of prejudice reduction programs on candidates' attitudes toward ELLs and diverse students.

Hollins and Guzman's (2005) review of research also supported what was already reported in previous studies about the demographics of teacher candidates. Most of the candidates in teacher preparation programs were white females (Zumwalt & Craig, 2005) from the dominant culture, had little experience interacting with diverse people, and did not represent the demographic trends in the United States (Clark et al., 2011; Garcia et al., 2010). While some of the teacher education programs had teacher candidates of color, those candidates often reported feeling alienated in the program. Additionally, many of the PSTs entered into the teacher education program with negative or deficit attitudes towards students who spoke a language other than English, or were ethnically diverse.

In support of these findings, Jimenez and Rose (2010) in their synopsis of the literature reported that Hispanic PSTs often held higher expectations for their Spanish

speaking students than did their mainstream white counterparts. In their survey of graduates ($n = 1,200$) from the *Just Teach* program in Florida, Coady et al. (2011) also found a significant relationship between that those teachers who spoke an additional language other than English, and their self-reported preparedness to work with ELLs. The *Just Teach* program was a university based PST education program that followed an Infusion Program model developed from guidelines set forth in the FTSEE 2010.

Next Hollins and Guzman (2005) reported on studies that examined the complex interaction between PSTs' experiential backgrounds (personal biographies and past experiences with diverse populations) and what they were taught in the context of their coursework. Their findings suggested that the experiential backgrounds of the PSTs often presented barriers when they attempted to integrate what they had learned in their coursework with their personal beliefs about diverse populations. This was supported in the theoretical model included in an article written by Coady et al., (2011). Their theoretical model included teacher personality traits, attitudes, and dispositions toward ELL as factors that can enhance or hinder the teaching and learning process with ELLs.

Last, Hollins and Guzman's (2005) findings suggested that teacher education programs that included a field experience component with diverse populations contributed positively to PSTs' views towards diverse students and their willingness to teach in urban areas. Jimenez and Rose (2010) also found that increased opportunities to interact with diverse students contributed to changes in PSTs' dispositions and helped with "shifts from deficit thinking to positive expectations for students and to confidence for teaching culturally diverse students" (p. 405).

In two case studies conducted by Mercado and Brochin-Ceballos (2011), PSTs with varied experiences working with Latino populations were given guided field study placements in Latino communities through supervised placements in schools and field-based projects. Both of these case studies reported an increase of strengthened relationships between the parents, students, communities, and PSTs. In addition both groups of PSTs reported that the experience increased their knowledge and understanding of the Latino community. According to the research, teacher candidates should be provided with ample opportunities in their teacher education coursework and field experiences to examine their own set of beliefs about attitudes towards diverse students (Commins & Miramontes, 2006; Garcia et al., 2010).

English as a Second Language Teacher Training Program Models

Preservice teacher preparation program models for teaching diverse populations vary from university to university and are at varying levels of implementation nationwide (Hollins & Guzman, 2005). Traditionally multicultural education classes were taught as separate classes outside of the mainstream teacher education curriculum and taught by faculty with background in working with diverse populations (Costa et al., 2005; Hollins & Guzman, 2005). Currently a variety of program models exist that vary from state to state, some traditional, others not. Some program models follow an ESOL integrated or infused model of instruction where topics of multiculturalism and bilingualism are integrated into the regular teacher education coursework curriculum.

According to Kim, Andrews, and Carr (2004), a curriculum is infused when it has specific strategies added to the coursework content or curriculum. Kim et al. (2004) conducted a case study with 334 PSTs from early childhood education to high school,

who just completed the coursework before entering the student teaching component of the program. Approximately half of the participants in the study completed their studies in a traditional (separate classes) multicultural/ESOL program model and half in a multicultural/ESOL infusion model.

Adjusting for background characteristics, the findings suggested that the PSTs from the infused program model were perceived as stronger candidates by their university supervisors and supervising teachers than those who had completed the traditional program. In addition the PSTs' perceived themselves to be better prepared than their counterparts to work with diverse populations. While this study did have some methodological limitations due to the fact that teacher candidates and faculty self-reported the data, it does offer some insight into the potential perceived benefits of an integrated curriculum. The findings reported by Kim et al., (2004) were similar to the findings reported by Morrier et al. (2007). They surveyed university deans ($n = 15$) of colleges of education on their perceptions of the infusion program as effective in preparing PSTs to work with ELLs and diverse students. The deans reported that they perceived the infusion program model of MCE content as useful in preparing the candidates to work with diverse populations. One limitation of the study was the small sample size.

Teacher Cognition and Language Teaching

How do PSTs perceive their knowledge and understanding of the ESOL education? While PSTs may perceive their knowledge about ESOL pedagogy and practices as a result of the knowledge that they have learned in their teacher preparation classes, it is important to address other factors that may also influence their knowledge. How do what teachers think, know, and believe relate to what they do in the classroom (including practice teaching) in the field of language teaching? According to Borg (2003), there are “unobservable cognitive dimension[s] of teaching- what teachers know, believe, and think” (p. 81), which he calls “teacher cognition.” In his meta-analysis of literature on teacher cognition and language teaching, Borg identified four factors that may influence how teachers approach language instruction (Figure 2). The factors are schooling, professional coursework, contextual factors, and classroom practice (including practice teaching).

According to Borg, how teachers experienced school as learners, can influence how they approach teaching and learning in their own classrooms. Both PSTs and classroom teachers hold beliefs on how languages are learned based on their own experiences as language learners, or observations in their own school experience. While professional coursework and preparation can shape PST and teacher cognitions, prior beliefs can still impact teaching in the classroom and often exert great influence on classroom practices. Contextual factors such as instructional concerns, pedagogical knowledge, decision making, and personal practical knowledge all shape classroom practices in language teaching. Last, all of these factors play a role in influencing the

types of classroom practices reflected in field placements and in actual teaching practices with students learning another language.

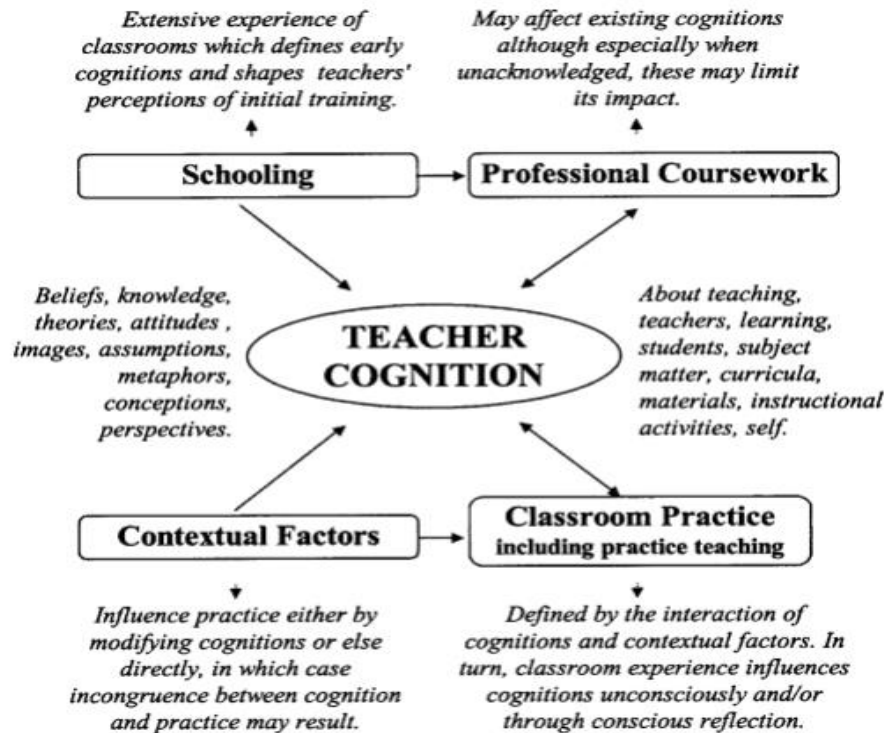


Figure 2. Teacher cognition, professional education, and classroom practice. Originally published in: Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching*, 36(2), 81-109. Reprinted with permission from Cambridge University Press.

Preservice Teachers' Perceptions of Their Knowledge and Preparedness to Teach English Language Learners

As stated, many PSTs are required to obtain certification, or receive training in ESOL as a part of their general teacher preparation coursework. How do PSTs perceive their knowledge and understanding of the ESOL domains? Current research on perceptions regarding ESOL knowledge and preparation contains many studies that reflect the perceptions of novice teachers after they have already entered into the teaching

field (Coady et al., 2011; Faez & Valeo, 2012; Whitney, Nagel, & Nieto, 2002). These types of studies, while valuable, contain certain limitations as they require teachers to remember and reflect on their past teacher education training. While not abundant, there are some studies that examine how PSTs perceive their ESOL knowledge while currently enrolled in their teacher education coursework (Table 2).

Table 2

Preservice Teachers' Perceptions and Knowledge of ESOL

Section	Smith (2005)	Coady et al. (2011)	Lo (2009)
RQ/Purpose	What are PSTs perceptions of their knowledge, skills, & attitude toward working with ELLs in mainstream classrooms?	What do teachers of ELLS need to know & be able to do? How is teaching ELLs different than monolinguals? How confident are PSTs in their ability to teach ELLs?	What are PSTs' attitudes toward ELLs, perceptions toward training & instruct. strategies? (comparison between bilingual & general certified PSTs)
Methods	Quantitative-survey-pre-post ESOL courses	Mixed Methods- 2 open ended ques., rank items for confidence & preparedness	Mixed Methods-survey, interviews
Literature Review	Policy, ESOL, Attitudes, Knowledge, Skills, Diversity, Teacher Educ.	Policy, ESL teacher knowledge, practice, disposition & pedagogy	Attitudes, policy, ESOL prof. training, instructional strategies & pedagogy

(table continues)

Table 2 (continued)

Section	Smith (2005)	Coady et al. (2011)	Lo (2009)
Results	ESOL instruct. is beneficial, know. is related to skill, PST need additional help w/ low level ELLs, no change in attitude towards inclusion of low level ELLs, field experiences most effective, readings least effective	ESOL knowledge beneficial, most know. - culture, instruct. strategies, modifications, comprehensible input, less knowledge - linguistics, socio/cult. implications, active planning for lang, specific teaching	ESOL instruction beneficial, strong awareness of cultural & linguistic needs, more needed for ELL assessment training, PSTs w/ bilingual cert. use more higher order thinking & native lang. instruction than general certified
Conclusion	Continue improvement of ESOL classes & more integration of curriculum, more application theory into practice	PST training should include more linguistics, address L2 dev. & curriculum issues, focus on inclusivity & social justice	Continue providing all PSTs with ESOL training to increase ELL achievement

Note. RQ = research question; ELLs = English Language Learners; ESOL = English as a Second Language; PSTs = Preservice teachers.

Smith (2005), in his quantitative study, surveyed PSTs during their initial ($n = 293$) and final ($n = 273$) ESOL classes. His study examined their perceptions of the knowledge, skills, and attitudes towards working with ELLs in the mainstream classroom. He found that most PSTs reported that the ESOL knowledge received in their classes was beneficial and that their knowledge base increased as they progressed through the course of study. This finding was consistent with the research reported by Coady et al. (2011) and Lo (2009). Lo, in conducting her survey ($n = 129$) and interviews, also found that those PSTs who were becoming certified in bilingual education, reported using more higher order thinking skills and native language instruction than their general education certified peers.

While somewhat similar, results of the three studies also found that PSTs perceived their ESOL pedagogical knowledge and understanding in certain areas to be stronger. In their mixed methods study, Coady et al. (2011) found that PSTs who were taking their last ESOL class were most knowledgeable in the areas of culture, instructional strategies, lesson modifications, and making input comprehensible. Lo (2009) reported somewhat consistent findings. Lo found that PSTs perceived their knowledge of instructional strategies to be the strongest in the following areas: encouraging interactions with the home culture, setting high expectations, making a student centered classroom, scaffolding, and providing hands on learning. Lo also found that PSTs had a strong understanding of the cultural and linguistic needs of ELLs, but needed additional training in assessment. In contrast Coady et al. (2011) reported that PSTs perceived themselves to be less knowledgeable when it came to linguistics, socio/cultural implications related to social justice, and active planning for specific language teaching. Smith (2005) found that PSTs reported that they needed additional help in order to work with low level ELLs in the classroom and that their attitudes towards inclusion in their classroom did not change as a result of taking more ESOL classes. Smith's study was the only one that addressed PSTs' perceptions of their ESOL coursework assignments and assessments. PSTs reported that field experiences were the most effective in increasing their understanding of ESOL pedagogy and practice while course readings were the least effective.

All of these studies cited an increased need for continual improvement and integration of ESOL training and curriculum for all future educators. Specifically Coady et al. (2011) called for more training in linguistics, theories of second language

development, inclusivity, and social justice. In addition Smith (2011) recommended increasing opportunities for PSTs to apply theory into practice.

Best Practices - Assessment of Preservice Teachers

Current research suggests that there are certain assessment activities and assignments that best support PSTs' understanding and knowledge of the content taught in their course assignments. Research question number two of the study addresses the assessment activities and assignments that the PSTs at this institution completed as part of their training. As the student population of this country becomes more linguistically diverse, it is important for future educators to have a wide breadth and depth of knowledge regarding ELLs so that they are prepared to teach their future students. What does the research say about best practices for the assessment of PSTs? Which types of assessment activities and assignments best support PSTs' content knowledge and understanding?

Currently in the United States teacher education programs are using a variety of different approaches to assess the knowledge and skills obtained by their PSTs. While state requirements may vary, many teacher education programs are charged with the task of preparing their PSTs to pass a summative test of knowledge in order to receive state licensure or endorsement. In addition many states have additional endorsements, such as ESOL, which require additional preparation. In response to the licensure and accreditation requirements, many teacher education programs have included performance based assessments as additional mode of assessing student knowledge related to the application of theory into practice (Wei & Pecheone, 2010) and as an additional step to

improve validity when evaluating PSTs (Darling-Hammond, Wise, & Klein, 1999 as cited in Wei & Pecheone, 2010).

Performance based assessments are activities, assignments, and tasks that attempt to reflect some scenarios of teaching and present many of the variables that PSTs may eventually face in their classrooms (Darling-Hammond & Snyder, 2000). Performance based assessments such as case studies, portfolios, exhibition performances, and problem based inquiries are just some of the assessment tools that have been identified in the research as being useful in applying theory to practice (Darling-Hammond & Snyder, 2000; Wei, & Pecheone, 2010). As suggested by Haertel (1991), assessments that are done in context may help teachers to integrate their own knowledge and experiences better than traditional standardized or paper and pencil tests. When reflecting on their teacher training, novice teachers reported that those activities and tasks that integrated theory into practice were the most useful types of assessments in preparing them to work with ELLs and diverse populations in their own classrooms (Faez & Valeo, 2012; Wiggins & Follo, 1995).

According to Floden and Klinzing (1990), while contextualized assessment reflects the knowledge base and learning of PSTs, teaching skills still need to be mastered and “goals and schemata must be used to select, adapt, and integrate these skills to meet the demands of specific situations” (Floden & Klinzing, 1990, p. 17). Darling-Hammond and Snyder (2000) developed a framework that outlines four aspects of authentic assessment and reflects current research. This framework is useful for developing assessments to measure teaching knowledge and to evaluate PSTs’ abilities to teach. The four aspects of authentic assessment are:

1. The assessments sample the actual knowledge, skills, and dispositions desired of teachers in real teaching and learning contexts;
2. The assessments integrate multiple sources of evidence collected over time and in diverse contexts;
3. Multiple sources of evidence are collected over time and in diverse contexts; and
4. Individuals evaluate assessment evidence with relevant expertise against an agreed-on set of standards.

Teacher education programs can use these four aspects as a guide to create assessment tasks and activities that best meet the goals and curriculum of its particular program and needs of its preservice population.

Assessments that sample the actual knowledge, skills, and dispositions desired of teachers in real teaching and learning contexts often require PSTs to engage in actual classroom observations or work with students. Often these types of assessments include videos, analyses of lesson plans or curriculum, interviews, or observation based assessment (Darling-Hammond & Snyder, 2000; Wei & Pecheone, 2010). These types of activities or tasks allow PSTs to practice or demonstrate their abilities and apply the knowledge that they have learned through their coursework to prepare them for future teaching positions (Ball, 2000). Activities and tasks that provide PSTs with field placements in diverse settings, opportunities to observe teachers working with ELLs in their classrooms, and interactions with diverse communities, are just a few ways in which they can learn about how other languages work in schools, and how learning is enhanced when it is socially and linguistically relevant to the student (Garcia et al., 2010).

Case studies are another method of assessing PSTs' knowledge because they are flexible and can be used in a variety of subject areas with implications for cross-curricular exchanges. Kleinfeld (1998) posits that case studies are particularly useful for developing the understanding of diverse cultures because most PSTs have little experience with cultures other than their own. Darling-Hammond and Snyder (2000) caution that case studies are often criticized because they encourage PSTs to apply their own perspectives, often unsupported by current theory or practice. Creating original or adapting existing lesson plans and curriculum is another assessment activity that provides opportunities for PSTs to apply differentiated learning strategies for diverse student populations. According to Assaf, Garza, and Battle (2010), field placements are a realistic context in which PSTs should be required to create lesson plans suited for their target population because they provide opportunities for PSTs to gain a real life understanding of the contexts in which ELLs learn in the classroom.

Portfolios are another assessment tool that allow PSTs to showcase their best work in an organized manner, and reflect on their knowledge of practice and pedagogical knowledge (Wei & Pecheone, 2010). Portfolios are also useful for collecting diverse material over extended periods of time during a teacher education program (Darling-Hammond & Snyder, 2000) and are valuable as an assessment tool for evaluating field placements (Assaf et al., 2010). They also enable multiple assignments from a variety of ESOL embedded courses to be filed and evaluated in order to demonstrate mastery of the curriculum (Nutta et al., 2012). Last, problem-based inquiries are designed to integrate research in the context of teaching into the PSTs' educational program. A goal of this type of assessment is to evaluate how well the PST is able to investigate, analyze, and

apply theory and practice and is often linked to action research type assessments (Darling-Hammond & Snyder, 2000).

Using authentic assessments in conjunction with other types of assessments in teacher education programs is essential to prepare future teachers to meet the educational needs of all students when they enter into the workforce. These types of assessments provide future teachers opportunities for practice, feedback, and reflection (Darling-Hammond & Snyder, 2000) of their practice. As with any type of evaluation or assessment, teacher education faculty who are experts in the field of ESOL education must embed the assessments into the curriculum and be guided by specific pedagogy and program requirements. This also requires the development of rubrics and syllabi that reflect how these types of assessments will be evaluated.

Implementing any program model changes into the content or curriculum of a subject area implies that changes will need to be made on behalf of the educator to his/her area of expertise. The current literature on curriculum implementation contains many studies that are considered best practices for motivating teachers/faculty to embrace change in their curriculum and course content. Fullan (2008), in his extensive review of the literature, examined curriculum implementation and sustainability in school settings by examining a variety of research studies and design models.

Interdisciplinary Teaching

Teacher education faculty who are responsible for preparing teaching candidates to teach multicultural and second language learners will need to infuse a new innovation (Fullan, 2008) into their area of expertise as required by the FTSEE 2010. This implies that the faculty will need to understand the components of the FTSEE as an area of

pedagogy in their content area, and also understand how their students' knowledge of diverse learners is reflected in the course assignments, classroom discussions, and activities. The integration of content across subject or content areas is commonly referred to as interdisciplinary teaching.

While interdisciplinary teaching is not exactly the same as implementing an infusion model into an existing program, the literature on interdisciplinary teaching merits inclusion in this literature review because it reports on how faculty view out of subject teaching in higher education. For the purpose of this study interdisciplinary teaching will be defined as “the degree of integration between various disciplinary bodies of knowledge” (Holley, 2009, p. 4). Initiating interdisciplinary teaching implies that changes will need to be made, and that new curriculum will need to integrate into the discipline (Costa et al., 2005).

Interdisciplinary teaching in higher education holds its own set of unique challenges. First, university faculty are hired based on their knowledge of a specific discipline and are often promoted and tenured according to their publishing and researching success in that discipline (Holley, 2009). Therefore, in most cases faculty are unaccustomed to teaching subjects out of discipline. Second, due to campus structure of most universities, faculty are usually physically separated in their own departments and therefore do not exist as a professional community (Holley, 2009). Last, the institutional structure of universities compartmentalizes faculty according to departments, therefore not providing opportunities for cross discipline interactions. In her conceptual framework for multicultural teacher education, Cochran-Smith (2003) refers to the forces such as institutional capacity and mission, relationships with local communities, and government/

non-government regulations as external factors that shape teacher preparation programs in higher education.

According to a review of literature conducted by Spelt, Biemans, Tobi, Luning, and Mulder (2009), having the knowledge, ability, and skill to synthesize and integrate various disciplines was reported as a positive approach to teaching. Spelt et al. (2009) conducted a review of the literature in 13 different publications based on four research questions. The research questions examined the sub skills and conditions necessary for successful interdisciplinary teaching in higher education. The authors reported that successful interdisciplinary teaching employed a curriculum that was a balance between disciplinary and interdisciplinary content and was supported by a community of faculty who were focused on interdisciplinary studies (Spelt et al., 2009). The student activities that promoted learning followed an interdisciplinary approach of shared learning and encouraged student reflection. In addition faculty consensus, faculty expertise, and team development were components of a learning environment that promoted interdisciplinary teaching (Spelt et al., 2009).

Teacher Education Faculty: Knowledge, Perceptions, and Commitment to the Teaching of Diversity in Preservice Teacher Education Classes

While not specifically examined in the research questions of this study, this section was included because it is possible that the findings from the interviews may include data about faculty knowledge and commitment to teaching diverse students. One challenge facing universities that are who are implementing the ESOL infusion program model for PSTs is the fact that many education faculty do not have the appropriate teaching credentials in the subject area of ESOL because they started their careers before

the advent of MCE and ESOL teaching requirements (Sheets, Flores, & Clark, 2011; Verkler, 2003). Consequently, faculty with different levels of knowledge and certification are responsible for integrating an out-of-discipline subject area and pedagogy, often without the support, knowledge, or frameworks necessary to make changes (Costa et al., 2005; Hollins & Guzman, 2005; Morrier et al., 2007; Smolen, Colville-Hall, Liang, & MacDonald, 2006). Funding and adequate time allotments for faculty development are also critical components of a success integration of new curriculum into existing disciplines (Costa et al., 2005).

In addition, implementing curriculum changes in higher education is challenging because faculty often feel ownership of the individual course content (Meskill, 2005) and do not accept changes that they do not perceive as necessary (Travis, 1995, as cited in Costa et al., 2005). Assaf et al. (2010) argue that teacher education faculty must recognize that teaching ELLs is a collegial responsibility and should be a part of all teacher education curricula. Taking a more practical view, Commins and Miramontes (2006) believe that teacher education programs should train teachers to work with diverse populations from the beginning of the coursework because of the current demographics in public schools.

However, in order for this to be accomplished, faculty must first be engaged in the process and it must involve collaboration with facilitators providing support for the implementation (Costa et al., 2005; Morrier et al., 2007). Costa et al. (2005) implemented a faculty training program at a university in the initial stages of infusing an ESOL/diversity component into their teacher education program and stressed the importance of collaboration and involvement of all faculty in the process. This

philosophy of collaboration among stakeholders was also mirrored in the training program reported by Meskill (2005). Both Meskill (2005) and Costa et al. (2005) noted that the course syllabi are one means in which faculty can share and infuse the out of discipline curriculum knowledge into their own course content and curriculum, while maintaining ownership of their discipline.

All faculty in teacher education programs face many challenges as they prepare PSTs to work with ELLs and diverse populations. Studies examining faculty perceptions, knowledge, and commitment to the teaching of diversity in PST education classes have reported some consistent findings and themes (Table 3).

Table 3

Faculty Perceptions of Multicultural Education and English Language Learners

Section	Gorski (2012)	Smolen et al. (2006)	Assaf et al. (2010)
RQ/ purpose	How do multicultural teacher educators (MTE) characterize challenges they face in teaching multicultural education (MCE)?	What are the knowledge, perceptions, & attitudes of MTE regarding the preparation of preservice to work with diverse students?	What are MTE perspectives about MCE in elementary & middle school teacher preparation programs?
Methods	Qualitative framework used to examine survey data	Quantitative-self constructed survey	Qualitative-interviews, syllabi, assessments
Literature review	MCE theories, faculty ideologies/abilities, student resistance to MCE	MCE teacher training, faculty activities & social conditions of colleges of education	MCE teacher training, teacher candidates and MTE beliefs about diversity
Results	MTE Challenges Instructional-student privilege & color blindness, Institutional –lack of support from institution & colleagues Sociopolitical-conservatism, NCLB policies, accountability	MTE Perceptions Strong support for diversity objectives, less support for implementation Travel & contact with diverse students were factors in MTE integration in courses Racial self-identification influenced perceptions of MCE	MTE Challenges Optimistic perspective of diversity while facing challenges Value of authentic field experience Effective teaching vs. building ideology, no uniform approach to teaching ethnic & linguistic differences

(table continues)

Table 3 (*continued*)

Section	Gorski (2012)	Smolen et al. (2006)	Assaf et al. (2010)
Conclusion	Findings consistent with lit. MTE have a critical understanding of MCE, MTE found students to resist MCE, lack of support from institution and colleagues is a factor	Efforts for diversity training need to be cohesive, ongoing, & collaborative with institutional support, important for faculty to be diverse or have cross cultural experiences	All MTE identified importance of preservice MCE preparation, field experiences, unsure how to address racial tensions, best practices vs. ideology

Note. RQ = Research Question.

Using a self-constructed quantitative survey, Smolen, et al. (2006) surveyed 116 full-time university faculty in Midwestern United States responsible for preparing PSTs to work with diverse students. The findings suggested that while faculty perceived strong support for diversity objectives, there was less support when it came to implementation. These findings are consistent with the findings reported by Gorski (2012). Using a qualitative framework to examine survey data, Gorski found that MCE faculty ($n = 70$) did not feel that they were supported by the department and in addition did not feel supported by their colleagues. However faculty in Gorski's study attributed the current state of sociopolitical trends and accountability policies as perhaps influencing the lack of support from the institution and colleagues. While Gorski (2012) originally intended to examine the data across demographics, the sample did not provide enough demographic variables. Both of these findings support the work done by Fullan (2008) in his review of literature. His review found that teachers must have support from other teachers or experts if the innovation is to be sustained.

Using qualitative methods, Assaf et al. (2010) surveyed 14 teacher educators at a university in the southwestern United States to examine teacher educators' perspectives about multicultural education in their teacher preparation program. Results reported by Gorski (2012), and Assaf et al. (2010) suggested that the faculty in both of their studies perceived the PSTs lack of racial diversity and understanding of other populations to be a challenge when preparing the students to work in multicultural settings. The faculty in Gorski's 2012 study reported that many of the PSTs were from privileged backgrounds and felt that they were *color blind*, treated everyone equally, and therefore were somewhat resistant to the concepts of MCE (Gorski, 2012). While somewhat similar, Assaf et al. (2010) reported that the faculty in their study described concerns over the racial difference between the PSTs and the students that they would teach upon graduation. However, they found the field placement segment of the program to be very valuable because it "outweighed their own [faculty] abilities to teach for diverse populations and offered authentic opportunities for multicultural education" (p. 124).

Both studies done by Gorski (2012) and Smolen et al. (2006) also examined faculty's' perceptions regarding their own abilities to teach PSTs and each reported slightly different results. Gorski's (2012) findings suggested that the overall faculty perceived themselves as having a critical understanding of MCE in the areas of sociopolitical influences and accountability. Smolen et al. (2006) found that faculty who identified best with the concepts of MCE identified themselves as diverse, had traveled to different cultures, and had more direct contact with other cultures. All three studies identified the importance of PSTs preparation specifically designed to train them to work with diverse populations.

Chapter Summary

As the population of ELLs and students from diverse backgrounds continues to grow in the state of Florida, it becomes more urgent to train teacher candidates to work with these populations. In response to this growing need the state of Florida implemented the FTSEE (2010) to ensure that teacher candidates receiving certification would be trained to work with this population. This entails a commitment on behalf of teacher training programs to design curriculums and programs models that are aligned with best practices and policy in the field of ESOL education. In addition teacher education programs should include learning opportunities for all faculty to increase their understanding of best practices in ESOL education so that the entire teacher training faculty can be consistent and reinforce the knowledge and skills necessary for future educators to possess. It is also pertinent that teacher education programs base their assessment activities and tasks on best practices as identified in the literature so that future teachers can enter into the teaching field with an in-depth knowledge about how ELLs best learn and function in the classroom and school community.

CHAPTER 3: METHODOLOGY

Study Design Overview

The purpose of this study was threefold. First, this study examined PSTs' perceptions of their knowledge and understanding of the ESOL domains as specified in the FTSEE. Second, it examined those assessment activities and assignments reported by PSTs that provided them with the best method of understanding the ESOL domains as specified in the FTSEE. Last, it examined other factors perceived by PSTs as influencing their understanding of the ESOL domains. This research investigated the following research questions:

1. What are PSTs' perceptions regarding their knowledge and understanding of the ESOL domains as specified in the FTSEE?
2. Which assessment activities or assignments do PSTs report provide the best method of understanding the ESOL domains as specified in the FTSEE?
3. What other factors do PSTs believe influence their understanding of the ESOL domains as specified in the FTSEE?

Mixed Methods

This study used the explanatory design mixed methods approach (Creswell, & Plano Clark, 2011). This type of design collected both quantitative (survey) and qualitative data (interviews) with the qualitative data providing a supporting role to the quantitative data (Creswell, 2007). In this study the interviews allowed the researcher to

gain a more in-depth understanding of the survey data, probe for specific examples, and gain a better understanding of the participants' perspectives (Creswell, 2007).

This Institutional Review Board (IRB)-approved study surveyed and interviewed PSTs enrolled in the fall 2014 section of the TSL4081 course approximately midway through the semester (see Appendix B). The IRB-approved pilot study followed the same protocol but was conducted with PSTs who had already completed TSL4081 during the previous spring (2014) semester.

Sample

The sample of this study was purposeful in selection (Creswell & Plano Clark, 2011; Maxwell, 2005). Elementary education majors attending a large university in the southeastern United States with a college of teacher education were selected to participate in this study. The teacher education program at this university follows the ESOL-infused program model and all graduates of this teacher education program receive the ESOL endorsement as part of their state teaching certificate.

Elementary undergraduate PSTs previously enrolled in the spring 2014 session of the TSL4081 course were solicited for the pilot survey. Undergraduate PSTs enrolled in the fall session of the TSL4081 course were solicited for the study ($N=148$). All seven sections of the fall 2014 TSL4081 course were included in the study, and none of the courses was taught remotely. The researcher did not teach during the fall semester and therefore did not have any of the participants as students.

Instrumentation

Survey description. The questions on this survey used Likert-type items and asked PSTs to rate their knowledge and understanding of the ESOL domains found in the FTSEE (Research Question 1) and their perceptions regarding the types of assessment activities and assignments given as part of the ESOL coursework (Research Question 2) that provided them with the best method of understanding the ESOL domains.

The questions on the survey were modified from a previous survey (ESOL Awareness Survey) developed by Smith (2005). The researcher obtained permission from Smith to modify and use his survey (see Appendix C). The reasons why the researcher chose this survey were twofold. First, this survey was selected because it is aligned with the five ESOL domains found in the FTSEE 2010 and addressed Research Questions 1 and 2. Second, Smith's sample selection was similar to this researcher's research sample: undergraduate PSTs participating in an ESOL infused program of study. However, the researcher of this study made some modifications to the ESOL Awareness Survey (Smith, 2005).

Smith (2005) organized his ESOL Awareness Survey questions into two separate categories. They were as follows: (a) ESOL Content Knowledge, (b) ESOL Skills. Based on feedback provided by Smith, the researcher of this study combined the two sections into one section, ESOL Content Knowledge. Smith (2005) noted that his research participants had a difficult time distinguishing between knowledge and skills when completing the survey. The researcher for the current study added five additional questions (Questions 4, 5, 6, 18, and 19) because they were related to the ESOL performance standards (FTSEE) and thus merited inclusion. The researcher also

sequenced and grouped the survey questions in a different order according to the sequence of the ESOL domains (FTSEE). Smith's 2005 survey contained an additional six questions (Questions 21-26) regarding PSTs' attitudes and support of the inclusion of ELLs in the mainstream classroom. These questions were omitted from the survey because teacher attitudes towards inclusion were not related to the scope of the current study.

While the intent of Smith's (2005) Questions 31-41 and the current researcher's questions were the same, questions related to the assessment activities, assignments, and tasks were changed from Smith's survey to reflect the unique assessment activities, tasks, and assignments found at the institution participating in this research. The assessment activities and assignments selected for the survey were taken directly from the Instructional Program Evaluation Plan document (IPEP). The IPEP is a matrix that shows curriculum alignment to the state ESOL standards and is specific to the university where the research was conducted (see Appendix D).

In addition the researcher re-categorized Smith's (2005) four rating scales to three and changed the focus of the wording. The reason for this modification was because Smith's study focused on attitudes towards the assignments rather than the perceived effectiveness of the assignments. Prior to piloting the survey instrument, the researcher also solicited two experts in the field to critically examine the survey tool and offer their advice regarding clarity of questions, grammatical errors, or potential problems that could surface later in the research (Campanelli, 2008).

Survey format. The ESOL Awareness survey is divided into three sections (see Appendix E). Structure of the survey is as follows:

Introduction Page: The first part of the questionnaire contains questions designed to elicit demographic responses such as: major of study, other language proficiencies, and willingness to participate in the interview.

Part A: This section contains 19 questions regarding ESOL content knowledge. Likert rating scales are as follows: (a) I know hardly anything about...; (B) I know a little about...; (c) I know generally about...; and (d) I know a lot about....

Part B: This section contains 15 questions regarding ESOL assessment activities and assignments taken during the teacher education coursework. Likert rating scales are as follows: (a) This activity /assignment was not helpful; (b) This activity/assignment was somewhat helpful; and (c) This activity/assignment was extremely helpful.

Interview Questions: Description

Prior to piloting the interview questions, the researcher worked with an expert in the field of ESOL education to write the 10 interview questions. These interview questions were informed by: the study's three research questions, five ESOL domains from FTSEE standards, current literature in the field, and the information taken from the IPEP document. The purpose of the semi-structured interview questions was to gain more details, a better understanding of their perspectives, and to further explain the results of the quantitative questions in more detail (Creswell & Plano Clark, 2011).

Pilot Study: Results

Pilot survey. A pilot study with IRB approval was conducted prior to the fall semester. The overall purpose of the pilot study was to get feedback on the clarity and comprehensibility of the survey and interview questions. The web-based pilot survey was distributed to the participants using an online tool called Survey Monkey. The pilot study

surveyed three course sections of PSTs who previously took TSL4081 during the spring semester of 2014. Preservice candidates who took the course received recruitment letter that contained the link to the consent form and survey (see Appendix F) and survey via an email that was sent by their former professors. After sending the initial email, the researcher asked the professors to send additional reminders to the candidates during Weeks 2 and 3. The survey was closed 1 month after the initial contact.

Of the approximately 74 candidates who were contacted, 11 responded (14.8%). Comment boxes were provided at the end of each of the sections in the survey, and participants were asked to make written comments on the clarity and readability of the survey questions. Two of the 11 survey respondents made written comments regarding the clarity and content of the survey. The remainder of the respondents answered the survey questions but did not make any written comments regarding the clarity or content of the survey. Neither of the respondents made comments about Part A of the survey. Both of them made comments about Part B. One of the respondents commented that he/she left a few of the questions unanswered because she/he could not remember the exact activity or assignment that was referred to in the question. The same respondent commented on which types of activities and assignments he/she felt were the most important and contributed the most to his/her ESOL knowledge, along with a request to include more classroom observations and field placements in the program. The second respondent noted that there was some crossover between the some of the ESOL coursework assignments and activities into the field experiences.

Pilot interview. The interview questions were also piloted (see Appendix G). The purpose of piloting the interview questions was threefold. First, were the questions were

clearly worded and comprehensible? Second, did they provide enough information and rich data? Third, was the time allotment correctly calculated? The pilot interview also gave the researcher the opportunity to practice her interviewing skills. As indicated on the survey, four PSTs volunteered to be interviewed. Participants were given the option of a phone, Skype, or in-person interview. After two email attempts, only one volunteer responded. The interview was done in person, recorded, and transcribed.

The pilot interview participant answered all of the questions and thought that they were clear and comprehensible. The interview took approximately 35 minutes to complete. Based on observations noted by the researcher during the pilot interview, the researcher made the following modifications. First, the word “coursework,” as referenced in Question 1 needed clarification. The interviewee was confused about the meaning of “coursework.” She was not sure if it referred to the coursework from her TESOL stand alone courses only, or whether it referred to all of the teacher education coursework. This correction was noted and corrected on the current study. On one occasion the interviewee had a difficult time remembering some of the assessment assignments and activities that were included on the survey. The researcher consulted with a few committee members, and it was recommended that future interviewees be provided with the list of assessment assignments and activities that were included on the survey to be used as a reference if requested. The researcher also consulted literature regarding best practices for interviewing and how to ask follow-up questions so that she could improve her skills for future interviews.

After conducting the pilot interview, the researcher contacted two additional experts in the field of ESOL education and asked them to review and to make additional

comments about the interview questions. One of the experts was a university professor with extensive background teaching PSTs in an ESOL program. The other expert was an elementary classroom teacher, teacher trainer, and published author with extensive experience working with both ESOL students and in teacher training. Both experts offered suggestions to make the questions more probing and concise, without changing the intent of the questions. Based on the results of the pilot interview, and feedback from the experts, the researcher made modifications and additions to some of the interview questions.

Data Collection

Survey. During a faculty meeting prior to the start of the fall semester, TSL4081 faculty were informed about this pending research study by one of the senior faculty members. Halfway into the semester the researcher emailed the faculty a description of the study and a brief PowerPoint that included its salient points. Faculty was encouraged to voluntarily share the PowerPoint with their classes as a point of introduction to the study. Subsequently faculty was sent an email that included an introductory letter (see Appendix H). Faculty were asked to forward a letter to their students (see Appendix H) which included a survey link and consent form (see Appendix J). Faculty were encouraged to post both on their Blackboard pages. At the request of the researcher, the faculty was asked to remind their students of the survey approximately 2 weeks following the initial email, and again at 3 weeks. The researcher also had the faculty forward two email reminders from the researcher to the participants. Survey participants were offered the option of selecting a \$5.00 e-gift card for their participation. Prior to the start of end of semester exams, the survey was closed.

Descriptive data from the demographic profile section of the ESOL Awareness survey were analyzed using the software provided by Survey Monkey. Data from the ESOL Awareness survey Parts A and B were analyzed using the IBM SPSS software. Cronbach's alpha test of reliability was used to measure reliability of the ESOL Awareness Survey. A simple repeated measures test using single item analysis was used to compare the means across the domains on the ESOL Awareness Survey (Part A only) in order to determine the degree of their knowledge across the ESOL domains. This was analyzed across the ESOL domains according to a summative rating scale.

Cooper (1976) and Whitney's (1978) tests of symmetry for Likert-type items were used to test for asymmetry of responses across the means in Parts A and B of the ESOL Awareness survey. The purpose of this was to categorize responses by polarity of perceived knowledge in Part A and by reported usefulness of the assessment activities and assignments from the ESOL infused coursework (Part B). Last, Hsu's test was used to determine the agreement or disagreement of the Likert-type survey items Parts A and B (Hsu, 1979; Morris, 1979).

Interviews. The interview process was started after the researcher completed an evaluation of the survey data. Based on the survey data, some interview questions were re-written to gain a better understanding and insight into the data from the survey (see Appendix K). Interviews were conducted with those participants who voluntarily consented to be included in the interview process by providing their email address on the survey. The researcher offered face-to-face, Skype, or phone interviews with those PSTs who volunteered to participate.

Twenty-three PSTs expressed willingness to participate in the interviews and were contacted by the researcher via email. Based on the data distribution from the survey, approximately two participants from each of these categories were selected as follows: (a) two individuals who indicated ESOL knowledge at the higher end of the scale (I know a lot about...); (b) two individuals who indicated ESOL knowledge at the medium end of the scale (I know a little about... or I know generally about...); (c) two individuals who indicated ESOL knowledge at the low end of the scale (I know hardly anything about...); and (d) one individual who indicated proficiency in a language other than English. The distribution was determined after the quantitative data were analyzed. The remainder of the applicant pool was randomly selected and contacted by email over a 5-week period until the list of potential interviewees was exhausted. After three email attempts, the researcher ceased contact. Participants were interviewed at the time and place that was convenient for them. While a number of participants responded to the interview request, ultimately six actually committed to be interviewed.

As in any type of research, it is important for the researcher to uphold a high level of ethics and ensure that the research is forthright and not subversive (Creswell, 2007). Prior to the interview, participants signed and were provided with a copy of the consent form (see Appendix L) and interview protocol (see Appendix M). The interview protocol ensured the anonymity of the participants, and a pseudonym was used in place of their real names. The participants were audio recorded after verbally agreeing to proceed with the interview questions. Interviews were conducted at the convenience of the participants. Interviewees were given the choice of face to face, Skype, or phone interviews. Two of six interviewees chose to be interviewed over the phone, and the remainder in person.

One of six interviewees was proficient in another language. All interviewees were compensated with a \$20.00 gift card.

Following each interview the researcher did a brief reflection of the overall interview. First the researcher reflected on her interviewing skills so that adjustments could be made to the subsequent interviews. Second the researcher wrote brief reflective notes regarding items of interest or unexpected responses from the interviewees. Next, the transcripts were professionally transcribed and checked for accuracy by the researcher before commencing the analysis. Prior to beginning the process of data analysis, the researcher read through all of the interview transcripts while listening to the audio recordings in order to verify that the transcriptions were done accurately. Next the researcher read each transcript to review, reflect, and to gain an overall understanding of the data (Creswell, 2007). During that process no notes were taken.

During the subsequent read through, the researcher began the process of open coding by underlining, circling and taking general notes in the margins regarding key words or phrases that seemed relevant or important to the study. Since this research study was conducted with a previously known framework taken from the FTSEE Endorsement and existing literature in the field of ESOL education, it was important for the researcher to remain open to other themes or categories that emerged and to remain objective (Maxwell, 2005; Saldaña, 2009) during the entire process. Based on these emergent findings and the initial open codes, the researcher wrote summative memos for each of the interview questions that were subsequently used in the member checking (Merriam, 2009).

Member checking. To address the issue of validity, at approximately 6 weeks after the interviews, interviewees were sent an email asking them if they were willing to volunteer to verify the information on the transcript for accuracy, to further clarify any ambiguous material cited by the researcher on the transcript, and to comment on a summary memo written by the researcher. Five of six interviewees volunteered to participate in the member checking. The researcher sent the interviewees the interview transcript with researcher comments and the summary memo. Interviewees were asked to respond within a 2-week time period or the researcher would assume that the transcript, comments, and summary memo were satisfactory.

Two of five who volunteered to participate in the member check contacted the researcher within the 2-week time period. Both responded that everything was satisfactory and neither offered specific feedback regarding the researchers' comments or the summative memo. Three did not respond to the researcher's email, therefore it was assumed that there were no corrections. Since the response to the member check was not adequate, it was recommended that the researcher take a further step to strengthen the confidence of the qualitative data.

Inter-Coder Agreement

To increase the reliability of the interview data, the researcher solicited an assistant coder with a background in ESOL education and research, to help establish inter-coder agreement based on a modified procedure designed by Campbell, Quincy, Osserman, and Pedersen (2013). This coding procedure is useful when one person is doing the coding, coders have different knowledge levels, and concerns exist regarding whether or not the coding would be consistent if coded by other knowledgeable coders.

Based on the coding discussions, and subsequent reconciliations, inter-coder agreement is then calculated. Prior to starting the coding process, the researcher met with the assistant coder to give him a brief overview of the study, to answer any questions regarding the inter-coding agreement methodology, and to organize a meeting schedule (see Appendix N).

According to Campbell et al. (2013), disagreement exists regarding the appropriate number of transcripts to be coded to ascertain reliability. It was decided that only one transcript would be coded unless inter-rater agreement could not be reached and in that case another would be coded. This decision was made for two reasons: first there were only a small number of transcripts ($n = 6$) available to code. Second, this was 10% of the transcripts, which was cited as acceptable according to Hodson (1999, as cited in Campbell et al., 2013).

Following the procedure by Campbell et al. (2013), the researcher randomly selected one interview transcript and identified the units of meaning by bracketing sentences, words, or units of meaning. Campbell et al. (2013) refers to the process as unitizing. The reasons for doing the unitization were threefold. First, the researcher was more knowledgeable than the secondary coder about the theoretical frameworks and subject matter found in the study; therefore, she was more qualified to make the unitizing decisions. Second, by doing this, confusion was limited as to how much of the text was to be coded rather than the appropriateness of the code. Last, due to time and resource limitations, this approach allowed for flexibility in the coding process (Creswell, 2007).

After completing the unitization the researcher established a preliminary set of analytical codes and definitions based on the open codes and then clustered and sorted the

information into logical categories of meaning. Some of the codes were drawn from existing names in the frameworks and literature while others were taken from the open coding completed during the analytical memo portion of the research (Creswell, 2007). The researcher defined the analytical codes and some were grouped into previously known categories, while others were grouped into new categories that emerged from the data. During this coding process, it became apparent to the primary coder that some of the bracketed segments, words, or units of meaning required more than one code. Often in research this happens when the same line, word, or segment of data contains information that changes meaning when removed from the overall context of the sentence or paragraph, and therefore, must be double coded (Saldaña, 2009). Some of the data taken from the transcripts in this research required double coding because the bracketed segments, words, or units of meaning from the transcript referred to an assignment or activity that the PST completed during the coursework as well the knowledge or understanding gained as a result of completing the assignment.

At the first meeting the researcher provided the assistant coder with the initial coding schemes and definitions. The researcher and assistant coder discussed each individual code and definition for clarity, discrepancy, or confusion. During this meeting the researcher took detailed notes. Based on the feedback from this meeting, the researcher further clarified many of the definitions, re-organized some of the categories that were not mutually exclusive, and categorized some of the codes into different categories. Based on a recommendation from the assistant coder, the primary coder also agreed to create distinct codes for oral language development versus language development in reading and writing. Developing exclusive codes for data regarding

ESOL methods and ESOL curriculum and materials was challenging because many of categories overlapped, and there were issues with the coding language and definitions. This required considerable effort and merited close attention to create codes that were mutually exclusive, and the primary coder further tightened the definitions.

The following week the researcher presented the assistant coder with the revised coding charts and the bracketed and unitized transcript with the codes removed. Due to the complexity of the first round, the researcher recommended that the double coding be done at the next round of coding so that it would be more manageable for the secondary coder. After the coding was completed, the coders met to compare their coding results and establish negotiated agreement.

During the negotiated agreement meeting (Meeting 2) the primary coder kept careful notes on a chart regarding the agreement or disagreement of the coding schemes. The primary coder and assistant started at the beginning of the transcript. If both parties agreed on the code, then no further discussion was warranted. When both coders disagreed on the code, then each coder negotiated or explained his/her point of view until reconciliation was achieved. Some of the disagreements were minor, while others required much discussion.

The minor coding disagreements that surfaced were mainly clerical or oversights on the part of one or both coders. For example, the assistant coder did not see one of the codes on the coding chart because it was printed onto the next page and not in clear view. Once pointed out, this error was easily corrected during the negotiated agreement process. In another instance, the assistant coder pointed out a classification error made by

the primary coder on the coding chart. One of the assessment definitions was misplaced on the chart and as a result the primary coder corrected the error and deleted the code.

Most of the coding disagreements occurred in the sections of the transcript that addressed the domains of ESOL methodology and ESOL curriculum and instruction. During the negotiating agreement both coders agreed that there was a substantial amount of content crossover between both areas, which created disagreements on certain bracketed sections of the transcript. Both coders discussed each coding disagreement in detail, negotiated his/her viewpoint, and made sure that each unitized section of the transcript had a code that was clearly defined and singular. In particular one issue that both the primary coder and assistant coder discussed in depth was the ambiguity of the word *accommodations* in the interview transcript.

In this transcript the word accommodation(s) was often used in a non-specific manner and as a general description of any type of modification or adaptation that was made to the curriculum, materials, strategies or methodologies for ELLs, and therefore presented some difficulty in assigning a code. According to the FTSEE, the word accommodation is used to exclusively reference the types of assessment accommodations made specifically for ELLs. The words adaptations, modifications, or selections are used in reference to any adaptation of the instruction or curriculum used specifically with ELLs. Upon further research it was learned that the Florida Educator Accomplished Practices (FEAP) specifically use the word accommodation when referring to any adaptation made to the “learning environment to accommodate the differing needs and diversity of students” (FEAP, 2010). During the initial ESOL infused program development, the ESOL standards were integrated into the existing FEAP standards

(Nutta et al., 2012). Consequently PSTs and faculty have integrated the word accommodation(s) across the domains into the lexicon of their ESOL infused coursework.

During the negotiated agreement discussion the primary coder and assistant coder dedicated ample time to ensure that our agreements were well explained and supported, and it was mutually agreed upon that from that point forward the word accommodation would be categorized as a general ESOL strategy or method unless specifically stated otherwise in the transcript. There was also one instance when a general teaching strategy was mentioned therefore it was decided to create a code for general strategies (strategies specific to mainstream best practices).

Following the negotiated agreement process, an inter-coder agreement was calculated (see Appendix O). A formula suggested by Miles and Huberman (1984, as cited in Campbell et al., 2013) was used to determine the level of inter-coder reliability ($47/74 = .62$). The same formula was used to determine the level of inter-coder agreement after negotiation ($74/74 = 1.00$). While the percentage of negotiated agreement on the first coding was in the exceptional range, the researcher asked the assistant coder to code five additional pages (second round coding) taken from another randomly selected transcript. The reason for this extra coding was to add an extra layer of assurance that the ambiguities and crossovers between ESOL strategies and methods, and curriculum and materials had been addressed sufficiently. These five pages referenced two interview questions specific to the ESOL methods and Curriculum and material interview questions.

The inter-coder reliability rate for the second round was .70 ($12/17 = .70$) and the negotiated agreement rate was 1.00 ($17/17 = 1.00$). Both coders agreed that this partial coding had been warranted and felt confident that the ambiguities had been sufficiently addressed. One additional minor issue surfaced regarding the distinction between using a lesson plan to instruct versus creating an actual lesson plan. Based on the discussions from the negotiation, the researcher further tightened and defined the code.

As mentioned earlier, for data management purposes the researcher made the decision to delay the double coding until after the first round of coding was completed. Using the same bracket transcript and codes, the transcript was double coded. The inter-coder reliability rate for the double coding was .87 ($21/24 = .87$) and the negotiated agreement rate was 1.00 ($24/24 = 1.00$). Two of three disagreements were attributed to the fact that the researcher was not aware that the referenced item in the transcript referred to an assignment because the assignment was recently added in the last semester and therefore not known by the researcher. One of the disagreements was not considered as a deferral as both coders felt that the sentence needed to be further unitized into two segments. Consequently had the researcher known about the new assignment, the reliability rate would have been even higher (see Appendix P).

The primary coder, using the final categories and definitions, coded the remaining transcripts. Patterns emerged and were categorized after the transcripts were coded (Saldaña, 2009).

Reliability and Validity

Prior to conducting the actual study, both the survey and interview questions were evaluated by trained experts in the field and were piloted. Participants in the pilot were

asked to share comments, corrections, or issues of clarity directly on the survey instrument (Campanelli, 2008). Interview questions were evaluated by experts in the field of ESOL education and piloted. Based on the feedback and data from the pilot survey, adjustments and revisions were made on the research survey and interview questions. During the data analysis, the ESOL Awareness survey data were adjusted for non-responses and tested for reliability using the Cronbach's alpha test of reliability.

Reliability may also be affected by the way the interviewer asks the interview questions. While the interview data from this study may have provided clarification and additional understanding of the survey data, it is possible that the interviewer may not have been consistent in the way in which she asked the questions or may have probed in a way that changes the meaning of the questions (Fowler & Cosenza, 2008; Loosveldt, 2008).

Self-reported research can also be influenced by social desirability. Social desirability can affect reliability of an interview if the interviewee answers the questions according to how he/she perceives the answer should be given to a specific question that may have perceived social implications (Loosveldt, 2008). To minimize the effects of social desirability bias when conducting interviews, the researcher took the following steps. First, the wording on the interview questions reflected what the interviewees would do, rather than what they thought (Four ways to get the truth out of respondents, 2012). Second, indirect questions rather than direct questions were asked because indirect questions are more strongly associated with a true score (Fisher & Tellis, 1998). In addition the researcher ensured the interviewees that there were no right or wrong answers to the questions.

Coding semi-structured interview transcripts can also present reliability issues for researchers especially when a single knowledgeable coder is responsible for coding the data once the coding scheme has been developed. Inter coder reliability and agreement methodologies were used to increase the reliability of the coding process (Campbell et al., 2013; Drost, 2011) in this study.

Representativeness of the participant sampling and non-response effects can also influence the validity of the findings. It is important to recognize that bias may occur particularly if the non-responders do not represent the type of participant who volunteered to take the survey and be interviewed (Kano, Franke, Afifi, & Bourque, 2008; Sax, Gilmartin, & Bryant, 2003). In this study, the participant sampling was determined based on willingness of PSTs to voluntarily participate in the survey and interview. Therefore it is possible that those PSTs who took the survey and participated in the interview may or may not be representative of the total sample, and therefore bias may exist. Perhaps those who responded to the survey were interested in the topic of the study, whereas non-responders may have been uninterested.

Member checking was used to ensure internal validity and further verify and confirm the data from the interview questions (Merriam, 2009). After the transcripts were transcribed, the researcher wrote a summative interpretation memo for each of the research questions. The purpose of writing the summary memos was to give the researcher the opportunity to synthesize and interpret the interview questions and give the interviewees the opportunity to respond to the researcher's preliminary analysis of the interview transcripts (Merriam, 2009). In addition, the researcher also wrote comments in the margins next to some of the interviewees' answers if the researcher felt extra

clarifications were needed (Maxwell, 2005). Interviewees were asked to respond within a 2-week time period or the researcher would assume that the transcript and summary memo were satisfactory. Two of the five who volunteered to participate in the member check contacted the researcher within the 2-week time period. Both commented that the researcher's comments and the summary memo were satisfactory and neither offered specific feedback regarding either of these two items.

Limitations and Delimitations

Limitations. Issues of generalizability in research make the assumption that the research findings can be replicated and yield the same results (Merriam, 2009). Despite offering an incentive to participate in the survey and interview, having the support of the educational institution, and sending reminder emails, the response rate was low. Due to the low response rate on the survey, this study cannot be generalized to other teacher training programs or other teacher education curriculums.

It is possible that the method of survey distribution contributed to the low response rate. According to the literature, web based surveys typically have a lower response rate than paper surveys (Cook, Heath, & Thompson, 2000; Nulty, 2008; Sax et al., 2003). In their meta-analysis of the literature, (Sax et al., 2003) reported that this may possibly be attributed to inconvenient access to computers, not checking emails regularly, technical issues, or suspicion about confidentiality. The issue of saliency and relevance to the responders' lives has also been cited in the literature as possibly influencing response rates (Sax et al., 2003; Cook et al., 2000). It is also possible that the timing of the research was not convenient for the participants. Since the research was conducted from

the middle to the end of the semester, perhaps the coursework load and studying for exams interfered with the PSTs' willingness to participate.

Delimitations. The depth and breadth of the participation pool was a delimitation of this study. The participants for this study included undergraduate elementary PSTs currently enrolled in the TSL4081 who were completing the ESOL Endorsement at one university.

Chapter Summary

As the demographics of the school age population continue to change, knowledge of ESOL education has become an essential component in many elementary teacher educator programs and curricula. This mixed methods study attempted to understand the ESOL knowledge base, assessment assignments and activities, and other factors that PSTs perceived as influencing their understanding of the ESOL domains.

CHAPTER 4: RESULTS

Presentation of Findings

The purpose of this study was threefold. First, this study examined PSTs' perceptions of their knowledge and understanding of the ESOL domains as suggested in the FTSEE. Second, it examined those assessment activities and assignments reported by PSTs that provided them with the best method of understanding the ESOL domains as specified in the FTSEE. Last, it examined other factors perceived by PSTs as influencing their understanding of the ESOL domains. Both quantitative and qualitative data were collected in this research. This research investigated the following research questions:

1. What are PSTs' perceptions regarding their knowledge and understanding of the ESOL domains as specified in the FTSEE?
2. Which assessment activities or assignments do PSTs report provide the best method of understanding the ESOL domains as specified in the FTSEE?
3. What other factors do PSTs believe influence their understanding of the ESOL domains as specified in the FTSEE?

Quantitative Results: Survey

Survey participants. The web-based study survey was distributed to the participants using an online tool called Survey Monkey. During the fall semester 2014 eight sections of TESOL4081 classes were offered and none of the classes were taught

remotely. Of the 145 elementary PSTs contacted for this study, 28 of them participated in the survey (19% response rate). The 28 participants indicated the ability to: (a) speak a language other than English (28%), (b) read a language other than English (25%), and (c) write in another language other than English (21%). It is important to acknowledge that the non-response rates for this study may have impacted the findings particularly if the non-responders did not represent the type of participant who volunteered to take the survey (Kano et al., 2008). Demographic and ethnicity questions were not asked on the survey; therefore it is impossible to know if the participant sample was a representation of the entire population of PSTs at this university.

Survey results. The ESOL Awareness Survey contained two parts. Part A of the ESOL survey contained 19 questions regarding PSTs' perceptions regarding their knowledge of the five ESOL domains as specified in the FTSEE standards. Part B of the survey contained 15 questions regarding PSTs' perceptions of the assessment activities or assignments that provided them with the best method of understanding the ESOL domains. Cronbach's alpha test of reliability was used to analyze the reliability of the ESOL Awareness Survey. The results of the analysis determined that ESOL Awareness survey had high reliability (Part A $\alpha = .956$ and Part B $\alpha = .890$).

Research Question 1. What are PSTs' perceptions regarding their knowledge and understanding of the ESOL domains as specified in the FTSEE?

To answer Research Question 1, participants responded to Part A on the ESOL Awareness Survey. Part A of the survey contained 19 Likert-type questions regarding PSTs' perceived knowledge of the FTSEE. A simple repeated measures test was used to compare the means across the ESOL domains in order to determine the degree of the

relationship between PSTs' reported knowledge of the five ESOL domains. Mauchly's test of sphericity failed to reject the null hypothesis, therefore the repeated analysis of variance was done and sphericity was assumed, $F(4,108) = 2.3, p = .06$. The data showed no significant difference in means regarding PSTs perceived knowledge across the five domains (Table 4).

Table 4

*Repeated Measures Mean Scores – ESOL Awareness Survey-Part A
Preservice Teachers' Reported Knowledge of the ESOL Domains*

ESOL domain	Mean	Standard deviation
Culture	2.90	.66
Language & literacy	2.70	.58
Methods of teaching	2.80	.74
ESOL		
ESOL curriculum & materials	2.92	.82
Assessment	2.65	.61

Note. $n = 28$.

Cooper (1976) and Whitney's (1978) tests of symmetry for Likert-type items were used to test for symmetry and disagreement for Part A on the survey (Table 5). As shown on Table 5, Hsu's test (1979) was used to determine the agreement or disagreement of the Likert-type survey items in Part A (Morris, 1979). A disagreement categorization indicated that the data had a larger spread or a flatter profile than a normal distribution. The effect size was the ratio of actual item variance to that which would obtain with a stepped normal distribution. As shown in Table 5, Part A of the survey contained three survey question results that were in disagreement, Questions 6, 14, and 16.

The effect size ($ES = 1.52$) of Survey Question 6 (Part A), second language acquisition for ELLs, suggested disagreement. The data indicated that some PSTs

generally knew about second language acquisition, while others knew a lot. One reason for the varying degree of perceived knowledge could be attributed to the fact that the majority of the curriculum pertaining specifically to second language acquisition is taught in the two TESOL classes, and therefore PSTs are exposed to a large amount of information in a condensed period of time. Given the amount of material that needs to be covered on second language acquisition, it is possible that some of the PSTs may still need more exposure to the material in order to fully grasp the theories and concepts, while others feel that they have mastered it.

Though the ESOL infused program model requires all faculty to integrate ESOL content into the curriculum, it is possible that this particular content was not covered or covered consistently across other infused coursework. Perhaps some faculty members responsible for teaching this material were not knowledgeable in the field of ESOL education and therefore did not cover this subject matter in their coursework, while others were only able to integrate it peripherally as their courses were already overloaded with subject area content.

Field placements and observations also provide additional opportunities for PSTs to experience and observe ELLs acquiring English in a realistic setting. Field placements often vary in their quality, number of ELLs, variety of language levels of ELLs, and exposure to language learning opportunities. Perhaps those students who indicated they had a lot of knowledge about second language acquisition, participated in quality field placements or observations where language learning was occurring. Conversely, those who had general knowledge may have experienced placements that did not offer them a

variety of experiences working with or observing ELLs, therefore not affording them opportunities to see the coursework theory being applied in practice.

While leaning towards the positive range of the distribution, Survey Question 14 (Part A), suggested that there was disagreement to the extent in which PSTs perceived their knowledge on how to set language objectives in the content areas (ES = 1.77). PSTs were not in agreement regarding whether they had a general or a lot of knowledge of how to write ESOL language objectives in the content areas. There are a few possibilities of why there may be a variance between PSTs' knowledge regarding how to write ESOL language objectives in the content areas.

First, this indicates that PSTs are aware and have experienced writing language objectives in the content areas in their coursework, but there was disagreement to the extent of their knowledge. PSTs are required as part of their ESOL infused coursework to write a variety of objectives in all of their coursework lesson plans and assignments. These objectives must meet the needs of mainstream students, exceptional students, ELLs, and often include higher order thinking skills and content specific objectives. Perhaps those who claimed to know they knew a lot about language objectives were very competent in writing language objective in addition to the other required content objectives. This requires specific knowledge of the ELLs' language level as well as the ability to integrate the language objective into the content area.

It is also possible that some PSTs have not yet developed the in-depth knowledge needed to identify the specific language objectives for ELLs according to their linguistic abilities or levels, but they are aware that they must include some type of language objective in their coursework lesson plans and assignments. This requires specific

knowledge of the ELLs' language proficiency levels, principles of grammar, morphology, discourse analysis, pragmatics, and pronunciation/phonology, and often takes multiple opportunities to integrate this knowledge into practice. At the institution where this research was conducted, this content is one of many topics covered in the first TESOL class. Perhaps this content is too extensive to be included as part of only one TESOL class.

While leaning towards the positive direction of the distribution, Survey Question 16 (Part A), integrating technological resources to enhance language and content area instruction for ELLs, was flatter than the normal distribution ($ES = 1.50$). This indicated that while the PSTs perceived themselves to have knowledge about technology specific for ELLs, they were in disagreement as to the extent of that knowledge. Some believed that in general they had a solid knowledge base, while others knew a lot. There are a few possible explanations for this finding. First, it is possible that PSTs may have varying levels of personal competency or interest in the area of technology. Therefore there may be varying degrees of knowledge based on their personal comfort level and experiences with technology. Perhaps some of them viewed their personal knowledge of technology as contributing to their specific knowledge of how to use technology as a resource for ELLs. Conversely, others may have felt that they had general knowledge about technology, but were not as confident with their ability to use it with ELLs.

This may also hold true for faculty responsible for integrating the components of technology into their coursework. According to the IPEP document, the technology component is supposed to be integrated into the teacher education coursework through

assignments from the textbook chapters, lesson plan assignments, and the field experience report. Some faculty may be more competent and knowledgeable in their personal capabilities with technology in general, and therefore more receptive to integrating technology into their curriculum. Integrating technology into coursework that is specific to ELLs may also present certain challenges for faculty who do not have specific training in the field of ESOL, or who may resist teaching outside of their area of expertise.

Last, PSTs may have observed varying levels of technology being used specifically for ELLs in the classroom during their field placements or observations. Perhaps those PSTs who knew a lot about how to use technology specifically designed for ELLs experienced placements where the master teacher demonstrated and integrated technology into the curriculum. Whereas others had limited opportunities to see it used with ELLs in a real classroom environment.

Finally, a summary of the responses of Cooper and Whitney's tests for Part A survey items were categorized by polarity of response (Table 6). The responses were categorized as positive, neutral, or negative based on the range of the distribution. A positive categorization indicated that the data leaned towards toward the positive range of distribution. As shown on Table 6, six of the survey items on Part A were categorized as positive and leaned towards the positive range on the distribution which indicated that the respondents were generally knowledgeable or knew a lot about the topic from the survey. The data indicated that PSTs generally knew or knew a lot about certain items included in the Culture, Language and Literacy, Curriculum and Materials, and Methods of Teaching ESOL domains. In Part A, 10 of the survey items were categorized as neutral and were in

the middle range on the symmetry distribution. Two of 28 respondents provided feedback in the comment box. One commented that his/her learning was still in progress and the other commented that he/she wanted more details of how ELLs are entered and exited from an ESOL program. The data indicated that PSTs perceived themselves to be a little or generally knowledgeable about certain items from the Language and Literacy, Methods of Teaching ESOL, and Assessment domains as indicated in the FTSEE Endorsement. Part A of the survey did not contain any data that leaned toward the negative range of the distribution.

Table 5

Symmetry and Disagreement Test Part A-Perceived Knowledge of the ESOL Domains

Survey item	Cooper		Whitney			Hsu			Frequency					
	z	p	df	t	p	ES	df	χ^2	p	ES	1	2	3	4
Cultural awareness	2.62	.09	27	3.72	.00	.70	27	34.52	.15	1.28	1	5	13	9
Appropriate cult. response	2.28	.02	27	3.24	.00	.61	27	34.80	.14	1.29	1	6	13	8
Building home partnerships	.76	.44	27	1.22	.23	.23	27	31.14	.26	1.15	1	11	12	4
Components of English grammar	2.19	.02	25	4.03	.00	.79	25	19.33	.78	.77	0	5	16	5
Similarities & diff. between Eng. & other languages	1.94	.05	27	2.96	.00	.56	25	30.66	.28	1.14	0	9	12	7
*L2 acquisition	1.10	.27	27	1.49	.14	.28	27	41.08	.04	1.52	1	12	8	7
Preproduction level I	.42	.67	27	.72	.47	.14	27	32.24	.22	1.19	2	10	13	3
Early production level II	.25	.80	27	.51	.61	.10	27	28.72	.37	1.06	2	10	14	2
Speech emergence level III	.25	.80	27	.55	.58	.10	27	24.86	.58	.92	1	12	13	2
Intermediate fluency level IV	.25	.80	27	.55	.58	.10	27	24.86	.58	.92	1	12	13	2
Variety of methods in content areas	1.10	.27	27	1.66	.10	.31	26	33.35	.18	1.24	1	10	12	5

(table continues)

Table 5 (continued)

Survey item	Cooper		Whitney			Hsu			Frequency					
	z	p	df	t	p	ES	df	χ^2	p	ES	1	2	3	4
State policies/ practices ELLs	1.10	.27	27	1.76	.09	.33	27	29.48	.33	1.09	1	9	14	4
Methods – teaching ESOL students	1.38	.16	26	1.96	.06	.38	27	34.94	.11	1.34	3	3	17	4
*Language objectives in content areas	1.77	.07	27	2.17	.03	.41	26	47.71	.00	1.77	2	8	9	9
Adapting materials for ELLs	1.61	.10	27	2.23	.03	.42	27	37.56	.08	1.39	3	3	17	5
*Technology for ELLs	2.11	.03	27	2.79	.01	.53	27	40.53	.04	1.50	2	5	13	8
ELL assessment in content areas	.93	.35	27	1.59	.12	.30	27	26.51	.49	.98	1	9	15	3
Alternative assessment - ELLs	1.10	.27	27	1.66	.10	.31	27	33.35	.18	1.24	2	7	15	4
L2 Lang. vs. learning difficulties	.00	1.00	26	.14	.89	.03	26	24.63	.54	.95	1	13	11	2

Note. Scale Steps 1 = I know hardly anything about; 2 = I know a little about; 3 = I know generally about, 4 = I know a lot about

*= Item in disagreement

Table 6

Summary of Symmetry and Disagreement Test for Perceived Knowledge of the ESOL

Domains

Survey item	Domain	Negative	Neutral	Positive	Disagreement
Pre-production	LL		X		
Early production	LL		X		
Speech emergence	LL		X		
Intermediate fluency	LL		X		
Variety of methods in content areas	M		X		
State policy/practices for ELLs	M		X		
Methods of teaching ELLs	M		X		
Assessment in content areas	A		X		
Alternative assessment for ELLs	A		X		

(table continues)

Table 6 (continued)

Survey item	Domain	Negative	Neutral	Positive	Disagreement
L2 lang. vs. learning difficulties	A		X		
Cultural awareness	C			X	
Appropriate cultural response	C			X	
Home/school relationships	C			X	
Components of English grammar	LL			X	
Language similarities/differences	LL			X	
Adapting content materials for ELLs	CM			X	
Second language acquisition	LL				X
Setting lang. objectives for ELLs	M				X
Technology for ELLs	CM				X

Note. LL = Language & Literacy, M = ESOL Methods, A = Assessment, C = Culture, CM = Curriculum & Materials.

Research Question 2. Which assessment activities or assignments do PSTs report provide the best method of understanding the ESOL domains as specified in the FTSEE?

To answer Research Question 2, participants responded to Part B on the survey. Part B contained 15 questions regarding PSTs' perceptions of the assessment activities or assignments that provided them with the best method of understanding the FTSEE.

Cooper (1976) and Whitney's (1978) tests of symmetry for Likert-type items were used to test for asymmetry for Part B on the survey (Table 7). As shown on Table 7, Hsu's test (1979) was used to determine the agreement or disagreement of the Likert-type survey items Part B (Morris, 1979). Part B did not contain any items that had a larger spread than a normal distribution, and therefore did not indicate disagreement.

Summaries of the responses from Cooper and Whitney's tests for Part B survey items were categorized by polarity of response (Table 8). The responses were categorized

as positive, neutral, or negative based on the range of the distribution. As shown on Table 8, 11 of the survey items on Part B leaned towards the positive range on the symmetry distribution. This data indicated that PSTs believed that these particular assessment assignments are activities were very helpful in providing them with the best method of understanding the ESOL domains. In Part B of the survey, four assessment activities or assignments were reported as somewhat helpful in providing PSTs understanding of the ESOL domains, and were in the neutral range on the distribution. Two of 28 gave feedback in the comment box on the survey. One commented that his/her learning was still in progress. The other commented that he/she could not remember, or hadn't yet done some of the assignments or activities and therefore responded that they were *not helpful*. Part B of the survey did not contain any data that leaned toward the negative range of distribution or suggested disagreement.

Table 7

Symmetry and Disagreement Test for Part B-ESOL Assessment Activities and Assignments

Survey item	Cooper			Whitney			Hsu				Frequency		
	z	p	df	t	p	ES	df	χ^2	p	ES	1	2	3
Interview an immigrant	.58	.563	27	.77	.449	.15	27	46.26	.012	1.71	6	13	9
Interview a teacher	1.97	.049	27	2.78	.010	.53	27	31.85	.238	1.18	2	15	11
Create original lesson plan	2.43	.015	27	3.67	.001	.69	27	27.35	.445	1.01	1	15	12
Create language experience lesson plan	1.97	.049	27	2.78	.010	.53	27	31.85	.238	1.18	2	15	11
Analyze ESOL lesson plan	1.74	.083	27	3.29	.003	.62	27	18.01	.903	.67	0	20	8

(table continues)

Table 7 (continued)

Survey item	Cooper			Whitney			Hsu			Frequency			
	z	p	df	t	p	ES	df	χ^2	p	ES	1	2	3
Modify a lesson plan	3.12	.002	27	4.58	.000	.87	27	28.36	.392	1.05	1	12	15
Written reflections	.58	.563	27	1.00	.326	.19	27	27.35	.445	1.01	3	19	6
Language learning project	1.74	.083	27	2.52	.018	.48	27	30.61	.287	1.13	2	16	10
Field observation	4.05	.000	27	6.09	.000	1.15	27	26.56	.488	.98	1	8	19
Tracking ELL program placement	2.00	.045	26	2.36	.026	.45	26	44.12	.015	1.70	4	10	13
Topics related to ELLs	2.66	.008	27	3.58	.001	.68	27	34.22	.160	1.27	2	12	14
Create lesson higher order thinking	2.66	.008	27	4.50	.000	.85	27	21.61	.757	.80	0	16	12
Diagnostic reading report	1.04	.298	27	1.41	.170	.27	27	38.15	.075	1.41	4	15	9
School demographic report	.81	.418	27	1.07	.293	.20	27	42.32	.031	1.57	5	14	9
Design assessment for ELLs	1.97	.049	27	3.10	.004	.59	27	25.55	.544	.95	1	17	10

Note. Scale Steps 1 = Not Helpful; 2 = Somewhat Helpful; 3 = Very Helpful.

Table 8

Summary Table of Symmetry and Disagreement Test-Survey Part B

Survey item	Negative	Neutral	Positive	Disagreement
Interview recent immigrant		X		
Discuss/write reflections		X		
Diagnostic reading report		X		
Written school data report		X		
Interview classroom teacher		X		
Create original lesson plan for ELLs			X	

(table continues)

Table 8 (continued)

Survey item	Negative	Neutral	Positive	Disagreement
Create lang. experience lesson plan			X	
Analyze ESOL lesson plan			X	
Modify lesson plan for ELLs			X	
Language learning project			X	
Classroom observations ELLs			X	
Track ELL in program entrance to exit			X	
Topics related to educating ELLs			X	
Create lesson plans thinking skills			X	
Design assessments for ELLs			X	

Qualitative Results: Interviews

Three quarters of the way through the fall semester of 2014, six undergraduate elementary education PSTs were interviewed. Of six, one indicated proficiency in a language other than English, and all were female. Four of six were interviewed in person and the remaining two by phone.

Interview participants were interviewed using 10 semi-structured questions informed by the study's three research questions, five ESOL domains from FTSEE standards, current literature in the field, results of the quantitative portion of the study and the information taken from the IPEP document. Interviews were audio recorded, transcribed, and organized according to patterns. The data from the interview questions

were analyzed and grouped into patterns that were then organized by research questions. Findings in the following section will be discussed by research question.

Research Question 1. What are PSTs' perceptions regarding their knowledge and understanding of the ESOL domains as specified in the FTSEE?

Preservice teachers' conceptualization of their ESOL knowledge. Findings from the qualitative section indicated that PSTs did not necessarily compartmentalize their ESOL knowledge into domains or standards. When asked to respond to specific interview questions, it was common for the respondents to intersect or integrate their ESOL knowledge when answering the questions across domains or disciplines. Therefore it is important to note that while reading the findings, one will find intersections of knowledge at many points. For example, while discussing assessment challenges for ELLs, some interviewees also mentioned the importance of understanding oral and written language proficiency classification levels.

Domain 1, Knowledge of cultural factors and English language learners. PSTs demonstrated understanding of the connection between culture and learning (cultural competence) and the importance of integrating ELLs' culture as a means in which to help ELLs feel included in the classroom or connected to the curriculum. All mentioned the importance of using ELLs' backgrounds as cultural resources for both instruction and curriculum selection. Interviewees commented on the connection between cultural backgrounds and increased student achievement and indicated the importance of incorporating their future students' cultural backgrounds into the selection of curriculum and materials to increase learning. Julia felt that her classroom observation assignment contributed most to her knowledge about cultural variables because she was able to observe

the master teacher “actually take her students’ capabilities and their background and form her lessons around her students.”

Common responses reported by PSTs that demonstrated their knowledge of the components of cultural competence included: understanding that different cultures may view education and schooling differently, the effects of cultural variables on the learning processes, the importance of understanding body language, and cultural influences on learning styles. For example, Julia discussed the ways in which cultural variables can influence how ELLs participate in classroom interactions. She learned about this through an article that was discussed in one of her ESOL infused classes. Julia shared:

So that article really helped me to understand that culture is extremely important, and the way that they might do something that is not normal here, but it’s what they’re used to back home. So that’s why I feel like first week of school, you have to always understand who your students are so that they can succeed in your classroom.

In this scenario, Julia not only exhibited cultural competence, but also an understanding of how the cultural values of the teacher might influence how she/he approaches teaching. Her understanding mirrored the responses of the other interview participants. Overall they were very knowledgeable about how their own cultural values might influence their view on education and that teaching was often “a reflection of our/your own culture” (Barbara). They also recognized that they might select curriculum and materials that reflect their own cultures. As stated by Sofia, “I have to be sensitive, and I respect that because everyone has their own way of celebrating or living their lifestyle. It’s not all about how American’s lifestyle. I’ll be able to incorporate

everyone's." Susan was the only one who commented that she had learned about the importance of being aware of cultural bias when formatting tests for ELLs.

One of six interviewees mentioned an assignment from her coursework that discussed language policies specifically related to the historical treatment of Native American languages in public schools. Susan commented that this assignment changed her perspective on how the culture and language affect "people." Susan shared: "In past time periods and stuff, how they had different language and were put into schools with one specific. They wouldn't be allowed to use it and all this made me think about it." Susan's reflection was the only one that touched upon the effects of language policies in education and how languages in society are legitimized or not legitimized.

All interviewees were very knowledgeable on how to integrate a variety of cultural strategies, methods, resources and materials to teach ELLs. There were many examples cited in the data directly related to integrating ELLs' individual learning styles, holidays, and cultural learning materials into lesson plans. Interviewees often referred to lesson plan assignments as a way to integrate the student's backgrounds by gearing "lesson plans or lessons towards the cultural needs or how the student learns best" (Sofia).

Susan shared an assignment from one of her reading classes that required her to incorporate multicultural books into the lesson plan. She commented that this assignment was beneficial because "just being able to look for books like that and create content on it just helps to create a better classroom environment, I think." The interviewees also frequently mentioned modifying lessons and using strategies to meet the different cultural learning styles. Barbara said, "You have to figure out how to get

that information to your ELLs in your class. So you have to know somewhat about them, about their cultural background, about their learning style, and modify your lesson plan.”

While not directly asked, very few of the interviewees mentioned the importance of building relationships between the home, school, and community of learning. One interviewee commented on the importance of building home/school relationships as a way of involving parents in helping with homework, getting them involved with the daily tasks in the classroom, or becoming familiar with the student’s home life. Margaret mentioned the importance of having all students involved in creating hands on materials that could be taken home and shared with family members. One interviewee in particular integrated her cultural competence with her understanding of home school relationships. Sofia shared:

You have to respect ever- respect every student’s culture but yet keep in mind that they have their ways of viewing education and how their parents are. Some parents don’t come to the school and then some—on the other hand, parents stay to the schools. So it depends, everything depends on culture.

Gaps in knowledge of cultural factors and English language learners. Overall interview participants lacked a specific understanding of the intricate relationship between language and culture and how both are culturally embedded. Barbara commented that: “Every culture has different things that prevent them from learning, especially the English language, because they’re in the classroom with, we live differently than, you know, they live or they were taught. So it can be very confusing for them”. Barbara’s general understanding of the relationship between language and culture was consistent with the other interviewee data.

Maria likened the relationship between culture and language as one where it is easier for ELLs to pick up a language when they have “more help from around them.” In her field placement she observed one Vietnamese speaking student who was not progressing as quickly in English as her Spanish speaking counterparts. Maria felt that the student needed more assistance such as “someone that spoke the language in the school or someone... some kind of translation, because all they had was a dictionary. Like, they need someone else to speak one-on-one to.” In other words, Maria believed when ELLs in the same classroom have peers who share the same native language or culture, it is easier for them to learn English because of the language and cultural support received from them.

Also lacking from the interview data was mention of how the cultural backgrounds of ELLs could be used as a vehicle to foster social change both in the school and communities. For example, Susan felt it was important to include the “nationalities of all the students that you come across in your classroom so that it creates a comfortable environment.” While important to have a supportive classroom environment, it is also important to build home school connections that foster parental involvement that extends beyond the school and into the community. In addition, none of the data indicated that PSTs understood the role of the school and teacher as potential agents of legitimizing the languages of ELLs in society.

The data from the interviews indicated that PSTs demonstrated understanding of the connection between culture and learning (cultural competence) and the importance of integrating ELLs’ cultural backgrounds into the curriculum and instruction as a means in which to help ELLs feel supported in the classroom. The interviewees also understood

the importance of using a variety of cultural resources for instruction and curriculum selection based on the cultural and linguistic backgrounds of their students. Last, they understood how their own cultural values might affect or influence their teaching and selection of materials. However, more development was needed in understanding the relationship between language and culture, the cultural undertones of language, and how to capitalize on the ELL's native language skills to build linguistic and cognitive connections (Brisk & Harrington, 2007). Last, there was a lack of advocacy stance and understanding of how to build home school relationships that foster social change in the school and community.

Domain 2, Knowledge of language and literacy: English language learners.

Preservice candidates understood that language was made up of many different components, and that the teacher must address both the oral and written language proficiency levels in conjunction with content requirements in their lesson plans and instruction. Margaret commented that languages progress from simple to complex and therefore the teacher must point out grammar, vocabulary, and sentence structure. PSTs all understood that oral and written language needed to be explicitly taught and noted that language learning objectives were required to be included in their lesson plans. Sofia commented, "I know that whenever I'm teaching math, reading, emphasizing the grammar technique because that's what helps develop the language more, helped develop the child master the language of English."

When specifically asked about the role of grammar in language learning and instruction, all replied that the components of grammar were important to teach ELLs, and that they should be integrated and taught across the content areas. Many were able to

apply this knowledge in their field observations/placements. In her interview, Julia noted that the master teacher in her field placement observation focused more on vocabulary than grammar development and that this would make it more difficult for the students in the future because they were not getting the “basic fundamentals of grammar early on.” Susan reported that her own knowledge of grammar did contribute to her understanding of how to meet the language needs of ELLs and felt that her reading methods classes contributed to this knowledge. Sofia commented, “When you are teaching ELLs, that’s what you are, you are a grammar teacher first.” Margaret also agreed that the infusion coursework contributed to her knowledge about the importance of grammar instruction for ELLs.

All of the interviewees commented that their empathy and understanding of the challenges faced by ELLs has increased after taking the infusion coursework. Many reflected on the challenges that they had faced trying to learn a second language and most commented that the language learning assignment in their coursework contributed to their knowledge. Maria commented:

Well, that was difficult for me to learn a new language, so I could only imagine as a child coming to a new environment what it’s like to learn a different language and you need to know it not just because you need to present it to the class [in reference to language learning assignment], but you need it to live.

In general, the interviewees were knowledgeable about the similarities and differences between languages and how some elements of language could be transferred from a student’s first language to English. Some also understood that variables such as age, attitude and past educational experiences might influence learning and second

language acquisition. While discussing her TSL field placement, Margaret observed the following:

The kids were real young and so they kind of pick up language faster I think by listening to each other, but there were some children that didn't say a word and I can only assume they're in the silent stage which we learned about where they're just listening right now before they go in to speak English.

Many cited the Language Learning Project assignment as beneficial for developing the understanding about the inter-relatedness between languages. Julia felt this assignment helped her to “understand a specific language and the differences in the languages compared to English.” Some interviewees referenced the importance of pointing out cognates and elements of punctuation to ELLs as an important ESOL strategy. Sofia realized that a Spanish-speaking student in her field placement did not understand root words, so she found a *Spanish version* and used it as a point of introduction for root words. Julia also integrated her knowledge of Spanish into her TSL field observation. She was able to work with a Spanish-speaking student and gained a better understanding of how ELLs integrated their native language abilities when learning English. Barbara also understood the complex relationship between languages. She commented, “You learn that in different languages, sometimes like the word “you” isn't used or “us” or “to.” So stuff like that, like those words are confusing to ELLs because it's not used in their language.” One commented that she would feel challenged to help her ELLs transfer skills if the languages spoken by her students did not follow the Roman alphabet.

Gaps in knowledge of language and literacy: English language learners. It is important to acknowledge that the interview questions did not directly ask PSTs to discuss their knowledge of language acquisition theories or levels of language development, rather they asked them to apply and reflect on this knowledge in relationship to their perceptions of their preparedness and understanding as future teachers. While all had a general understanding of language proficiency classification levels, few mentioned specific thresholds or competencies reflected at each level. One of six reported that the assignments completed in their reading methods classes on English language development contributed to their overall knowledge on how languages are acquired and they were able to integrate this into their ESOL knowledge.

All interviewees responded that they needed and wanted further exposure to working with ELLs at all language proficiency levels to further understand the types of strategies associated with each level. In addition they all wanted more exposure to ELLs at different age levels. Julia expressed her concern in the following way: “But when it comes to the different level, that’s where I might struggle because for me, I feel like it would be hard to tell where the students are in their speaking levels, so I don’t know.” Most commented that the coursework and field placements/observations all contributed to their knowledge but the field placements/observations were most valuable because they could actually observe ELLs interacting with the teacher and other students.

There was some disagreement between the interviewees whether or not they felt more competent to work with level one and two or three and four ELLs. Margaret said she felt competent to teach level one and two ELLs because she knew a lot of strategies, how to use visuals, and incorporate hands on materials even though she did not observe

any differentiation in instruction between ELLs and mainstream students during her field placement: “I just didn’t really see those strategies being used in the first grade class I was in, cause all of the kids were little, they’re learning the same thing and in need of visuals and things like that.” Overall Margaret felt it was easier to teach levels three and four students because they already had the basics down and just needed to refine and develop their language. Interestingly Margaret thought it was more important to use language strategies with the lower level ELLs than with higher functioning ELLs.

Susan also felt that her field placement and coursework helped prepare her to work with level one and two students, but felt she needed more knowledge on how to teach the more advanced speakers. When reflecting on her field placement with levels one and two ELLs, she commented that her field placement teacher “overlooked little things, like there were opportunities for them to learn a little bit more than they did.” However, she expressed concern with her ability to differentiate between ELLs who were at the intermediate or advanced levels of English in her teacher’s aide job because the higher level ELLs were “grouped with students who were on level with everything and they’re almost, they have a pretty good understanding of English already so I think that they don’t stand out as much.” Julia felt more prepared to work with the upper level ELLs because the coursework focused more on the students who had some competency in speaking and writing English. Whereas Barbara believed that all PSTs needed more experience teaching students at all language proficiency levels.

While all understood the importance of teaching the components of grammar to ELLs, some were not confident in their own ability to teach it. One PST felt that her knowledge of grammar was second nature to her and that she lacked formal knowledge of

grammar, therefore would be difficult to explain or articulate it to her students. One interviewee, Maria, felt “disadvantaged” because of her “horrible grammar” and questioned her own ability to successfully teach it with her future students. Maria said: “How could I teach my students and how to improve their grammar that don’t even speak English when I myself have horrible grammar?”

One of six reported that the assignments she completed in her reading methods class on English language development contributed to her overall knowledge on how languages are acquired. PSTs understood that specific language challenges existed at all language proficiency levels, but they were not always able to identify them. However they were able to suggest modifications or strategies that could be made to the curriculum or instruction to enhance learning opportunities for ELLs. All interviewees understood the importance of teaching grammar and language structures to ELLs, but their perceived ability to do so was influenced by their own knowledge and preparation. While many of the PSTs were able to identify language proficiency levels and write language objectives for the students in their field observations, all of them desired to have more understanding of the specific linguistic thresholds associated with each classification level.

Domain 3, Knowledge of methods and instructional strategies for English language learners. Overall PSTs had a solid understanding and large repertoire of ESOL teaching strategies and methods and were able to discuss and identify many strategies appropriate to use with ELLs. Some of the strategies mentioned were: visuals, games, paired learning, scaffolding, hands on learning, labeling, word banks, additional wait time, and small group instruction. Their knowledge of strategies and methods were

mentioned multiple times across all of interview questions and ESOL domains. For example, when referring to teaching a lesson on vocabulary development in the content areas, Margaret said: “You have to have visuals. You have to use work banks. You have to help them with the vocabulary, saying the words, pronouncing the words, knowing different meanings of words and things like that.” Maria believed that a case study and subsequent discussion she completed in one of her TESOL classes contributed to her knowledge on the most effective types of teaching strategies and methods to use with ELLs. During this assignment Maria critiqued three case studies and choose the one that displayed the most effective teaching strategies for ELLs based on the classroom discussion and criteria.

Two of six interviewees reported that the lesson plan modification assignment helped increase their understanding of ESOL methods and strategies. Julia commented that she “couldn’t believe how many strategies” she could fit into one lesson plan after making the modifications. Barbara further supported that the lesson plan modification increased her knowledge because she had to use her creativity. She said: “You have to figure out how to get that information to your ELLs in your class. So you have to know somewhat about them, about their cultural background, about their learning style, and modify your lesson”.

At some point during all of the interviews, all interviewees mentioned lesson planning as the primary way in which they were able to demonstrate their knowledge of how to write objectives throughout the entire infused coursework. As noted by the interviewees, all coursework lesson plan assignments required a multitude of objectives in addition to content, language objectives, and integration of the ESOL standards. Maria

believed that her non-specific TSL infused classes were more helpful in preparing her to write lesson plans because the assignments consistently required her to plan content instruction and language learning objectives for ELLs. All of the PSTs were very aware of the importance of including language and content objectives. Susan's shared:

One of my teachers provided me with a list of all the different ESOL strategies that there are, and I guess in just lesson planning you figure out what's best for which situation and what you're trying to teach, and what you could introduce to help them to get the content or you know, the language objectives as well as the content objectives.

Margaret specifically cited the types of modifications that she made in her lesson plans based on language objectives. She shared:

Adding visuals and cognates and word banks and things specifically geared toward ELLs in order to help them learn better, and then touching on vocabulary especially in grammar and words with multiple meanings and just a lot of things that are specific to the ELLs.

Interviewees had a general understanding of policy and program models that support ELLs in the schools. Two of six specifically commented that they felt the School Data assignment was "not helpful when I connected it to ELL learning" (Margaret) and "not relevant to what she would be teaching" (Maria). Some of them saw these types of programs in place during their field experiences, but most felt that laws were always changing and that the assignments completed during their coursework only gave them a cursory understanding and were not able to connect it to real scenarios that they might

encounter in schools. Barbara related her knowledge of policies to her last ESOL observation. She stated:

It is interesting to see how schools are different and how somehow programs to support their ELLs, parents of ELLs, and/or then how some schools really don't, and how some schools may have more, well over 50% of the school that does not speak English as a first language.

In her interview, Sofia mentioned general policy topics and policies related to the instruction of ELLs, such as school funding, demographics, and how school performance on test scores influenced funding.

Gaps in knowledge of methods and instructional strategies for English language learners. The interview data indicated that all of the PSTs believed they were very knowledgeable about ESOL methods and strategies. However, most of the strategies and methods mentioned in the interviews focused on the types of input that the teacher would use to make the content of language comprehensible. They did not address the types of strategies or methods that a teacher would use to develop the output of oral and written English based on language proficiency level. When asked how a coursework assignment helped prepare her to teach ELLs in the future, Barbara said:

Right, so learning what they need, learning how to also adapt your lesson plan to their needs and making sure you have visuals and games and something maybe a little bit beyond the lesson plan for them to better understand it or better understand the language.

Julia believed that observing a teacher in the field, and then enhancing and modifying the lesson was helpful because she was able to use “different strategies, like with vocabulary, putting pictures next to the word to help make the connection.”

All of the interviewees discussed a wide repertoire of many different instructional strategies and methods that could be used with ELLs and believed that the lesson plan assignments allowed them to integrate and demonstrate their knowledge across the ESOL infused coursework. However, the types of ESOL strategies and instructional methods that PSTs mentioned, while valuable for providing ELLs with language and content input, did not address strategies or methods appropriate to develop the output of language. All of the interviewees reported that the lesson plan assignments increased their knowledge of how to write language and content objectives, however their knowledge was broadly based and did not reflect a deep understanding of how to write specific language objectives based on the language proficiency levels.

Domain 4, Knowledge of curriculum and materials for English language learners. Overall PSTs had a general understanding of how to create, select, or incorporate curriculum and materials for ELLs. Interviewees often discussed the types of curriculum and materials they selected as a result of the types of strategies and methods that they were using, based on the cultural backgrounds and language proficiency levels of their students. Interviewees mentioned many types of curriculum and materials for ELLs throughout the interview questions, and across the domains. Julia reported that the lesson plan modification assignment helped her to select materials for ELLs. By doing this assignment she was able to modify what the teacher did in the field and enhance it by selecting more hands on materials like “vocabulary, putting pictures next to the word to

help make the connection.” The sheltered English lesson plans also was “helpful with understanding materials and strategies to use in the classroom.”

Data from the interviews indicated that PSTs all had an understanding of the challenges faced by ELLs in the school environment. PSTs specifically noted the importance of providing their future students with a supportive classroom environment based on the ELLs’ language and individual learning needs. Julia felt that the language learning project assignment broadened her understanding of the challenges faced by ELLs when learning English because she was able “to see the differences in the language and understand how the student would feel in the classroom.” Margaret’s own experience in learning English as a child made her aware of “the struggle that ELLs have in learning the new language, and then I’m aware of different strategies to use with them and modifications that I’m going to have to make for them.” The other interviewees also voiced the same concerns and were empathetic towards the struggles faced by ELLs..

Three of six interviewees mentioned the availability of primary language and multicultural materials and noted the importance of using them to bridge language and cultural gaps. This awareness came from the multicultural coursework, reading classes, and fieldwork. The assignments that Susan completed in her reading coursework required her to incorporate multicultural books into her lesson plans, which she believed helped “to create a better classroom environment.” Sofia felt that her field placement in a dual language program was beneficial because she was able to see bilingual materials being used and gained the awareness that she could request bilingual materials when she is a teacher. Sofia said:

I noticed that you can, when the students read a book in Spanish, they must take the test in Spanish. The students, they struggle if they take, they read the book in Spanish and they take the test in English. It's different with the materials. I never thought that in the U.S. school system I would see a text, full textbooks that were written in Spanish only.

Margaret also mentioned the importance of using and selecting materials both in the ELL's primary language and English "to help kids connect the words to what something is and what something means and even use their own language to help them connect it."

Gaps in knowledge of curriculum and materials for English language learners.

PSTs were aware of technology available for ELLs but most had not experienced using it in either their coursework or fieldwork. Most felt knowledgeable using it with mainstream students but overall did not believe that the coursework specifically addressed technology for ELLs. One of six saw accelerated reader in Spanish and English being used for ELLs in her field placement but the remainder did not observe technology being used specifically for ELLs. Barbara was the only one who believed she was prepared to use technology specifically for ELLs. During her coursework she completed a paper on the different types of websites, apps, and videos for ELLs. She was the only interviewee to mention that technology could be put into lesson plans when modifying them for ELLs. Maria noted that the infused coursework included a little information about different types of programs that ELLs could use to translate, but she believed that it wasn't specific enough for ELLs. All but one expressed the desire for more knowledge in this area.

Overall PSTs have a general understanding of how to create, select, or incorporate curriculum and materials for ELLs. Some even mentioned the importance of integrating materials based on the cultural and linguistic backgrounds of their students. All but one of the interviewees expressed a desire to know more about the implications of instructional technology for ELLs.

Domain 5, Knowledge of assessment of English language learners. PSTs had a general understanding of the challenges and issues faced by ELLs in the area of assessment and were aware of certain testing accommodations. Extra time, read questions/answers aloud, bilingual dictionary, and use of primary language were some of the assessment accommodations cited by the interviewees as appropriate to use with ELLs. Margaret went further and discussed how she made accommodations prior to using an anticipation guide: “So if you’re going to give an ELL student something like that, then you can make an accommodation like reading them the statement, because they might not know how to read it.” Julia emphasized the importance of doing pre-assessments with ELLs in the beginning of the school year so that their progress could be tracked throughout the year.

Most interviewees mentioned that the lesson plan format required in all of the infused coursework assignments and the critical assignment from the measurement coursework as beneficial because they were able to integrate their knowledge of how to make accommodations for ELLs when giving assessments. Margaret integrated verbal assessments, quizzes, and an observational rubric into her lesson plans in order to modify and make accommodations for ELL and ESE students. Additionally, many interviewees

discussed the merits of alternative, classroom based assessments, and informal assessments for ELLs.

Many referenced an assignment that they completed for one of the TSL classes because it contributed to their knowledge about how to evaluate assessment results based on both oral and written language proficiency levels. This assignment required the PSTs to complete a unit plan that included a pre-and-post test, analyze the results according to a rubric, and determine if it matched the language proficiency classification along with an alternative assessment. Susan felt that this assignment raised her level of awareness as to the multitude of tests available to evaluate students' abilities. This knowledge prepared her for her future teaching because she understood the importance of "knowing how to evaluate where they're at before you can actually start giving them lessons and knowing what their objective should be." Sofia elaborated further:

I was able to see the cues on which the student made, the missed cues which the students made in the tests and connect it to the strategies that can be used based upon the ESOL classification level. It was an eye opener to see how a test is so different than hosting alternative assessment, so I feel like when working with ELL's tests aren't that important – They are important but ELL's you have to make sure you could see it through their eyes to say, "Okay this is what he knows, but just because he didn't put it on paper doesn't mean he doesn't know it."

Margaret also commented that while she had never actually given a language assessment to determine placement, she was aware that they existed and were used at schools to determine placements. She cited the Comprehensive English Language Learning Assessment (CELLA) and Student Oral Language Observation Matrix (SOLOM) as two

types of language assessments that were required to use as part of the assignment in one of her TSL classes.

Gaps in knowledge of assessment of English language learners. Two interviewees desired more knowledge about assessing and evaluating ELLs. Barbara commented that she would like more preparation overall, even with mainstream students. Barbara commented that she felt there was a “lot of information to know about the requirements and what is allowed and what is not allowed when it comes to testing ELLs”. However, she didn’t feel that she had an assignment that addressed the topic. Julia believed that the coursework from her evaluation course had increased her understanding of how to create and analyze assessments for mainstream students, but she was less knowledgeable on how to modify assessments for ELLs. Overall Julia reported that she needed a greater understanding of how to modify and assess ELLs, but she felt most knowledgeable of classroom-based assessments. Julia said:

I am capable to form assessment by doing more informal, like, little activities or little projects that they can make. But I feel for older grades when they actually have to take like a pen and paper test, that I lack the knowledge of how to maybe modify testing for them. So assessment might be one area that is my weakness.

PSTs were aware of the difference between a learning disability versus language learning difficulty but were in disagreement to the extent that they perceived their knowledge level or preparation to distinguish between the two. All understood the importance of making the distinction between the two but only one felt like the coursework, in particular the critical assignment from the evaluation course, had prepared her to distinguish between the two. Two of six discussed the difference between language

learning versus learning difficulty, but did not directly comment on their perceived levels of preparedness. Margaret mentioned a few of the assessments appropriate to use for determining language levels and learning disabilities and mentioned that a team of school personnel would intervene to make a plan. She also realized the importance of making the distinction:

So you have to be careful to I guess, assess the students first to see if the problem is just language learning or if it's a disability. And then once you know that, then you can go on and make the proper accommodations and modifications.

Three of six reported that they needed more understanding in this area. Barbara commented: "And when you have a student with a learning disability and they're also an ELLL, an English language learner, I think it's going to be very difficult to figure out where they're having problems and why." Julia couldn't recall a time during her coursework when this topic was brought to her attention and felt like she "never had to make that distinction." At first, Sofia answered that the "ESOL modifications and ESE modifications, they kind of tie hand to hand depending on the student needs" but upon further reflection Sofia later admitted that she was unsure whether or not she was prepared to distinguish between the two a language learning difficulty and a learning difficulty. Susan couldn't remember any specific assignments regarding how to make the distinction between a language learning, versus learning difficulty, but overall she felt a little prepared. She felt that the only exposure she got was in her field placement working with a student who she believed had a learning disability due to her lack of participation across the content areas.

PSTs had a general understanding of the challenges and issues faced by ELLs in the area of assessment and they were aware of the accommodations used in testing situations. All interviewees were aware of the multitude of assessments being given to all students and some expressed the need to learn more about how to modify assessments specifically for ELLs. All reported that the lesson plan format required in the infused coursework and the assignments from the measurement coursework were assignments that allowed them to integrate their knowledge of how to make assessment for ELLs. More than half reported that they wanted more preparation in the area of identifying language learning difficulties versus issues related to learning difficulties.

Research Question 2. Which assessment activities or assignments do PSTs report provide them with the best method of understanding the ESOL domains as specified in the FTSEE?

Best practices for assigning coursework that supports preservice teacher knowledge of English language learners. As shown on Table 9, there were many coursework assignments or activities that PSTs believed contributed to their ESOL knowledge and skills set. Overall PSTs reported that the assignments and assessments that best supported their learning gave them the opportunity to integrate their own contextual knowledge and skills into scenarios that may actually occur when they are classroom teachers, or reflected the typical scenarios that may be encountered in real teaching and learning situations.

All of the interviewees mentioned lesson plans assignments as a means in which they could demonstrate how to integrate their knowledge of the standards, methods, strategies, and modifications appropriate for ELLs in preparation for their careers as

future teachers. Maria believed that the lesson plan assignments from all of the infused classes prepared her for her future teaching: She noted:

Because not only in the ESOL section, but you also have to deal with the objectives and SMART objectives and you have to add the Bloom's taxonomy, and that's all different ways to teach different kinds of learners. And you also incorporate the ESOL section.

Margaret felt that the knowledge gained by preparing the lesson plan assignments made her more confident because even though they required time to create, they helped her to "organize" so that she included all of the standards, objectives, and strategies. Barbara believed the infused lesson plan assignments helped her learn how to "adapt for, you know, ELLs or gifted or whatever, you know, child or learning disability you may have in your class" and that this knowledge would be useful in her future teaching.

Many interviewees mentioned the language learning assignment as an assignment that helped them to integrate their knowledge about the challenges that ELLs face trying to learn English, teaching strategies, and how languages are learned. For example, Julia felt that this assignment helped her to understand the differences between English and her selected language, while Susan believed it increased her understanding of all the different ESOL strategies. Margaret referred to her experience listening to one of her classmates do the presentation for this assignment: "And I always thought, okay, well Spanish is close to Italian. I'll probably understand what she's saying. And, I mean, I understood maybe one or two words out of the whole presentation. That was an eye opener." All interviewees commented that that assignment increased their empathy and awareness of

how difficult it is to learn another language and it gave them the opportunity to experience firsthand some of the challenges faced by their future and current ELLs.

All but one interviewee viewed the ESOL field experiences as very valuable. Susan felt that the lesson planning assignments coupled with the field placements were beneficial: She said: “I created a whole lesson plan and then I looked at it and then I realized, “This doesn’t meet the students in my class that I’m going to be teaching, it just meets general students.” So I had to edit it to fit that.” Susan also mentioned that her master teacher also missed some opportunities for her ELLs to “do a little bit more visual activities or things that could use their background knowledge a little bit more, I think that they would’ve been able to get some of the concepts that she wasn’t really able to reach with them.” Barbara felt the fieldwork also helped her to understand “some of the frustration that some of the other teachers have and just see how they’re handling it.”

Julia’s insights regarding her field placement reflected the relationship between what is learned in the infused coursework and how it is integrated into the field (real teaching and learning in context). When referring to her field observation she noted: “Well, seeing the teacher perform a lesson, I was able to take the strategies from the textbook and see, like, oh, she did this well, she didn’t do this well, she could have added this here or maybe taken this away.” Julia also felt that an additional field placement during the TESOL1 class would have increased her knowledge even more. Sofia’s experience in the classroom mirrored the same sentiment: “Anybody can read a book but when you’re in front of an ELL student, that’s a whole another story.” Most believed that the field experience components gave them the opportunity to apply theory into practice.

Many also mentioned the assessment assignment from one of the TESOL classes as beneficial for integrating their knowledge of language proficiency levels and issues of assessment. Julia felt that this assignment helped her to become more knowledgeable about the interrelationship between languages. Julia said:

So it was really interesting to see and be able to look at how there are writing and speaking in English and they relate it back to their native language because I've taken a couple Spanish classes so I have like a small background and I can understand like simple things and simple grammar.

Sofia also found this assignment to be beneficial because it gave her the realization that curriculum and materials published in Spanish were being used in the classroom, and that she could access to these types of materials as a future teacher.

Last, a few mentioned coursework power points and articles related to the education of ELLs as increasing their knowledge of the ESOL domains. Barbara credited the power point assignment that she presented to her classmates as increasing her knowledge of how to teach ELLs grammar. Susan believed the power point presentations from her multicultural coursework increased her understanding of how to integrate different cultures into the classroom and into her lesson plans.

Gaps in best practices for assessing and assigning coursework that supports preservice teacher knowledge of English language learners. While all interviewees reported that the field experiences increased their knowledge and understanding of ELLs, the data indicates that the quality and breadth of the placements and/or master teachers influenced some of their experiences. Margaret did not find her field placement to be helpful because she did not observe her field teacher making many modifications for the

ELLs. Margaret shared: “I didn’t find it helpful only because I was in first grade and, you know, I felt like in first grade, whether you’re an English language learner or not, you are pretty much learning the same way.” She believed it would have been more beneficial to observe a teacher working with older students to see how she would modify her instruction for the ELLs. Sofia had the opposite field placement experience with older, higher functioning speakers; therefore she wished for an additional experience with lower level speakers.

Overall interviewees reported that those assessment assignments and activities that incorporated scenarios that they would encounter in real teaching situations (real teaching and learning in context) as being the most valuable in increasing their knowledge of the ESOL domains. Even though the School Data Report assignment incorporated an activity that could be encountered in a real school setting, overall it was perceived as moderately effective by the interviewees. In addition PSTs valued opportunities to take what they had learned in the classroom or through coursework readings or lectures, and apply or observe them in real teaching situations.

When asked about their preparation to work with ELLs all but one participant believed that the infused coursework increased their knowledge, confidence, and awareness about ELLs. Margaret commented that it raised her level of awareness about the “struggles that ELLs have in learning the new language” and the different types of strategies and modifications appropriate to use with ELLs. Julia felt that for the most part that the program had prepared her, but commented: “In my TESOL1 class, I was very overwhelmed with all the information because I was first introduced to all the concepts and theorists and I was extremely lost”. However, she later commented that the

assignments and fieldwork from the TESOL2 course helped her to understand what she had learned. Maria was the only one who did not believe that she was prepared to work with ELLs. She did not feel that the two ESOL specific classes coupled with the infused coursework prepared her because, “The teachers don’t elaborate on it in other classes. It’s just like, hey, don’t forget to add the ESOL accommodations to your lesson plan”. Maria also felt that there were too many assignments from the TESOL 2 coursework and not enough field observation hours to finish the required work.

All of the interviewees indicated that they wanted more opportunities to be in the field both observing and working with a cross section of ELLs with varying language proficiency levels. Many commented on the quality or lack thereof of their field placements and all desired to have more opportunities to observe ELLs at different language proficiency and grade levels.

Table 9

Assignments/Assessments Reported Most Often in Interviews as Developing ESOL Knowledge

Type of Assignment or Assessment	Knowledge Gained from Assignment
Field Placements/Observations	RTLTC
Lesson Planning (Coursework)	CKS
Lesson Planning (Field Work)	RTLTC
Case Studies	CKS
Written Term Papers (Related to ELLs)	CKS
Power Point Presentations	CKS
Language Learning Project	CKS
Observational Reports (Fieldwork)	RTLTC
Assessment Rubrics (Field Work)	RTLTC
Classroom Discussions/Lectures (related to ESOL)	CKS
Articles (related to ESOL)	CKS

Note. RTLTC = Real Teaching and Learning in Context; CKS = Contextual Knowledge and Skills.

Research Question 3. What other factors do PSTs believe influence their understanding of the ESOL domains as specified in the FTSEE?

Preservice teachers' conceptualization of the influences of other factors on their ESOL knowledge. As shown in Figure 3, there were five other factors reported as influencing PSTs' ESOL knowledge outside of their coursework. The five factors were: outside work, work related to the educational field, own school experience, own experience learning another language, and infused coursework. Most often discussed in the interviews were job related influences on ESOL knowledge. All but one of the interviewees reported that other factors had influenced her ESOL knowledge. Overall the interviewees felt that these outside influences and experiences had increased their empathy, given them opportunities to apply what they had learned in their coursework, and increased their understanding of the challenges faced by ELLs in society and the workplace.

One of six interviewees experienced learning a second language as a child. This experience increased her understanding of the challenges faced by ELLs trying to learn another language and also gave her the opportunity to use her personal experience as a springboard for applying those strategies and methods she felt would be most helpful to use with ELLs in her future classroom. Margaret commented:

I'm very aware how difficult it is to learn a second language, and I think that in the classroom, the best thing to do is to use a lot of visuals to help kids connect the words to what something is and what something means and even use their own language to help them connect it.

Sofia was the only interviewee to have the unique experience of being of a small number of students in her high school who did not speak Spanish or Haitian Creole. By not speaking the majority languages, and not being from the majority cultures, Sofia felt that she understood the challenges faced both socially and linguistically by students who are not part of the mainstream group. Sofia's motivation for trying to learn Spanish was motivated by social pressure in order to understand whether or not her friends were talking about her behind her back. Conversely, Sofia was often selected to help recent arrivals or non-English speakers with "buddy learning" and these types of experiences also helped to increase her awareness of the types of modifications or strategies that can be used with ELLs.

Four of six interviewees experienced working with ELLs in a variety of job related settings. Experiences varied from jobs held in the restaurant business to part-time jobs in the field of education. These jobs related experiences gave the interviewees an increased understanding of the challenges faced by ELLs in society and the workplace. Reflecting on her job experience working with adult ELLs in the restaurant business, Barbara said:

I think that influenced my knowledge of how difficult it is for them, and uh, but also how they have such a desire to learn, and they're adults so – and how they have the desire for their children to learn and become educated in the English language.

Three of six worked in a school setting outside of their coursework and had opportunities to apply what they had learned in their coursework. Maria's job at a magnet school offered her the unique perspective of seeing what happened to high school ELLs

after they exited into English only programs. It made her realize that “just because they came here and they didn’t know the language and they couldn’t understand the content, the content didn’t stop these students. Like, they’re still capable of anything.” Susan’s job as a substitute teacher at a dual language school gave her the opportunity to apply the strategies from her coursework. Last, Barbara’s work as a substitute teacher gave her the opportunity to “think back” to what she learned from her coursework assignments “not just put them away on a computer or something.”

All but one of the interviewees reported that experiences outside of the infused coursework influenced their understanding of the ESOL domains. These experiences were varied but overall increased their levels of empathy and understanding towards ELLs while providing additional opportunities for them to apply some of the knowledge gained in the coursework into practice. This knowledge also extended to adult learners as well as children.

Other Factors Influencing Pre-Service Teacher ESOL Knowledge

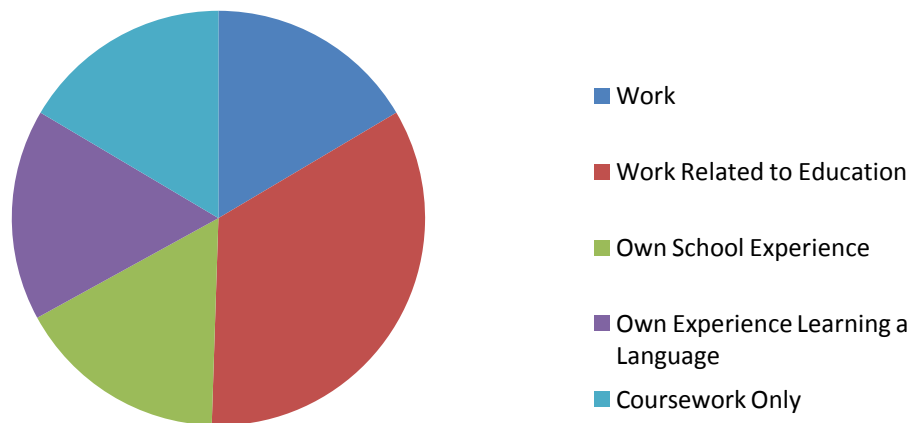


Figure 3. Other factors influencing preservice teacher ESOL knowledge.

CHAPTER 5: SUMMARY OF FINDINGS, LIMITATIONS, IMPLICATIONS, RECOMMENDATIONS, AND CONCLUSION

This study examined PSTs' perceptions regarding their knowledge of the ESOL domains as suggested in the FTSEE, their beliefs regarding the types of assessments and assignments that provided them with the best method of understanding the ESOL domains, and other factors they perceived as influencing their understanding. First, this chapter summarizes the findings by research question and Borg's (2003) framework on teacher cognition, professional education, and classroom practice, which are used as a visual for interpreting the findings. Next, the implications and recommendations for further research are discussed followed by the study limitations and conclusion.

The following research questions were investigated:

1. What are PSTs' perceptions regarding their knowledge and understanding of the ESOL domains as specified in the FTSEE?
2. Which assessment activities or assignments do PSTs report provide the best method of understanding the ESOL domains as specified in the FTSEE?
3. What other factors do PSTs believe influence their understanding of the ESOL domains as specified in the FTSEE?

Summary of Findings

Research Question 1. What are PSTs' perceptions regarding their knowledge and understanding of the ESOL domains as specified in the FTSEE?

Knowledge across the five domains. According to the quantitative results, there were no significant differences in means regarding PSTs' perceived knowledge across the five domains. A simple repeated measures test was used to compare the means across the ESOL domains to determine the degree of the relationship between PSTs' reported knowledge of the five ESOL domains ($p = .06$). While Part A of the survey did not contain any data that leaned toward the negative range of the distribution, there was some disagreement to the extent in which participants felt knowledgeable about second language acquisition proficiency levels, technology for ELLs, and how to write language objectives for ELLs. Based on the results of the survey, the interview questions probed further to better understand and explain the perceptions of PSTs completing the ESOL infused coursework. The findings from the qualitative section also indicated that PSTs had an overall understanding of the five domains. On many occasions during the interview process it was common for the respondents to intersect or integrate their ESOL knowledge across domains and coursework disciplines. As indicated in the survey results, interviewees also demonstrated different levels of perceived competencies in their knowledge of second language acquisition proficiency levels, technology for ELLs, and setting language objectives for ELLs.

Cultural factors: English language learners. Data from the survey indicated that PSTs believed that they were generally knowledgeable or knew a lot about the effects of cultural factors on the language learning and school achievement of ELLs. The survey specifically indicated that they knew a lot about cultural awareness, how to respond appropriately to diverse learners, and the importance of building home school relationships. Data from the interviews also indicated that PSTs believed they were

culturally competent and able to respond appropriately to culturally and linguistically diverse learners. However, the interview data indicated some disagreement with the quantitative findings.

While the quantitative and qualitative data indicated that PSTs were culturally aware, their knowledge base was at a micro, not macro level. First, PSTs demonstrated understanding of the connection between culture and learning (cultural competence) but did not view integrating ELLs' cultural backgrounds as a vehicle in which to foster social change, rather as a means in which to help ELLs feel comfortable in the classroom, or as a strategy to make the curriculum more connected to their culture. This finding was consistent with the research done by Coady et al. (2011). While it is important to integrate the cultural backgrounds of ELLs into the curriculum, it is pertinent that future teachers also understand how to take a critical stance to legitimize the culture of their students so that the students and communities feel a sense of empowerment (Nieto & Bode, 2012; Pennycook, 1999; Sleeter, 2005). Next, many interviewees understood that language and culture were related, but most did not have a deep enough understanding of the intimate relationship between the two. Some of the data from the interviews reflected the belief that ELLs learned English faster when supported by peers who spoke the same language and shared similar cultural characteristics. PSTs need to develop a more in-depth understanding of the connection between language and culture. Language and culture should be understood as one entity because the socio-cultural images associated with a word(s), can share unique meaning(s) depending on the context and how they are used in speaking or writing (Jiang, 2000). In addition, many ELLs speak the same language, but do not necessarily share the same cultural backgrounds.

Last, PSTs demonstrated understanding of the importance of building home school relationships, but not as a way to legitimize or empower the language or culture of the families, but more as a way of involving parents in helping with homework or getting them to join the school community. This commonly held view reflects how mainstream cultural views on parental involvement have been historically and traditionally defined in the U. S. and fails to recognize the challenges faced by ELLs and their families as they try to access the school community and mainstream culture. Multiple barriers such as cultural backgrounds, socio-economic levels, and the personal experiences or educational levels of parents may also prevent parental involvement (Cakiroglu, 2004 as cited in Watson, Sanders-Lawson, & McNeal, 2012). Additionally, strong English bias presented by teachers and schools can lead parents and students to believe that their language and knowledge are not valued by the school community, (Nieto & Bode, 2012; Pennycook, 1999; Sleeter, 2005). According to Flor Ada (1995), when ELLs believe that their language and culture are legitimized, teachers are able to build stronger home/school connections, that will ultimately increase parental, and community involvement.

While not specifically asked on the survey, many of the interviewees acknowledged that their own cultural views might influence how they will select curriculum or instruct students in the future (Borg, 2003; Hollins & Guzman, 2005), and were cognizant that they would need to integrate the cultural backgrounds of their students into the classroom and curriculum. As cited in the literature, this awareness is important for teachers to understand before entering the classroom (Coady et al., 2011; Hollins & Guzman, 2005), as these contextual factors can influence and shape their future classroom practice (Borg, 2003). Opportunities to work with diverse populations

outside of the teacher education coursework is also cited in the literature as beneficial in helping change attitudes towards working with diverse students (Jimenez & Rose, 2010). All but one of the interviewees reported that *outside influences* such as work and personal experiences contributed to their knowledge of how cultural backgrounds might influence language learning and academic achievement of ELLs. This could be due to fact that the community surrounding the university where the research occurred is very diverse, therefore affording multiple opportunities both socially and in the work place for these encounters to occur.

Overall PSTs believe that they are knowledgeable regarding cultural influences on language and academic learning and understand that their cultural lens might influence how they will approach teaching and selection of materials. PSTs understand that cultural variables can affect not only language learning but also all learning across the content areas. While empathetic and eager to integrate their student's cultural backgrounds into their curriculum and activities, they are not yet cognizant of how to build collaborative relationships between the school and community to foster academic achievement and legitimize the language of their ELLs. More understanding is also needed related to the relationship between language and culture.

Language and literacy: English language learners. The survey data indicated that PSTs believed that they were knowledgeable about English grammar, understood the similarities and differences between English and other languages, and they knew a little or somewhat about language proficiency levels. While leaning towards the positive range of the distribution, the survey suggested that there was some disagreement (ES = 1.52) to the extent in which PSTs understood how second languages are acquired. The data

indicated that some PSTs had a general understanding about second language acquisition, while others knew a lot. Although some of the interview data supported the qualitative findings, there were also some disagreements.

In agreement with the quantitative findings, when specifically asked about the role of grammar in language learning and instruction, all interviewees replied that the components of both oral and written English were important to teach ELLs, and that they should be integrated and taught across the content areas. This knowledge was cited as very important for PSTs to understand as part of their infused coursework and preparation for teaching ELLs (Echevarria & Vogt, 2010; FTSEE, 2.1b; Harper & de Jong, 2004; Samson & Collins, 2012). Many were able to apply this knowledge in their field observations or placements. While all indicated that they understood the importance of integrating the components of English grammar into the content areas, when further probed on this topic, some believed that they were not confident in their own grammatical knowledge, and therefore believed it would be challenging to teach grammar to ELLs (Wong Fillmore & Snow, 2000; Harper & de Jong, 2004).

As required in the FTSEE (2010), teachers should have knowledge and understanding of research related to bilingualism. All of the interviewees were somewhat knowledgeable about the similarities and differences between languages and how some elements of language could be transferred from a student's first language to English. Two of six interviewees mentioned speaking Spanish to some of their field placement students in order to make the material more comprehensible. Some also stated that variables such as age, home, and past educational experiences might influence learning and second language acquisition (Lesaux et al., 2008).

As suggested by the quantitative findings, interviewees had varying levels of knowledge regarding their understanding of second language acquisition. Many were able to generally discuss second language acquisition but were not specific in their understanding of language proficiency levels. Interviewees recognized that specific strategies, modifications, and methods needed to be implemented for ELLs across the various language proficiency levels and content areas, but did not articulate the linguistic thresholds at each the different language proficiency levels. As more states move towards the adoption of the World-class Instructional Design and Assessment (WIDA, 2012) standards, it is pertinent for future teachers to understand the language proficiency indicators because the WIDA standards require teachers to understand the following: the linguistic complexity of speech and writing, vocabulary usage in context, and the types of errors in oral and written discourse.

When further queried during the interviews, some believed they were more prepared to work with ELLs at the lower language proficiency levels (levels one and two) because the content of the subject matter was less contextually embedded, required less complex knowledge of English, and the general teaching strategies were more aligned with mainstream best teaching practices (Harper & de Jong, 2004). However, others believed they were more prepared to work with higher English functioning ELLs (levels three and four) because they had a better command of the language, understood more, and could communicate better. It is pertinent for PSTs to understand that higher functioning ELLs often have good receptive and oral language, but may struggle when their academic language surpasses their conversational abilities (Cummins, 1986) and writing abilities (Jimenez et al., 1996).

The interview findings also suggested that PSTs were much more knowledgeable on how to develop ELLs' receptive language through strategies and methods designed to make academic language more comprehensible and accessible. While not specifically asked in the interview questions, none of the interviewees mentioned the types of strategies or modifications that would encourage ELLs to produce language in order to speak fluently or participate in discussions in a meaningful way (Anthony, 2008). As noted in the research, it is imperative for ELLs to develop strong oral language skills in English because oral language competency plays a pivotal role in the development of literacy (Coleman & Goldenberg, 2009; Lesaux et al., 2008). Additionally, many ELLs have a greater ability in their receptive language and less ability in their productive language, a factor that could negatively influence the validity of the exam results (Jimenez et al., 1996). Consistent with the literature, these findings indicate that PSTs need more understanding about the threshold levels and indicators of each language proficiency levels so that they are able to accurately give corrective feedback based on language abilities (Lyster, Saito, & Sato, 2013).

PSTs had a general understanding of the importance of integrating the components of grammar into all areas of the curriculum and generally understood the similarities and differences between English and other languages. While the interviewees understood the importance of teaching grammar and language structures to ELLs, some reported that their inability to do so was influenced by their own lack of knowledge and preparation. They also had a general understanding of the different language proficiency levels, but lacked in-depth knowledge of the language thresholds at each language proficiency level. These findings imply that some PSTs do not have an in-depth

understanding of the formality, components, nuances, and complexity of oral language development. This entails not only understanding of how to make the content comprehensible and accessible (input), but also how to provide feedback based on the ELLs' oral language output to further develop their academic language proficiencies. The interviewees understood and recognized that ELLs face challenges as they acquire English while navigating academic content and all wanted more exposure working with ELLs at different language proficiency levels.

Methods and instructional strategies for English language learners. According to the survey results, PSTs believed that they were generally or very knowledgeable about the types of methods and instructional strategies to use with ELLs in the content areas. In agreement with the findings of Coady et al. (2011), interviewees also believed they were knowledgeable and prepared to integrate a variety of instructional strategies and methods for ELLs across the content areas and into their lesson plans. However, some felt that methodologies and strategies for mainstream students were sufficient enough to use with ELLs, especially at the lower language proficiency levels. This misunderstanding is cited in the literature and should be addressed at the teacher training level so that the PSTs understand that while these strategies may appear to work, ELLs require additional support (Harper & de Jong, 2009). The types of strategies and methods mentioned by interviewees were wide and varied. Results from the survey also found that PSTs understood how to set language objectives in the content areas (ES = 1.77) however there was some disagreement to the extent of this knowledge. Some reported they generally understood, while others believed they knew a lot. The interview data supported the findings from the survey data.

All of the interviewees mentioned the importance of including language objectives in their lesson planning, but the specificity of what constituted a language objective varied. Some believed it meant including visuals, while others addressed specific language skills such as vocabulary or cognates. In order for language objectives to be written correctly, it is pertinent for future teachers to have a strong understanding of the specific language proficiency levels of their ELLs so that the correct strategies and modifications can be made to the method of instruction to ensure accessibility (de Jong & Harper, 2005; Met, 1999; Nutta et al., 2012). Future teachers must also have a strong understanding of grammatical principles, language proficiency levels, morphology, discourse, pragmatics, pronunciation/phonology of English, and need to know how to plan and adapt activities that would meet the language objectives.

While the data from the interviews indicated that most PSTs were able to write basic language objectives that help to make the content more comprehensible and accessible (input), there was no evidence that they understood how to write language objectives that addressed the desired language output from their ELLs. Coady et al. (2011) also reported the same finding. They found that PSTs were less knowledgeable when it came to planning for specific language teaching. As discussed in the literature, instructional strategies and lesson planning for ELLs should also include objectives and specific strategies that will encourage ELLs to participate using English in a meaningful way with structured feedback (Anthony, 2008; Brisk & Harrington, 2007; Coleman & Goldenberg, 2009). According to Anthony (2008), there is a lack of intentional planning “to create opportunities for student output” (p. 474).

Including language objectives that plan for student output has tremendous implications for future teachers working with ELLs. Currently most states have, or are in the process of incorporating the Common Core Standards (CCS) into their educational programs as suggested by the National Governors Association Center for Best Practices (2010). The standards assume that instruction will be done in English only. According to Brisk and Proctor (n.d.), this presents many instructional challenges because ELLs are required to read and comprehend complex text that is highly contextually embedded. In addition, ELLs must possess strong oral language skills because the CCS requires all students to collaborate with their peers and participate in oral presentations. Last, the CCS contains many assignments or activities that require the ability to write narratives and essays; therefore ELLs must also have strong writing skills in English (Brisk & Proctor, n.d.). Given these parameters, it is pertinent for PSTs to understand how to write language objectives that will develop both the input and output of oral and written language, as well as objectives that address literacy skills.

Data from the quantitative and qualitative indicated that PSTs understood and were able to integrate a wide repertoire of general instructional strategies and methods for ELLs into their lesson planning, and that the professional coursework contributed to this knowledge (Borg, 2003). However, the types of ESOL strategies and instructional methods that PSTs mentioned weren't always selected as a result of the specific language proficiency levels of their ELLs, or based on concrete language objectives, rather they were more general. The results indicated that across the infused coursework PSTs had experienced writing language objectives that provided ELLs with language input, but

there was no evidence that they knew how to write language objectives that addressed the output of language.

Curriculum and materials for English language learners. Data from the survey indicated that PSTs believed that they were generally knowledgeable or knew a lot about how to select or adapt curriculum and materials for ELLs. The qualitative data also supported this finding. The interview data reported that PSTs had a general understanding of how to create, select, or incorporate curriculum and materials for ELLs, and felt that it was important to also integrate the cultural and linguistic backgrounds of their students to make the curriculum accessible (Commins & Miramontes, 2006). Interviewees often discussed the types of curriculum and materials they selected as a result of the types of strategies and methods that they were using, based on the cultural backgrounds and language proficiency levels of their students (Christensen, 2000; Flor Ada, 1995). Two of six stated that they were aware or had observed materials in Spanish being used with ELLs.

However, the data from the survey indicated disagreement to the extent that PSTs perceived their understanding of how to integrate technological resources to enhance language and content instruction for ELLs (ES = 1.50). Some respondents on the survey indicated that they had some knowledge, while others felt like they knew a lot. As a follow up to the survey finding, interviewees were asked about their knowledge of instructional technology for ELLs. Five of six interviewees reported that they were aware of a variety of instructional technology for mainstream students, and all but one indicated a desire to increase their knowledge of how to use technology with ELLs.

According to the literature, instructional technology in an ESOL program is beneficial for the ELLs because it gives them the opportunity to apply their content knowledge while also integrating the specific language skills they are trying to learn (Erben, Ban, & Casteneda, 2009). It can also provide reinforcement, introduce vocabulary through a variety of visuals, and provide alternate forms of assessment for ELLs (Brozek & Duckworth, n.d). One of six commented that instructional technology was an additional modification that was appropriate to use with ELLs and could be easily integrated into a lesson plan. The ability to integrate technology into a lesson plan requires that PSTs understand the language demands presented by the instructional technology and the language proficiency levels of the students so that the instructional technology is used appropriately (Erben et al., 2009). Technology such as whiteboards, computers, document cameras, videos, and social media resources are some of the instructional technologies cited for both mainstream students and ELLs (Brozek & Duckworth, n.d.). Two of the interviewees indicated that they had observed some of the above-mentioned technologies being used in their field placements, but only one saw it specifically being used with ELLs.

Overall PSTs reported a general understanding of how to create, select, or incorporate curriculum and materials for ELLs. Some specifically mentioned the importance of integrating materials based on the linguistic and cultural backgrounds of their students. However, PSTs desired to increase their knowledge of how to integrate instructional technology for ELLs into the curriculum. While they may possess various levels of competency in their own personal understanding and use of technology, they recognized that incorporating it with ELLs requires additional knowledge and training.

This entails additional knowledge and training in identifying the language demands of the specific technology, as well as understanding how to accurately identify the language proficiency levels of ELLs. Additionally faculty must be knowledgeable and able to integrate instructional technology into their existing coursework curriculum.

Assessment of English language learners. The quantitative data indicated that PSTs perceived themselves to be a little or generally knowledgeable about ESOL assessment and evaluation in the content areas, alternative assessments, and identifying a language learning versus learning disabilities in assessment. The qualitative data also indicated that PSTs had a general understanding of assessments, but some desired more knowledge on how to modify assessments and evaluate ELLs. All but one of the interviewees expressed a desire to increase her knowledge of how to differentiate between language learning difficulties versus special education needs.

PSTs have a general understanding of the challenges and issues faced by ELLs in the area of assessment and were aware of the accommodations that may be used in testing situations. Extra time, read questions/answers aloud, bilingual dictionary, and use of primary language were some of the assessment modifications cited by the interviewees. While research in the field found that some ELLs increased achievement with testing accommodations (Abedi et al., 2005), it is also important for teachers to understand the importance of knowing the language proficiency levels in order to accurately evaluate and understand the ELLs' knowledge and learning (Jimenez et al., 1996). If tests are not appropriately designed, or ELLs are not tested under the correct conditions, then the language demands of the test may negatively influence the ELLs' performance (Kieffer et al., 2009). Some of the interviewees commented that they would like more training on

how to modify assessments specifically for ELLs, and based on their language proficiency levels.

Both data sets indicated that PSTs understood the role of alternative or classroom based assessments for ELLs. The uses of alternative assessments are supported in the literature as appropriate to use with ELLs because they provide teachers the opportunity to make assessment more accessible to ELLs (Davison & Leung, 2009). Most interviewees mentioned that the lesson plan assignments required them to include or modify assessments for ELLs. In agreement with the literature, the interview data implied that PSTs understood that standard evaluation tools did not always give an accurate portrayal of ELLs' academic abilities, and that classroom or alternative assessments were another method of gaining this information (Darling-Hammond, 1994; Jimenez et al., 1996).

Data from the survey reported that PSTs knew a little or were generally knowledgeable about identifying the differences between a language learning difficulty, versus a learning disability. When probed further during the interviews, half expressed need for more knowledge in this area, and believed that they needed more knowledge regarding how to make the distinction between the two. It is important for all future teachers to understand the distinction between the two because ELLs are often retained at grade level or do not matriculate from high school (Darling-Hammond, 1994) as a result of low test scores or improper interpretation of test results. Often times ELLs are put into remedial classes as a result of language learning issues, not academic difficulties (Echevarria & Vogt, 2010; Reyes & Vallone, 2008). Therefore this is an area that needs

to be further addressed in the ESOL infused coursework so that future teachers are adequately prepared and knowledgeable.

PSTs have a general understanding of the challenges and issues faced by ELLs in the area of assessment and were aware of testing accommodations. All interviewees reported that they were aware of the multitude of assessments appropriate to evaluate ELLs and some expressed the need to learn more about how to modify assessments specifically for ELLs. More than half reported that they wanted more preparation in the area of identifying language-learning difficulties versus issues related to learning difficulties.

Research Question 2. Which assessment activities or assignments do PSTs report provide them the best method of understanding the ESOL domains as specified in the FTSEE?

Best practices for assigning coursework that supports preservice teacher knowledge of English language learners. As indicated on the survey, PSTs believed that the assessment activities and assignments completed during their ESOL infused coursework were *somewhat* (33%) to *very helpful* (67%) and contributed to their understanding of the ESOL domains. According to Borg (2003), professional coursework can be instrumental and influence how PSTs approach teaching and learning in their own classroom. The types of activities or assignments on the survey were varied, and included assignments or assessments such as: lesson-planning, case studies, problem based assignments, classroom observations, or performance based assessments related to topics about ELLs. During the interview process interviewees were asked to reflect on the types of assessment assignments or activities across the infused coursework that best helped

them to increase their knowledge or understanding of the ESOL domains. Two of six reported that the number of assignments and/or content from the TESOL classes were too much for the amount of allotted time in each course of study.

During the interviews the types of assignments mentioned by the interviewees varied, but the common underlying theme was that they pertained to topics or issues related to ELLs and they included opportunities for PSTs to demonstrate their knowledge by presenting scenarios that may actually occur when they are in the classroom. These types of teaching and assessment practices that best support PSTs learning are supported in the literature (Darling-Hammond & Snyder, 2000) as best contributing to PST knowledge and preparation to enter into the classroom (Faez & Valeo, 2012; Wiggins & Follo, 1995) because they integrate theory into practice. In agreement with research in the field (Assaf et al., 2010), all of the interviewees believed that creating lesson plans for ELLs in the field was beneficial in connecting pedagogical knowledge to practice (Wei & Pecheone, 2010). While the survey did not indicate any of the assignments to be *not helpful*, two of six interviewees believed that the School Data Report assignment was not helpful even though the assignment integrated policy issues with a scenario that reflected a realistic teaching scenario.

Preservice teachers reported on both the surveys and interviews that they valued opportunities to apply their knowledge in real teaching situations by observing and working with ELLs in the field. These types of opportunities are cited in the research as an integral part of preparing future teachers to work with linguistically diverse students (Ball, 2000; Borg, 2003; Garcia et al., 2010; Nutta et al., 2012). According to Jimenez and Rose (2010), field placements may also help change PSTs' views of ELLs from a

deficit perspective to a positive one and interactions that occur in field placements can also influence or change PSTs' understandings of how they will approach their own classroom practice as future teachers (Borg, 2003). PSTs also indicated that observing master teachers working with ELLs was beneficial because it allowed them to see real teachers working in a specific situation as they gained knowledge and learned about ELLs in context (Nutta et al., 2012). It also provided them with additional opportunities to observe what they had learned in the coursework, being applied to practice. While some of the interviewee expressed disappointment in their ESOL field placements due to a small number of ELLs, lack of different language proficiency levels, or competency of the master teacher, all expressed desire to increase the amount of field experience opportunities. This finding was consistent with the research conducted by Smith (2005).

All but one of the interviewees believed that the infused program had increased their knowledge of the ESOL domains, given them more confidence, and raised their level of awareness of the challenges faced by ELLs. In their research, Kim et al. (2004) also found that PSTs who completed an ESOL infused program believed they were better prepared than their counterparts to teach ELLs. However, two of six expressed concern that the two TESOL specific classes contained too many assignments and content given the time constraints.

Research Question 3. What other factors do PSTs believe influence their understanding of the ESOL domains as specified in the FTSEE?

Influences of other factors on English as a second language knowledge. Data from Research Question 3 was only gathered from the qualitative section of this study. According to Borg (2003), contextual experiences unrelated to professional coursework

can greatly impact PSTs' beliefs related to their future practice as teachers. The data indicated that there were four factors that influenced PSTs ESOL knowledge of outside of their coursework. The four factors were: outside work, work related to the educational field, own school experience, and own experience learning another language.

Most often discussed as influential in the interviews were experiences related to work.

According to Zumwalt and Craig (2005), most PSTs enrolled in preparation programs are white females from the dominant culture with limited experience interacting with other diverse cultures. While the demographic backgrounds of the interviewees were unknown to the researcher, all reported having multiple interactions with diverse peoples. This could be attributed to the fact that the university where the research took place was ranked as the 27th most diverse university in the nation, and the region surrounding the area is also linguistically and ethnically diverse (Kelly, 2014). In their meta-analysis of research, Hollins and Guzman (2005) found that many PSTs had negative or deficit attitudes towards students who spoke another language. Contrary to these findings, interviewees in this study believed that their experiences outside of their ESOL coursework positively enhanced their ESOL knowledge and afforded them opportunities to apply what they had learned in their coursework. In fact, one interviewee stated that her job in a magnet school had positively influenced her view of ELLs because they were able to overcome many obstacles.

Borg's (2003) theoretical framework on teacher cognition identified four factors that may influence how a teacher approaches language instruction. One of the factors is related to how teachers experienced language learning based on their own experiences learning a language or observations in their own school experience. In agreement with

Borg’s framework, one interviewee reported that observing her former classmates learn English had positively influenced her knowledge of the challenges faced by ELLs as they acquire another language, and that she planned on integrating this knowledge into her own classroom. Last, Coady et al. (2011) found that teachers who spoke another language believed that they were better prepared to work with ELLs because they had experienced it themselves. This finding was supported by one of the interviewees who also believed that she was more knowledgeable and understanding because of her past experience learning a second language.

1. Professional Coursework (Knowledge)	
a.	Overall knowledge across ESOL domains
b.	Culturally competent
c.	Micro understanding of home/school relationships
d.	Integrate/select curriculum/materials based on ELLs’ backgrounds & cultures
e.	Developing understanding of grammar/linguistics
f.	Developing understanding of bilingualism/L2 acquisition
g.	Knowledgeable of ESOL methods & instruction
h.	Developing understanding of language objectives in content areas
i.	Developing knowledge of technology (ELLs)
j.	Developing knowledge of assessment & evaluation
k.	Alternative assessment/accommodations
l.	Valued assignment that included real scenarios/demonstrations
2. Classroom Practice (including practice teaching) (Knowledge)	
a.	Valued a variety of field/classroom observation experiences with a variety of age levels & language abilities
b.	Valued opportunities to apply theory to practice
3. Contextual Factors (Knowledge)	
a.	Jobs
b.	Influence of own culture on teaching & materials/curriculum selection
c.	Knowledge of another language
d.	Influence of own school experience on teaching ELLs
4. Schooling (Knowledge)	
a.	Own school experience
b.	Cultural lens on teaching & curriculum/materials selection
1. Professional Coursework (Gaps)	
a.	Social Advocacy Approach
b.	Grammar, linguistics, second language acquisition, language proficiency levels, bilingualism
c.	Oral & written input/output of language
d.	Language objectives specific to linguistic needs
e.	Specific methods/strategies based on language abilities
f.	Technology for ELLs
g.	Identifying/interpreting assessments based on language proficiency
h.	Identifying language learning vs. learning disability
2. Classroom Practice (including practice teaching) (Gaps)	
a.	Field opportunities with ELLs throughout entire program that include a wide variety of grade levels & language abilities with qualified ESOL teachers
b.	Integrating web based teaching demonstrations into coursework
3. Contextual Factors (Gaps)	
a.	Social Advocacy Approach
4. Schooling (Gaps)	
a.	None

Figure 4. Interpretation of PSTs’ ESOL knowledge and gaps according to Borg’s framework.

In summary, the findings found four factors that influenced PSTs' approaches to language instruction, which concurred with Borg's (2003) framework on teacher cognition (Figure 4). PSTs had an overall understanding of the ESOL domains, were culturally competent, and were prepared to incorporate a wide variety of instructional strategies and methods in their future classrooms. While PSTs had a general understanding of oral language development, many had not yet obtained an in-depth understanding of the specific language thresholds at each proficiency level. They also needed more understanding of English grammar to advance literacy skills, knowledge of bilingualism, and how to actively teach for transfer across languages. PSTs valued assignments that allowed them to integrate their own knowledge into teaching situations and valued opportunities to work with ELLs of varying levels of language abilities in the field. However, PSTs would benefit in having more opportunities to work with ELLs in bilingual programs that allow them to see how teachers access ELLs' bilingual skills when they are learning English. While knowledgeable about technology, further development was needed in the area of technology for ELLs. Outside influences such as jobs, own school experiences, knowledge of another language, and societal interactions also contributed to their ESOL knowledge.

Limitations

Due to the low response rate on the survey and interview questions, this study cannot be generalized to other teacher training programs or other teacher education curriculums. Despite offering an incentive to participate in the survey and interview, having the support of the educational institution, and sending reminder emails, the researcher was unable to increase the rate of participation. The depth and breadth of the

participation pool was another delimitation of this study. The participants for this study included undergraduate elementary PSTs currently enrolled in TSL4081 who were completing the ESOL Endorsement at one university; therefore, they may not represent a cross section of the general population. The issue of saliency and relevance to the responders' lives has also been cited in the literature as possibly influencing response rates (Cook et al., 2000; Sax et al., 2003). Therefore it is possible that those who responded to the survey and volunteered to be interviewed felt that topics related to the education of ELLs were relevant or of personal interest. Last, this study was a perceptual study; therefore, social bias may be another limitation of the data.

Implications and Recommendations

Curriculum.

1. In this study, PSTs indicated that they were culturally competent and prepared to integrate their ELLs' cultural backgrounds into their curriculum and classroom instruction. Many also believed that the experiences that they had outside of the ESOL infused coursework had positively contributed to their knowledge of ELLs and increased their empathy towards the challenges faced by ELLs both in school and in the community. However they were not yet cognizant of how to build collaborative relationships between the school and community to foster academic achievement and legitimize the language of their ELLs and their families. The following are recommended: (a) Expand internship opportunities that allow PSTs to participate in internships in the community with ELLs and their families; (b) Partner with existing after school programs or community outreach programs that provide tutoring for ELLs, assist migrant workers, teach English, or provide parental support. These types of experiences

will increase PSTs knowledge of how languages are used in the community, the challenges faced by ELLs in the community, and the wealth of knowledge that these communities have to share. The ultimate goal of these types of experiences is to build collaborative relationships that can be integrated into the ESOL infused program.

2. In this study, PSTs indicated that they had a general understanding of how policies and laws impacted ELLs' achievement and program placement, but they were unable to connect the knowledge to real teaching situations. Integrating the school data assignment into the classroom observation hours from the second ESOL class should be considered so that PSTs observe how policy and laws affect the different program models and the language of instruction. If content load limitations prohibit integrating this assignment into the field observations hours, perhaps PSTs could visit various school sites one time during the infused program and observe how different program models function. Another suggestion would be to change the entire focus of the school data assignment by integrating the content of the assignment into an interview format. Guest speakers such as principals, ESOL teachers, administrators, and ESE coordinators could be invited as guest speakers into the teacher education classrooms, therefore giving PSTs the opportunity to compare how different schools implement policies related to the education of ELLs. Any of the aforementioned assignment changes would afford PSTs multiple opportunities to realistically connect and compare perspectives regarding laws and policies for ELLs.

3. In this study, PSTs valued field observations and placements because they provided them opportunities to apply what they had learned in their coursework into practice. The data also indicated that PSTs would like more opportunities to work with

ELLs at various language proficiency levels and ages to further increase their knowledge of language proficiency levels. It is suggested to increase the number of field placement and observation hours throughout the entire infused program and actively seek placements that include ELLs at varying ages and language abilities during all of the field placements, not just the placement associated with the second ESOL class. Additionally field placements should include placements in bilingual, dual language, and ESOL classrooms. By doing this, field placements would take place at the beginning, in the middle, and at the end of the infused coursework enabling PSTs to have multiple opportunities to develop and increase their knowledge throughout the entire coursework and apply what they have learned into practice. Currently field placements with ELLs only occur at the end of the infused program therefore denying PSTs opportunities to develop their knowledge over time. If a wide variety of field placements or qualified master teachers are not available due to demographic or personnel limitations, perhaps web-based technologies featuring master ESOL teachers teaching a cross section of language proficiency levels and ages, could be integrated into the infused coursework.

4. In this study, data indicated that PSTs had a general understanding of how to write language objectives that addressed how to make the input of language comprehensible to ELLs, but needed further development on how to write specific types of language objectives that would develop the output of oral and written language based on the language needs of the ELL. For example, the data indicated that many could write language objectives in their lesson plans that included strategies for making content vocabulary accessible for ELLs, but few addressed the specific types of oral language or written outputs that they expected their ELLs to achieve as a result. From a curriculum

standpoint, it is suggested to examine the infused curriculum to ascertain how language objectives are being addressed in the lesson plan assignments throughout the infused coursework. If necessary, changes to the lesson plan format would need to be made so that this type of objective is also included. As a result, PSTs would be exposed to writing specific output language objectives across the entire infused curriculum.

Policy. In this study, the data indicated that there were some gaps in PSTs' preparation, knowledge, and understanding of the standards associated with specific language proficiency levels, second language acquisition, and linguistics. Additionally PSTs reported that they were still developing this knowledge and desired more opportunities to put the theories into practice. The implementation of the CCS and the WIDA standards present tremendous implications for future teachers and necessitates that they obtain more in-depth knowledge of the aforementioned in order to successfully teach the complex oral and written language required by these standards. This entails teaching not only the subject area content, but also the language skills necessary to access the content and discuss it both orally and in writing. Adding one more ESOL stand alone class into the existing infused coursework should be considered so that experts in the field of ESOL education would have additional time to ensure that the content is adequately addressed. The rationale for adding this additional class is as follows. First, at this time the majority of ESOL language related content is taught in the first ESOL course along with many other ESOL related topics, therefore overloading the curriculum. Second, the first ESOL course is taken early in the program and the information must be retained until the last ESOL course, which is at the end of the program. Third, by adding another stand alone course PSTs would be able to develop a deeper understanding of

linguistics, retain the course content for a longer period of time, and have more opportunities to apply this knowledge in their other coursework and field placements. Last, by implementing the third stand alone course PSTs would be better prepared to instruct, assess, adapt, and select the appropriate curriculum, technology, and materials for ELLs. This additional course would be in compliance with state policy that allows for an infused model to have three stand alone ESOL courses (Govoni & Pelaez, 2011).

Research studies.

1. In this study, the researcher used a coding procedure suggested by Campbell et al. (2013) to increase the reliability of the qualitative data. This coding procedure was used because there was only one coder and no pre existing coding scheme. Working with an assistant coder, coding schemes and definitions were negotiated to increase the reliability. Based on the inter-coder negotiation procedure, the reliability was increased. Investigating other potential applications of this coding procedure should be considered for future studies of similar design where there is only one coder and no pre-existing coding scheme.

2. In this study, the data indicated that PSTs perceived themselves to be knowledgeable regarding instructional technology for mainstream students, but most desired to increase their knowledge on how to use technology that is specific to ELLs. This entails additional knowledge and training on how to identify the language demands of the specific technology, as well as understanding how to accurately identify the language proficiency levels of ELLs. Additionally faculty must be knowledgeable of, and able to integrate instructional technology into their existing coursework curriculum. It is suggested that further research studies examine the following questions before investing

money in faculty training or additional technological resources. First, what are the best practices for modifying and adapting existing mainstream technology for ELLs based on their language proficiency levels? Second, what types of linguistic and pedagogical ESOL knowledge is needed to identify the language demands of technology? Third, what types of in-service training would faculty need in preparation to teach their PSTs about instructional technology for ELLs? Fourth, what types of instructional technologies for ELLs are currently being used in schools? How are they being used? What is the feedback on their effectiveness?

3. In this study, the data indicated that there were some gaps in PSTs' understanding of the thresholds associated with specific language proficiency levels, second language acquisition, and linguistics. While not specifically researched in this study, there are some implications regarding the breadth and depth of the training received by out of discipline faculty responsible for integrating some of this periphery content knowledge into their coursework assignments. In the state of Florida, all elementary education majors are required to obtain ESOL certification as part of their regular teacher education program and most universities follow the infused program model. This program model integrates or infuses the FTSEE standards and indicators into the existing teacher training program curriculum while offering either two or three additional ESOL specific classes (often referred to as *stand alone*). The Florida ESOL infused program model requires out of discipline faculty to integrate some of the FTSEE 2010 standards and indicators into their existing coursework assignments as determined by each university. Out of discipline faculty are required to complete three semester hours of ESOL training or have 45 contact hours with ESOL instruction and preparation

(Govoni & Pelaez, 2011) prior to teaching in the infused program. The professional growth requirements are the same for out of discipline faculty regardless if their coursework follows the two or three stand alone ESOL program models. It is suggested that further research studies examine the perceptions of out of discipline faculty who teach in both the two and three stand alone infused programs models to the to understand their perceptions of the following: (a) What are out of discipline faculty perceptions regarding the depth and breadth of their ESOL preparation seminars? (b) What are out of discipline faculty perceptions of the effectiveness of the ESOL infusion model for preparing future teachers to work with ELLs? (c) How do out of discipline faculty perceive the additional support they receive from their department and peers in the area of ESOL education?

4. In this study, the data indicated that there were some gaps in PSTs' understanding of the thresholds associated with specific language proficiency levels, second language acquisition, and linguistics. While not specifically researched in this study, there are some implications regarding the current adoption of the CCS and new testing standards in the state of Florida. It is recommended that future research examine the language implications for ELLs as a result of the adoption of these standards. It is suggested to research the perceptions of elementary classroom teachers to understand the implications of the language and linguistic demands of the new standards to understand their perceptions of the following: (a) What are classroom teachers' perceptions of the language demands of the new standards? (b) What are their perceptions regarding their preparation to teach ELLs under the new standards? (c) How do they perceive the support and training that they received since adopting the standards?

Conclusion

This research studied the perceptions of PSTs regarding their ESOL knowledge, the types of assessments and assignments that contributed to their understanding, and outside factors that may have influenced this knowledge. The data indicated that PSTs believed that they had an overall understanding of the ESOL domains, and were able to integrate this knowledge across the domains. PSTs perceived themselves to be culturally competent, aware of their own cultural lens, and prepared to integrate their future students' cultures and backgrounds into their instructional strategies and curriculums. However, the data indicated that they had not yet developed the understanding of how to take an advocacy approach to empower their students in both the school and community.

PSTs valued the types of assignments and activities that allowed them to integrate their own knowledge base into scenarios that might actually occur when they become classroom teachers, or reflected the typical scenarios encountered in real teaching situations. They also believed that observing and working with ELLs in the field was beneficial, and they desired more opportunities to do so with a wider cross section of ELLs from a variety of language proficiency levels and ages. Outside influences such as work also contributed to their ESOL knowledge, and increased their empathy and awareness of the challenges faced by ELLs in both school and society at large.

While some PSTs demonstrated a basic understanding of the components of oral language and literacy development in ELLs, the data indicated that many had not yet obtained an in-depth understanding of the specific language thresholds at each language proficiency level nor the grammatical and linguistic complexities of spoken and written English. This lack of in-depth knowledge has many implications. First, if PSTs are to

provide ELLs with precise feedback on their oral and written language outputs and write specific language objectives that develop both language inputs and outputs (oral and written), then they must understand, the language markers or thresholds found at each language proficiency level, grammatical principles, morphology, discourse, pragmatics, and pronunciation/phonology of English. Next, if PSTs are to use the appropriate teaching strategies and select specific curriculum and materials, then it is pertinent for them to understand the exact language proficiency levels of their ELLs. This will also increase their abilities to select appropriate types of assessments, make informed decisions based on assessment results, and further understand the differences between a language learning versus a learning disability. Last, if technology for ELLs is to be integrated into lesson planning, then PSTs must understand the language demands presented by the instructional technology, and how to use or adapt it based on their future students' language and learning needs.

APPENDICES

Appendix A. Florida Teacher Standards for ESOL Endorsement 2010

Domain 1: Culture (Cross-Cultural Communications)

Standard 1: Culture as a Factor in ELLs' Learning

Teachers will know and apply understanding of theories related to the effect of culture in language learning and school achievement for ELLs from diverse backgrounds. Teachers will identify and understand the nature and role of culture, cultural groups, and individual cultural identities.

Performance Indicators

- 1.1. a. Understand and apply knowledge about cultural values and beliefs in the context of teaching and learning of ELLs, from diverse backgrounds and at varying English proficiency levels.
- 1.1.b. Understand and apply knowledge of concepts of cultural competence, particularly knowledge about how cultural identities affect learning and academic progress for students from diverse backgrounds and at varying English proficiency levels.
- 1.1.c. Use a range of resources in learning about the cultural experiences of ELLs and their families to guide curriculum development and instruction.
- 1.1. d. Understand and apply knowledge about the effects of racism, stereotyping, and discrimination in teaching and learning of ELLs from diverse backgrounds and at varying English proficiency levels.
- 1.1.e. Understand and apply knowledge about home/school connections to build partnerships with ELLs' families (e.g., Parent Leadership Councils (PLC)).
- 1.1.f. Understand and apply knowledge about concepts related to the interrelationship between language and culture for students from diverse backgrounds and at varying English proficiency levels.

Domain 2: Language and Literacy (Applied Linguistics)

Standard 1: Language as a System

Teachers will demonstrate understanding of language as a system, including phonology, morphology, syntax, semantics and pragmatics; support ELLs' acquisition of English in order to learn and to read, write, and communicate orally in English.

Performance Indicators

- 2.1.a. Demonstrate knowledge of the components of language and understanding of language as an integrative and communicative system.
- 2.1.b. Apply knowledge of phonology (the sound system), morphology (the structure of words), syntax (phrase and sentence structure), semantics (word/sentence meaning), and pragmatics (the effect of context on language) to support ELLs' development of listening, speaking, reading, and writing (including spelling) skills in English.
- 2.1.c. Demonstrate knowledge of rhetorical and discourse structures as applied to second language and literacy learning.
- 2.1.d. Demonstrate proficiency in English and model for ELLs the use of appropriate forms of English for different purposes.

2.1.e. Identify similarities and differences between English and other languages reflected in the ELL student population.

Standard 2: Language Acquisition and Development Teachers will understand and apply theories and research on second language acquisition and development to support ELLs' learning.

Performance Indicators

2.2.a. Demonstrate understanding of current and past theories and research in second language acquisition and bilingualism as applied to ELLs from diverse backgrounds and at varying English proficiency levels.

2.2.b. Recognize the importance of ELLs' home languages and language varieties, and build on these skills as a foundation for learning English.

2.2.c. Understand and apply knowledge of sociocultural, sociopolitical, and psychological variables to facilitate ELLs' learning of English.

2.2.d. Understand and apply knowledge of the role of individual learner variables in the process of learning English as a second language.

Standard 3: Second Language Literacy Development Teachers will demonstrate an understanding of the components of literacy, and will understand and apply theories of second language literacy development to support ELLs' learning.

Performance Indicators

2.3.a. Understand and apply current theories of second language reading and writing development for ELLs from diverse backgrounds and at varying English proficiency levels.

2.3.b. Demonstrate understanding of similarities and differences between L1 (home language) and L2 (second language) literacy development.

2.3.c. Demonstrate understanding of how L1 literacy influences L2 literacy development and apply this to support ELLs' learning.

2.3.d. Understand and apply knowledge of sociocultural, sociopolitical, and psychological variables to facilitate ELLs' L2 literacy development in English.

2.3.e. Understand and apply knowledge of how principles of phonology, morphology, syntax, semantics, and discourse affect L2 reading and writing development.

Domain 3: Methods of Teaching English to Speakers of Other Languages (ESOL)

Standard 1: ESL/ESOL Research and History Teachers will demonstrate knowledge of history, public policy, research and current practices in the field of ESL/ESOL teaching and apply this knowledge to improve teaching and learning for ELLs.

Performance Indicators

3.1.a. Demonstrate knowledge of L2 teaching methods in their historical context.

3.1.b. Demonstrate awareness of current research relevant to best practices in second language and literacy instruction.

3.1.c. Demonstrate knowledge of the evolution of laws and policy in the ESL profession, including program models for ELL instruction.

Standard 2: Standards-Based ESL and Content Instruction Teachers will know, manage, and implement a variety of teaching strategies and techniques for developing and integrating ELLs' English listening, speaking, reading, and writing skills. The teacher will support ELLs' access to the core curriculum by teaching language through academic content.

Performance Indicators

- 3.2. a. Organize learning around standards-based content and language learning objectives for students from diverse backgrounds and at varying English proficiency levels.
- 3.2.b. Develop ELLs' L2 listening skills for a variety of academic and social purposes.
- 3.2.c. Develop ELLs' L2 speaking skills for a variety of academic and social purposes.
- 3.2.d. Provide standards-based instruction that builds upon ELLs' oral English to support learning to read and write in English.
- 3.2.e. Provide standards-based reading instruction appropriate for ELLs from diverse backgrounds and at varying English proficiency levels.
- 3.2.f. Provide standards-based writing instruction appropriate for ELLs from diverse backgrounds and at varying English proficiency levels.
- 3.2. g. Develop ELLs' writing through a range of activities, from sentence formation to expository writing.
- 3.2. h. Collaborate with stakeholders to advocate for ELLs' equitable access to academic instruction (through traditional resources and instructional technology).
- 3.2.i. Use appropriate listening, speaking, reading, and writing activities in teaching ELLs from diverse backgrounds and at varying English proficiency levels.
- 3.2.j. Incorporate activities, tasks, and assignments that develop authentic uses of the second language and literacy to assist ELLs in learning academic vocabulary and content-area material.
- 3.2. k. Provide instruction that integrates listening, speaking, reading, and writing for ELLs of diverse backgrounds and varying English proficiency levels.

Standard 3: Effective Use of Resources and Technologies

Teachers will be familiar with and be able to select, adapt and use a wide range of standards-based materials, resources, and technologies.

Performance Indicators

- 3.3.a. Use culturally responsive/sensitive, age-appropriate and linguistically accessible materials for ELLs of diverse backgrounds and varying English proficiency levels.
- 3.3.b. Use a variety of materials and other resources, including L1 resources, for ELLs to develop language and content-area skills.
- 3.3.c. Use technological resources (e.g., Web, software, computers, and related media) to enhance language and content-area instruction for ELLs of diverse backgrounds and varying English proficiency levels.

Domain 4: ESOL Curriculum and Materials Development

Standard 1: Planning for Standards-Based Instruction of ELLs Teachers will know, understand, and apply concepts, research, best practices, and evidenced-based strategies to plan classroom instruction in a supportive learning environment for ELLs. The teacher will plan for multilevel classrooms with learners from diverse backgrounds using a standards-based ESOL curriculum.

Performance Indicators

- 4.1.a. Plan for integrated standards-based ESOL and language sensitive content instruction.
- 4.1.b. Create supportive, accepting, student-centered classroom environments.
- 4.1.c. Plan differentiated learning experiences based on assessment of students' English and L1 proficiency and integrating ELLs' cultural background knowledge, learning styles, and prior formal educational experiences.
- 4.1.d. Plan learning tasks for particular needs of students with limited formal schooling (LFS).
- 4.1.e. Plan for instruction that embeds assessment, includes scaffolding, and provides re-teaching when necessary for individuals and small groups to successfully meet English language and literacy learning objectives.

Standard 2: Instructional Resources and Technology Teachers will know, select, and adapt a wide range of standards-based materials, resources, and technologies.

Performance Indicators

- 4.2.a. Select and adapt culturally responsive/sensitive, age-appropriate, and linguistically accessible materials.
- 4.2.b. Select and adapt a variety of materials and other resources including L1 resources, appropriate to ELLs' developing English language and literacy.
- 4.2.c. Select technological resources (e.g., Web, software, computers, and related media) to enhance instruction for ELLs of diverse backgrounds and at varying English proficiency levels.

Domain 5: Assessment (ESOL Testing and Evaluation)

Standard 1: Assessment Issues for ELLs Teachers will understand and apply knowledge of assessment issues as they affect the learning of ELLs from diverse backgrounds and at varying English proficiency levels. Examples include cultural and linguistic bias; testing in two languages; sociopolitical and psychological factors; special education testing and assessing giftedness; the importance of standards; the difference between formative and summative assessment; and the difference between language proficiency and other types of assessment (e.g., standardized achievement tests). Teachers will also understand issues around accountability. This includes the implications of standardized assessment as opposed to performance-based assessments, and issues of accommodations in formal testing situations.

Performance Indicators

- 5.1.a. Demonstrate an understanding of the purposes of assessment as they relate to ELLs of diverse backgrounds and at varying English proficiency levels.

- 5.1.b. Identify a variety of assessment procedures appropriate for ELLs of diverse backgrounds and at varying English proficiency levels.
- 5.1.c. Demonstrate an understanding of appropriate and valid language and literacy assessments for ELLs of diverse backgrounds and at varying English proficiency levels.
- 5.1.d. Demonstrate understanding of the advantages and limitations of assessments, including the array of accommodations allowed for ELLs of diverse backgrounds and at varying English proficiency levels.
- 5.1.e. Distinguish among ELLs' language differences, giftedness, and special education needs.

Standard 2: Language Proficiency Assessment Teachers will appropriately use and interpret a variety of language proficiency assessment instruments to meet district, state, and federal guidelines, and to inform their instruction. Teachers will understand their uses for identification, placement, and demonstration of language growth of ELLs from diverse backgrounds and at varying English proficiency levels. Teachers will articulate the appropriateness of ELL assessments to stakeholders.

Performance Indicators

- 5.2.a. Understand and implement district, state, and federal requirements for identification, reclassification, and exit of ELLs from language support programs, including requirements of the LULAC Consent Decree.
- 5.2.b. Identify and use a variety of assessment procedures for ELLs of diverse backgrounds and varying English proficiency levels.
- 5.2.c. Use multiple sources of information to assess ELLs' language and literacy skills and communicative competence.

Standard 3: Classroom-Based Assessment for ELLs

Teachers will identify, develop, and use a variety of standards- and performance-based, formative and summative assessment tools and techniques to inform instruction and assess student learning. Teachers will understand their uses for identification, placement, and demonstration of language growth of ELLs from diverse backgrounds and at varying English proficiency levels. Teachers will articulate the appropriateness of ELL assessments to stakeholders.

Performance Indicators

- 5.3.a. Use performance-based assessment tools and tasks that measure ELLs' progress in English language and literacy development.
- 5.3.b. Understand and use criterion-referenced assessments appropriately with ELLs from diverse backgrounds and at varying English proficiency levels.
- 5.3.c. Use various tools and techniques to assess content-area learning (e.g., math, science, social studies) for ELLs at varying levels of English language and literacy development.
- 5.3.d. Prepare ELLs to use self- and peer-assessment techniques, when appropriate.
- 5.3.e. Assist ELLs in developing necessary test-taking skills.
- 5.3.f. Assess ELLs' language and literacy development in classroom settings using a variety of authentic assessments, e.g., portfolios, checklists, and rubrics.

Appendix B. IRB Permission Letter



Institutional Review Board

Mailing Address:
Division of Research
777 Glades Rd., Bldg. 80, Rm. 106
Boca Raton, FL 33431

Tel: 561.297.0777 Fax: 561.297.2573

<http://www.fau.edu/research/research.html>

Michael Whitehurst, Ed.D., Chair

DATE: August 4, 2014

TO: Hanizah Zainuddin, PhD, Cheryl Shamon
FROM: Florida Atlantic University Social, Behavioral and Educational Research IRB

IRBNET ID #: 620831-2
PROTOCOL TITLE: [620831-2] Responding to the Florida Teacher Standards for the English as a Second Language Endorsement: A Study of Pre-Service Teachers' Perceptions

PROJECT TYPE: *New Project*
ACTION: APPROVED

APPROVAL DATE: August 4, 2014
EXPIRATION DATE: August 3, 2015

REVIEW TYPE: Expedited Review
REVIEW CATEGORY: Expedited review category # B7

Thank you for your submission of Response/Follow-Up materials for this research study. The Florida Atlantic University Social, Behavioral and Educational Research IRB has APPROVED your *New Project*. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

- This study is approved for a maximum of **180** subjects.
- It is important that you use the approved, stamped consent documents or procedures included with this letter.
- **Please note that any revision to previously approved materials or procedures, including modifications to numbers of subjects, must be approved by the IRB before it is initiated.** Please use the amendment form to request IRB approval of a proposed revision.
- All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All regulatory and sponsor reporting requirements should also be followed, if applicable.
- Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.
- Please note that all research records must be retained for a minimum of three years.
- **This approval is valid for one year.** A Continuing Review form will be required prior to the expiration date if this project will continue beyond one year.

If you have any questions or comments about this correspondence, please contact Angela Clear at

Institutional Review Board
Research Integrity/Division of Research
Florida Atlantic University
Bldg. 80, Rm. 106
Boca Raton, FL 33431
Phone: 561-297-0777

* Please include your protocol number and title in all correspondence with this office.

**This letter has been electronically signed in accordance with all applicable regulations,
and a copy is retained within our records.**

Appendix C. Smith Permission Letter

Dear Dr. Smith,

I am a PhD student at FAU under the direction of Hanizah Zainuddin. The topic of my proposed dissertation is: Responding to the Florida Teacher Standards for the English as a Second Language Endorsement: A Study of Preservice Teachers' Perceptions

I recently read your article in the Tapestry Journal and found the results of your study to be very informing. I am also very interested in ESOL pedagogy and practice and in finding ways to better train our future teachers to enter into this important profession. As you suggested in your work, as professionals we should always be looking to improve our teaching, curriculum, and practice.

While our research focuses are similar, I will be focusing less on attitudes and more on the knowledge base and types of assessment activities and assignments found in the ESOL training program. I will also be conducting interviews.

I plan to modify and adapt your ESOL Awareness survey. I find it to be very suitable and I am impressed by your work. You will receive full recognition and if you would like, I am more than happy to send you the end result. I look forward to reading your future research and hope that our professional paths may cross in the future.

Kindest regards,
Cheryl Shamon

Hi Cheryl,

I am happy to hear of your interest in my study and my survey instrument. Please feel free to use it, and I would be honored to be cited in your study, and hear about your results.

Looking forward to hearing from you in the future.

All the best,

Phil

Phil Smith, Ph.D.
Foreign Language / ESOL Education Coordinator
Secondary Education
University of South Florida

Appendix D. Assessment Activities and Assignments (IPEP)

Adapted from: The Florida Atlantic University Institutional Program Evaluation Plan,
2010 ESOL Matrix for Elementary Education

Domain 1: Culture

<i>Description of Activity/Task</i>	<i>Description of Assessment/Instrument</i>
Interview-Recent Immigrant re: culture, language, immigration, and education. Classroom Teacher re: multicultural practices	Interviews - (class discussion or written summary)
Incorporate cultural and language factors (building background, parent involvement, & multicultural content)	Lesson Plan Modification
Create a lesson plan- knowledge of socio-political and psychological variables to differentiate reading instruction for all students. Include a reflection about formative assessment related to the lesson plan	Create Original Lesson Plan & Written Reflection
View video about an ELL- comments regarding family, school experiences, effective strategies, & parental involvement	Video - (class discussion or written summary)

Domain 2: Language and Literacy

<i>Description of Activity/Task</i>	<i>Description of Assessment/Instrument</i>
Students must learn a new language, list words & phrases learned, identify topics related to phonology, morphology, syntax, semantics, & pragmatics. Compare their language to English & how these topics could be taught to ELLs	Language Learning Project - Portfolio
Students apply L1 & L2 language acquisition theories to observe teachers & ELLs related to language development & content area teaching, oral language & literary assessments	Field Experience Project – Portfolio
Students modify a lesson plan with effective strategies & assessments to support ELLS' English language acquisition; must include oral communication, reading, & writing	Lesson Plan Modification - Rubric

Develop & teach a LEA lesson. The lesson must demonstrate understanding of the students' development of phonology, syntax, semantics, & pragmatics related to comprehending written language	Language Experience Approach Lesson Plan – Rubric
Essays, graphic organizers, presentations, or class discussions that demonstrate understanding of L 1 & L2 theories & research	Language Learning Project – Portfolio
Apply L1 & L2 acquisition theories to observe teachers & ELLS related to language development & content area teaching, conduct oral language & literacy assessments	Field Experience Project – Portfolio
Develop a lesson plan that demonstrates understanding & ability to apply current theories of L2 acquisition to differentiate instruction for ELLs of various levels & backgrounds	Create Original Lesson Plan – Rubric
Written sections on observations and strategies related to reading & writing strategies & lesson plan modifications	Field Experience Report – Portfolio
Complete a diagnostic reading report. Identify the factors impeding reading development in each of the components or the integration of these components	Intervention Plan & Diagnostic Reading Report – Rubric

Domain 3: Methods of Teaching ESOL

<i>Description of Activity/Task</i>	<i>Description of Assessment/Instrument</i>
Gather data about school demographics, programs, & performance; written report analyses the process & interpretations of findings	School Research Project - Written Report – Portfolio
Evaluate lesson plans compared to research & practices; make recommended modifications to improve ELL learning	Lesson Plan Analysis – Portfolio
Gather data about school demographics, programs, & performance; written report on findings	School Research Written Report (Field Experience School Evaluation) – Portfolio
Observation, modify lesson plans, conduct assessments of ELLs written & writing skills	Field Experience Report – Portfolio
Knowledge of policy, research, current practices in ESOL	Exam
Modify & integrate lessons to reflect policy research, current practices in ESOL	Lesson Plans – Rubrics
Analyze activities in ELL lesson plan or thematic unit, identify suitability for ELLS for listening, speaking, reading, or writing	Written Assignment

State objectives, activities, materials, resources, technology, & assessments. Lessons must include language development strategies	Modify/ Develop a Content Lesson Plan
Written observations of activities with ELLs; focus on language development strategies & effective strategies for teaching content & the core curriculum	Field Experience Report – Portfolio
Write or modify a lesson plan using standards-based objectives, effective strategies, activities, & alternative assessments for ELLs	Modify a Lesson Plan- Portfolio
In content courses- develop lesson plans & include appropriate adaptations for ELLs to learn & demonstrate appropriate content understanding	Lesson Plan – Rubric
Analyze ELL lesson plan or thematic unit & develop/modify a lesson plan with objectives, activities, materials, resources, technology, & assessments	Written Assignment
Observe in classroom; what materials, resources, technology are being used	Field Experience Report- Written Analysis – Portfolio

Domain 4: ESOL Curriculum and Materials Development

Analyze activities in ELL lesson plan or thematic unit, identify suitability for ELLs for listening, speaking, reading, or writing	Written Assignment – Portfolio
State objectives, activities, materials, resources, technology, & assessments. Lessons must include language development strategies	Modify/ Develop a Content Lesson Plan
Written observations of activities with ELLs; focus on language development strategies & effective strategies for teaching content & the core curriculum	Field Experience Report – Portfolio
Write or modify a lesson plan using standards-based objectives, effective strategies, activities, & alternative assessments for ELLs	Modify a Lesson Plan- Portfolio
In content courses- develop lesson plans & include appropriate adaptations for ELLs to learn & demonstrate content understanding	Lesson Plan – Rubric
Analyze ELL lesson plan or thematic unit & develop/modify a lesson plan with objectives, activities, materials, resources, technology, & assessments	Written Assignment – Rubric
Observe in classroom; what materials, resources, technology are being used	Field Experience Report – Written Analysis – Portfolio

Adapt a lesson plan or thematic unit & develop/modify a lesson plan with objectives, activities, materials, resources, technology, & assessments	Field Experience Report – Adapt Lesson Plan Portfolio
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Domain 5: Assessment

Gather data about school demographics, programs, & performance; written report analyses the process & interpretations of findings; standardized assessments impact on students & schools	School Research Project – Portfolio
Students discuss in class and/or complete written case study assignment tracking ELL from entrance to exit, testing accommodations, standards, & policy	Written Case Study - Portfolio
Gather data about school demographics, programs, & performance; standardized assessments & impact on students and schools	School research project - Written Report – Portfolio
Compare data gathered in school research report to classroom & schoolwide observations related to multicultural & linguistic bias, issues of accountability & demographics, teacher perspectives, & related assessment issues	Field Experience Project – Portfolio
Observe instruction & assessment of ELLs in classroom; students conduct oral & written literacy assessments & compare PLL assessment policies to on site observations	Field Experience Project – Portfolio
Candidates will design appropriate assessments that capture & align formative & summative assessments that match learning objectives & lead to mastery for all students, including ELLs	Assessment Rubric
Complete school focused research & data project including assessment data for students & school; observe classroom instruction & assessment for language development & content; apply assessment knowledge to develop modify assessments for ELLs	Field Experience Project – Portfolio
Candidates will use an author study & subsequent mini lessons to facilitate the comprehension of text & higher order thinking skills for ELLS	Mini Lessons - Rubric

Appendix E. ESOL Awareness Survey

PART B: *ESOL Content Knowledge* - in this set of questions, please reflect on your **knowledge** about the following ESOL content (not your skill):

Please check the box that applies.

Rating Scale	I know hardly anything about...	I know a little about...	I know generally about...	I know a lot about...
1. Cultural awareness.				
2. Responding appropriately to culturally diverse learners.				
3. Building home/school/community partnerships with ELLs				
4. The components of English grammar.				
5. The similarities and differences between English and other languages.				
6. Second language acquisition.				
7. Meeting the educational needs of preproduction (level 1) ESOL students.				
8. Meeting the educational needs of early production (level 2) ESOL students.				
9. Meeting the educational needs of speech emergence (level 3) ESOL students.				
10. Meeting the educational needs of intermediate fluency (level 4) ESOL students.				
11. Using a variety of methods to teach content area curriculum (i.e. math, science)				
12. Complying with the state policies and practices for teaching ESOL students.				
13. Methods of teaching ESOL students.				
14. Setting language objectives in the content areas (i.e. reading)				

15. Adapting content instruction/materials for ESOL students.				
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Part B: continued

Rating Scale	I know hardly anything about...	I know a little about...	I know generally about...	I know a lot about...
16. Using technological resources (computers, Web) to enhance language and content area instruction for ELLs.				
17. Assessing what ESOL students can do in the content areas, taking language demands into consideration.				
18. Alternative assessment for ESOL students.				
19. Distinguishing between L2 learning difficulties & learning disabilities in assessment.				

Part C: Assessment activities/assignments

The following assessment activities/assignments were completed at some point during your teacher education training. Please rate the following assessment activities/assignments based on how *you feel they helped you to understand English as a Second Language education*. (If you don't remember the assignment, please indicate that you need more details about the assignment).

Assessment Instrument	Description of Activity/ Assignment	This activity/assignment was not helpful	This activity/assignment was somewhat helpful	This activity/assignment was extremely helpful
20. Conduct Interviews	a. Interview a recent Immigrant			

	b. Interview a classroom teacher			
21. Lesson Plans	a. Create original lesson plans in content areas for ELLs			
	b. Create & teach an original Language Experience Approach lesson for ELLs			
	c. Analyze ESOL lesson plans or thematic units for appropriate content & make recommendations			
	d. Modify an existing mainstream lesson plan for ELLs			
22. Video (s) related to topics about ELLs	a. Discuss or write a reflection about video-ELLs experiences in school, parental involvement, & effective strategies			

Assessment Instrument	Description of Activity/ Assignment	This activity/assignment was not helpful	This activity/assignment was somewhat helpful	This activity/assignment was extremely helpful
23. Language Learning Project	Learn a new language, topics related to grammar, create activities to teach English to ELLs			
24. Field Experience Project (w/ELLs)	Observe: ELLs & teachers in classroom, strategies, conduct assessments			
25. Written Case Study	Track an ELL from program entrance to exit, discuss testing accommodations, & policies			
26. Written Reflections	Topics related to the education of ELLs			
27. Mini Lessons & Author Study	Create lessons that facilitate comprehension & higher order thinking skills			
28. Intervention Plan & Diagnostic Reading Report	Complete a diagnostic reading report for ELLs & identify factors impeding reading dev.			
29. School	Written report			

Research Project	on school demographics, programs, & performance			
30. Assessment Design for ELLs	Design an assessment that aligns formative & summative assessments to learning obj.			

Appendix F. Recruitment Letter to Participants for Pilot Survey

August 13, 2014

Dear Former TSL4081 Student,

I am a doctoral student working under the supervision of Dr. Zainuddin and hope that you can help with my research by taking an online survey. The intent of my research is to better understand the ESOL knowledge base and assessment assignments and activities that preservice teachers perceive as influencing their understanding of the ESOL domains.

This pilot survey consists of a 30 multiple choice questions which should take approximately 10-20 minutes to answer. This is a pilot survey. A pilot survey is conducted prior to giving the actual survey. One of its purposes is to make sure that the survey is understood by the people taking it. It is important for me to make sure that I have written a survey that is clear and understandable. If you do not understand the wording, if a question is not clear, or you need more explanation, please make a note of it in the “comment/suggestion” box found on the survey.

You do not have to participate in this pilot survey and it is not related in any way to your course work, grades, or program of study. If you return a completed survey you may choose to receive a \$5.00 e-gift card to a local coffee merchant. You will also be asked if you want to be considered to be interviewed at a later date as a follow-up to the survey questions.

This study has been approved by the Institutional Review Board at Florida Atlantic University. Please be assured that the upmost confidentiality will be maintained. The data obtained from the survey will be submitted to Survey Monkey using a secure, encrypted website. All responses and information from the interviews will be de-identified and a numerical system of identification will be created so that data will remain confidential and unidentifiable.

Click on the link below to learn more about your rights as a participant, to sign the consent form, and to take the pilot survey. Thank you in advance for your support, comments, and suggestions. Have a great fall semester.

Sincerely,

Cheryl Shamon cshamon@fau.edu

Please cut and paste link below into your browser to access the consent form and survey.
<https://www.surveymonkey.com/s/CX6S8LJ>

Appendix G. Pilot Survey Interview Questions

1. Which types of assessment activities or tasks that you completed in your coursework best represents your knowledge about how culture (Domain 1) affects second language learning? In what way(s) has this prepared you to teach English Language Learners in the future?
2. Which types of assessment activities or tasks that you completed in your coursework best represents your knowledge about how language works and how ELLs or bilingual students acquire a second language (Domain 2)? In what way(s) has this prepared you to teach English Language Learners in the future?
3. Which types of assessment activities or tasks that you completed in your coursework best represents your knowledge on how to use a variety of teaching strategies and methods specifically designed for ELLs (Domain 3)? In what way(s) has this prepared you to teach English Language Learners in the future?
4. Which types of assessment activities or tasks that you completed in your coursework best represents your knowledge of how to create curriculum and materials specifically designed for ELLs (Domain 4)? In what way(s) has this prepared you to teach English Language Learners in the future?
5. Which types of assessment activities or tasks that you completed in your coursework best represents your knowledge of how to test and evaluate ELL's (Domain 5) learning? In what way(s) has/have this prepared you to teach English Language Learners in the future?
6. How did the lesson plan assignments required in all of your coursework solidify your knowledge about the 5 ESOL domains? How do you see yourself using what you learned about lesson planning for ELLs when you are in the classroom?
7. In the future, how do you think your ESOL education will benefit your overall teaching?
8. React to this statement: "All students benefit from having ESOL students in their classrooms."
9. What other kinds of experiences or knowledge outside of your ESOL training do you think might have influenced your knowledge of the ESOL content that you learned in your teacher training program?

10. Please reflect on these questions. Were any of them unclear or difficult to understand? Do you have any additional comments regarding the interview questions?

Appendix H. Letter to Faculty for Participant Recruitment for Survey

Dear TSL4081 Instructors,

I am writing you regarding a research that I will be conducting. I am a doctoral student working under the supervision of Dr. Zainuddin. In order to conduct this research, I need the participation of students who are currently enrolled in the TSL4081 classes. I would appreciate you would forward the attached letter (“Recruitment Letter to Participants”) to your students. Your students’ participation in this study is completely voluntary.

The intent of this study is to better understand the ESOL knowledge base and assessment assignments and activities that preservice teachers perceive as influencing their understanding of the ESOL domains. This study will also examine other factors that may also influence preservice teachers’ understanding of the ESOL domains. By gaining a better understanding of how preservice teachers perceive their knowledge and understanding of the ESOL domains, the curriculum and program models can be examined and enhanced based on the results of this study. In addition, the results may help to open dialogue between stakeholders at institutions responsible for training preservice teachers to work with English Language Learners (ELLs).

This research study consists of a short 30 question electronic survey, which should take approximately 10-20 minutes. Students may also volunteer to be interviewed. Those students who return a completed survey may choose to receive a \$5.00 e-gift card to a local coffee merchant. The online survey will contain further information on how participants can volunteer to be interviewed.

Please forward the attached letter to your students. Be assured that their responses will be kept confidential and the study will be conducted with IRB approval. The data obtained from the survey will be submitted to Survey Monkey using a secure, encrypted website. All responses and information from the interviews will be de-identified and a numerical system of identification will be created so that data will remain confidential and unidentifiable.

Thank you very much for your time and consideration.

Sincerely

Cheryl Shamon cshamon@fau.edu

Appendix I. Recruitment Letter to Participants for Survey

August 13, 2014

Dear Former TSL4081 Student,

I am a doctoral student working under the supervision of Dr. Zainuddin and hope that you can help with my research by taking an online survey. The intent of my research is to better understand the ESOL knowledge base and assessment assignments and activities that preservice teachers perceive as influencing their understanding of the ESOL domains.

This pilot survey consists of a 30 multiple choice questions which should take approximately 10-20 minutes to answer. This is a pilot survey. A pilot survey is conducted prior to giving the actual survey. One of its purposes is to make sure that the survey is understood by the people taking it. It is important for me to make sure that I have written a survey that is clear and understandable. If you do not understand the wording, if a question is not clear, or you need more explanation, please make a note of it in the “comment/suggestion” box found on the survey.

You do not have to participate in this pilot survey and it is not related in any way to your course work, grades, or program of study. If you return a completed survey you may choose to receive a \$5.00 e-gift card to a local coffee merchant. You will also be asked if you want to be considered to be interviewed at a later date as a follow-up to the survey questions.

This study has been approved by the Institutional Review Board at Florida Atlantic University. Please be assured that the upmost confidentiality will be maintained. The data obtained from the survey will be submitted to Survey Monkey using a secure, encrypted website. All responses and information from the interviews will be de-identified and a numerical system of identification will be created so that data will remain confidential and unidentifiable.

Click on the link below to learn more about your rights as a participant, to sign the consent form, and to take the pilot survey. Thank you in advance for your support, comments, and suggestions. Have a great fall semester.

Sincerely,

Cheryl Shamon

Appendix J. Informed Consent for Survey

INFORMED CONSENT FORM FOR PRESERVICE TEACHER SURVEY

1) Title of Research Study: Responding to the Florida Teacher Standards for the English as a Second Language Endorsement: A Study of Preservice Teachers' Perception

2) Investigators: Dr. Hanizah Zainuddin and Cheryl Shamon

3) Purpose: You are being asked to participate in a research study about your knowledge English as a Second Language (ESOL) education and those activities and assignments that provided you with the best method of understanding the ESOL domains. The purpose of this study is threefold. First, to examine preservice teachers' perceptions of their knowledge of the ESOL domains as suggested in the Florida Teacher Standards for English as a Second Language Endorsement (FTSEE). Second, to determine those assessment activities and assignments believed by preservice teachers that provided them with the best understanding of the ESOL domains. Last, to examine any other factors perceived by preservice teachers as influencing their understanding of the ESOL domains.

4) Procedures: As a participant of this study, you will be asked to complete an online 30 item survey by clicking on the survey link sent via e-mail. The survey will contain questions regarding ESOL knowledge and the assessment activities and assignments that provided you with the best method of understanding the ESOL material that was taught to you in your teaching classes. The survey will take no more than 10-20 minutes to complete. You will be asked to answer questions about your major of study and ability to speak a language(s) other than English. You may choose to skip or not answer particular questions if you desire. However, we would like you to answer all the questions to get a complete picture of your perceptions. You will be asked if you would like to voluntarily participate in a follow-up interview at a location of your choosing. The interview will gather more details about your survey responses.

5) Risks: Your participation in this study does not involve any risks other than what you would encounter in daily life.

6) Benefits: The possible benefits to you from this study include an awareness of your understanding of best practices in ESOL and how these practices can be incorporated into your future as a classroom teacher. It is hoped that your participation will help researchers learn more about ESOL education for preservice teachers. The potential benefits to the field of ESOL education include the following: 1. an increased understanding of the types of knowledge and levels of understanding that preservice teachers have in the field of ESOL education 2. an increased understanding of the effectiveness of the assessment activities and assignments used to evaluate or teach pre-

service teachers in the area of ESOL education and 3. an increased understanding of other factors that may influence how preservice teachers understand the ESOL domains.

7) Data Collection & Storage: Your data will be submitted to Survey Monkey using a secure, encrypted website. Only the researchers working with the study will see your data. All data provided will be kept confidential, unless required by law. We will make every attempt to keep your data secure to the extent permitted by the technology. However, no guarantees can be made regarding the interception of data sent via the Internet by any third parties. Stored data will be deleted from the server and any computers used in this study 2 years after the study is completed. We may publish what we learn from this study. If we do, your responses will be reported only as a collective combined total. No one other than researchers will know your individual answers to this questionnaire and we will not disclose your identity. If you choose to participate in the interview, you will need to provide the researcher with your email. This means that the data set with your email will be temporarily retained by the researcher in order to contact you for the interview.

If you choose to receive a \$5.00 gift card for completing the survey, you will need to provide the researcher with your email. This means the dataset with your email will be temporarily retained by the researchers for gift card redemption purposes. Your email identifier will later be removed for data analysis purposes.

8) Contact Information: For questions or problems regarding your rights as research participant, you can contact the Florida Atlantic University Division of Research at (561) 297- 0777. For other questions about the study, call the researchers: (561) 297-6594.

9) Consent Statement: I have read the information describing this study. All my questions have been answered to my satisfaction. I am 18 years of age or older and freely consent to participate. I understand that I am free to withdraw from this study at any time without penalty. I have printed a copy of this consent form for my records. By clicking the link below, I am giving my consent to participate in this research study.

I consent I do not consent to participate in this research study

Appendix K. Interview Questions

Responding to the Florida Teacher Standards for the ESOL Endorsement: A Study of Preservice Teacher Perceptions

1. Across all of your coursework, which assignment or activity would you say best represents your knowledge of how culture (Domain 1) affects second language learning? Why?
 - i. What about this assignment/activity helped you to learn and demonstrate your knowledge?
 - ii. In what way has this knowledge prepared you to teach ELLs in the future?
 - a. How has your understanding of culture as a factor in ELL's learning contributed/not contributed to you responding appropriately to culturally diverse students? (Explain)
2. Across all of your coursework, which assignment or activity would you say best represents your knowledge of how language works and how ELLs acquire a second language (Domain 2)? Why?
 - i. What about this assignment/activity helped you to learn and demonstrate your knowledge?
 - ii. In what way has this knowledge prepared you to teach ELLs in the future?
 - a. How has your knowledge of the components of English grammar contributed/not contributed to your understanding of how to meet the academic language needs of ELLs?
3. Across all of your coursework, which assignment or activity would you say best represents your knowledge of how to use a variety of teaching strategies and methods specifically designed for ELLs (Domain 3)? Why?
 - i. What about this assignment/activity helped you to learn and demonstrate your knowledge?
 - ii. In what way has this knowledge prepared you to teach ELLs in the future?
 - a. Do you feel that the lesson plan assignments were helpful in preparing you to work with ELLs? If yes, how were they helpful in preparing you to work with ELLs? If no, why weren't they helpful?
4. Across all of your coursework, which assignment or activity would you say best represents your knowledge of how to create curriculum and materials specifically designed for ELLs (Domain 4)? Why?

- i. What about this assignment/activity helped you to learn and demonstrate your knowledge?
 - ii. In what way has this knowledge prepared you to teach ELLs in the future?
 - a. Do you feel your coursework has contributed to your understanding of how to use technology to enhance instruction with ELLs? If yes, how so? If no, why not?
5. Across all of your coursework, which assignment or activity would you say best represents your knowledge of how to test and evaluate ELLs (Domain 5)? Why?
- i. What about this assignment/activity helped you to learn and demonstrate your knowledge?
 - ii. In what way has this knowledge prepared you to teach ELLs in the future?
 - a. During your coursework you completed assignments related to the assessment of ELLs. In what way/s did this coursework prepare/not prepare you to distinguish between second language learning difficulties versus learning disabilities in assessment? Please explain.
6. During your coursework you completed written reports on school demographics, programs, and performance. In what ways did this assignment contribute/not contribute to your understanding of state policies and practices for teaching ELLs? Why?
7. During your ESOL coursework you had the opportunity to observe ELLs and teachers in the classroom.
- a. Do you feel observing ELLs and teachers in the classroom was helpful in preparing you to work with ELLs? If yes, how was it helpful? If no, why wasn't it helpful?
8. During your coursework, you completed assignments related to second language acquisition.
- a. In what way/s did the coursework prepare/not prepare you to meet the educational needs of ELLs who are:
 - a. Levels 1 and 2 English speakers (pre-production/early production)?
 - b. Levels 3 and 4 English speakers (speech emergent/intermediate fluency)? If yes, how so? If no, why not?
9. What other experiences outside of your ESOL training might have influenced your ESOL learning?
10. Overall do you believe that your ESOL Endorsement program has helped you to prepare to work with ELLs? How? Why not?

Thank you very much for your time. Do you have any questions you would like to ask me?

Appendix L. Interview Consent Form

1) Investigators: Dr. Hanizah Zainuddin and Cheryl Shamon

2) Purpose: You are being asked to participate in a research study about your knowledge English as a Second Language (ESOL) education and those activities and assignments that provided you with the best method of understanding the ESOL material. You will also be asked to reflect other factors that may have influenced your understanding of the ESOL domains. The purpose of this study is threefold. First, to examine preservice teachers' perceptions of their knowledge of the ESOL domains as suggested in the Florida Teacher Standards for English as a Second Language Endorsement (FTSEE). Second, to determine those assessment activities and assignments believed by preservice teachers that provided them with the best understanding of the ESOL domains. Last, to examine any other factors perceived by preservice teachers as influencing their understanding of the ESOL domains.

3) Procedures: As a participant of this study, you will be asked to respond to approximately 9-10 interview questions. The interview will contain questions regarding ESOL knowledge and the assessment activities and assignments that provided you with the best method of understanding the ESOL material that was taught to you in your teaching classes. It will also contain questions regarding other factors that you feel may have influenced your understanding of the ESOL domains. The interview will take between 45-60 minutes to complete and will be audio recorded. You may choose not to answer particular questions if you do not want to by skipping the question and you may withdraw from the study at any time without negative consequence. However, we would like you to answer all the questions to get a complete picture of your perceptions. Upon completion of the interview you will be given a \$20 gift card for your time and insights. You may keep the gift card even if you choose not to answer any, or only a portion of the interview questions.

4) Risks: Your participation in this study does not involve any risks other than what you would encounter in daily life. It is unlikely you will experience any harm or discomfort.

5) Benefits: The possible benefits to you from this study may include an increased awareness of your understanding of best practices in ESOL and how these practices can be incorporated into your future as a classroom teacher. It is hoped that your participation will help researchers learn more about ESOL education for preservice teachers. The

potential benefits to the field of ESOL education include the following: 1. an increased understanding of the types of knowledge and levels of understanding that preservice teachers have in the field of ESOL education 2. an increased understanding of the effectiveness of the assessment activities and assignments used to evaluate or teach preservice teachers in the area of ESOL education and 3. an increased understanding of any other factors that may influence how ESOL education is understood by preservice teachers

6) Data Collection & Storage: All data including paper transcripts, notes, and audio-recordings will be kept in a locked file cabinet in the researcher's house. Electronic data, including word files will be stored on a password protected computer, which belongs to the researcher. All responses and information will be de-identified and a numerical system of identification will be created so that data will remain confidential and unidentifiable. All data will be destroyed two years after it is collected. We may publish or share at conferences what we learn from this study. If we do, your responses will be reported only as a collective combined total. No one other than researchers will know your individual answers to this questionnaire and we will not disclose your name or identity.

7) Contact Information: For questions or problems regarding your rights as research participant, you can contact the Florida Atlantic University Division of Research at (561) 297- 0777. For other questions about the study, you should call the researchers, Dr. Hanizah Zainuddin (561) 297-6594, and Cheryl Shamon at (954) 258-0414.

8) Consent Statement: I have read the information describing this study. All my questions have been answered to my satisfaction. I am 18 years of age or older and freely consent to participate. I understand that I am free to withdraw from this study at any time without penalty. I have received a copy of this consent form for my records.

I agree _____ I do not agree _____ to be audio recorded.

Signature of Subject: _____ Date: _____

Printed name of Subject: First Name _____ Last _____

Signature of Investigator: _____ Date: _____

Appendix M. Interview Protocol

Title of Research Study: Responding to the Florida Teacher Standards for the English as a Second Language Endorsement: A Study of Preservice Teachers' Perceptions

Name of Interviewer: _____

Name of Interviewee _____

Place:

Date:

Starting Time: _____ Ending Time: _____

Interview Introduction

I really appreciate your agreeing to participate in this interview. As a participant of this study, you will be asked to respond to approximately 9-10 interview questions. The interview will contain questions regarding ESOL knowledge and the assessment activities and assignments that provided you with the best method of understanding the ESOL material. It will also contain questions regarding other factors that you feel may have influenced your understanding of the ESOL domains.

There are no right or wrong answers. The interview will take between 45-60 minutes to complete. I would also like your permission to audio record this interview, which I will later transcribe for the purposes of analysis. You may choose not to answer particular questions if you do not want to by skipping the question and you may withdraw from the study at any time without negative consequence. However, we would like you to answer all the questions to get a complete picture of your perceptions. Please know that a pseudonym will be used in place of your real name, and only the interviewer, me, will know your true identity. This protects your anonymity and the confidentiality of the data from this study. The information learned from this study may be published or shared at conferences.

Upon completion of the interview you will be given a \$20 gift card for your time and insights. You may keep the gift card even if you choose not to answer any, or only a portion of the interview questions. Before we begin, do you have any questions about this interview, or any other questions? Please take this time to read and sign this consent form. You will be provided with a copy. Thank you.

Appendix N. Inter-Rater Coding Meetings

Primary & Assistant Coder Meetings

Meeting 1

- a. Organizational/training meeting
- b. Discussed initial coding schemes/definitions
- c. Clarified discrepancies
- d. Revised coding schemes as necessary
- e. Reviewed the procedure of bracketed transcript coding

Follow up to meeting 1 - Assistant coder given updated coding scheme & bracketed transcript

Meeting 2

- a. Discussed & negotiated agreement for transcript one
- b. Results from first coding: Used formula suggested by Miles and Huberman (1984, as cited in Campbell et al., 2013) to determine the level of inter-coder reliability ($47/74 = .62$). Negotiated rate ($74/74 = 1.00$).
- c. Further revised coding schemes as necessary

Follow up to meeting 2 - Assistant coder given updated coding scheme & bracketed 5 pages of another transcript

Meeting 3

- a. Discussed & negotiated agreement for transcript two
- b. Results from second coding (5 pages only of another transcript): ($12/17 = .70$) negotiated rate ($17/17 = 1.00$)
- c. Discussed double codes
- d. Assistant coder given updated coding scheme & bracketed another transcript

Meeting 4

- a. Discussed & negotiated agreement for transcript three
- b. Results from third coding reliability rate ($21/24 = .87$) negotiated agreement rate ($24/24 = 1.00$)

Appendix O. Inter-Coder Reliability and Negotiated Agreement Chart, First Round

Item #	Code Name Agreement	Code Name Disagreement	Yes Reconciliation & Agreed Upon Code	No Reconciliation	Who Deferred?
1	LC				
2	PP				
3		PCI versus CO	Yes-CO		Primary Coder
4	CO				
5	ESM				
6	CV				
7		AI versus AA	Yes-AA		Primary Coder
8	CV				
9		CV versus CC	Yes-CV		Assistant Coder
10	LC				
11	CC				
12		ESM versus PPM	Yes-ESM		Assistant Coder
13		ESM versus PPM	Yes-ESM		Assistant Coder
14		ESM versus PPM	Yes-ESM		Assistant Coder
15		ESM versus PLL	Yes-ESM		Assistant Coder
16		ESM versus VDC	Yes-ESM		Assistant Coder
17		ESM versus TEL	Yes-TEL		Primary Coder
18	PPM				
19	ESM				
20	L2TO				
21		L1L2 versus SDLO	Yes-SDLO		Primary Coder
22		L1L2 versus SDLO	Yes-SDLO		Primary Coder
23	ESM				
24	ESM				
25	SML				
26	PCI				

Item #	Code Name Agreement	Code Name Disagreement	Yes Reconciliation & Agreed Upon Code	No Reconciliation	Who Deferred?
27	ESM				
28		CO versus ESM	Yes-ESM		Assistant Coder
29	LLO				
30	CO				
31	ESM				
32		ESM versus CO	Yes-ESM		Assistant Coder
33	CO				
34	CO				
35	AA				
36		ESM versus ILV	Yes-ILV		Primary Coder
37		ESM versus L12	Yes-L12		Primary Coder
38	PLL				
39	PI				
40	ESM				
41		ESM versus ALL	Yes-ALL		Primary Coder
42	CRI				
43	SCE				
44		CRI versus PCA	Yes-CRI		Assistant Coder
45		CRI versus CO	Yes-CRI		Assistant Coder
46		CRI versus CO	Yes-CRI		Assistant Coder
47	SCE				
48	TEL				
49	TEL				
50	AI				
51		PCA versus AI	Yes-AI		Primary Coder
52	ALL				
53	CBA				
54		VOC versus AI	Yes-AI		Primary Coder
55	ALL				
56	PLL				

Item #	Code Name Agreement	Code Name Disagreement	Yes Reconciliation & Agree Upon Code	No Reconciliation	Who Deferred?
57	LVL				
58	LVL				
59		LVL versus AA	Yes-LVL		Assistant Coder
60	PP				
61	PP				
62	PP				
63	ESM				
64		ESM versus PCI	Yes-PCI		Primary Coder
65		ESM versus PLL	Yes-PLL		Primary Coder
66	PLL				
67		PCI versus PLL	Yes-PLL		Assistant Coder
68	L12				
69		L12 versus LLO	Yes-L12		Assistant Coder
70	L12				
71	ESM				
72		L23 versus ALL	Yes-ALL		Assistant Coder
73	ESM				
74	ESM				
Code Abbreviation			Code Name		
AA			Assessment Accommodations		
AI			Assessment Issues		
ALL			Assessment Language Levels		
CBA			Classroom Based Assessments		
CC			Cultural Competence		
CO			Content Objective		
CRI			Cultural Resources for Instruction		
CV			Cultural Values		
ESM			ESOL Strategy/Method		
ILV			Individual Learner Variables		
L2TO			L2 Theories Oral		
L12			Levels 1 & 2		
L23			Levels 2 & 3		
L1L2			L1 Literacy Influences on L2		
LC			Language & Culture		
LLO			Language Learning Objectives		

LVL	Language vs. Learning Challenges
PCA	Performance Criterion Assessments
PCI	Plan Content Instruction
PLL	Plan Language Levels
PP	Policy & Program Models
SCE	Supportive Classroom Environment
SDLO	Similarities/Differences Languages Oral
SML	Select Materials Language Level
TEL	Technology - ELLs
VDC	Vocabulary Development Content Areas

Appendix P. Inter-Coder Reliability and Negotiated Agreement

Chart-Double Coding

Item #	Code Name Agreement	Code Name Disagreement	Yes Reconciliation & Agreed Upon Code	No Reconciliation	Who Deferred?
1	CKS				
2	CKS				
3	CKS				
4	RTL				
5	RTL				
6	RTL				
7	RTL				
8	RTL				
9	CKS				
10	CKS				
11	RTL				
12	RTL				
13	RTL				
14	CKS				
15	CKS				
16	CKS				
17	CKS				
18		RTLS vs. CKS	Yes CKS		Primary Coder
19		RTLS vs. CKS	Yes CKS		Primary Coder
20	RTL				
21	RTL				
21		RTLS vs. CKS	Yes-item should be divided into two segments		Mutually agreed upon decision
23	JW				
24	CKS				

Note. CKS = Contextual Knowledge & Skills; RTL = Real Teaching & Learning in Context; JW = Job/Work Related.

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