# EXPLORING CHANGE IN PRESERVICE TEACHERS’ BELIEFS ABOUT ENGLISH LANGUAGE LEARNING AND TEACHING 

A Dissertation<br>by<br>KYLAH CLARK-GOFF<br>Submitted to the Office of Graduate Studies of Texas A\&M University<br>in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY

May 2008

Major Subject: Curriculum and Instruction

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Approved by:
Co-Chairs of Committee, Zohreh Eslami Rasekh
Blanca Quiroz
Committee Members, Radhika Viruru
Sharolyn Pollard-Duradola
Dennie Smith

May 2008

Major Subject: Curriculum and Instruction

ABSTRACT<br>Exploring Change in Preservice Teachers’ Beliefs about English Language Learning and Teaching. (May 2008)<br>Kylah Clark-Goff, B.A., Baylor University;<br>M.Div., Southwestern Seminary<br>Co-Chairs of Advisory Committee: Dr. Zohreh Eslami Rasekh<br>Dr. Blanca Quiroz

Increasing numbers of English language learners (ELLs) and diminishing services for those students is resulting in mainstream teachers across the United States taking on the responsibility of teaching ELLs. This demands the preparation of all teachers to teach ELLs. Yet adequate preparation of these educators depends on insight into the beliefs that preservice teachers carry with them to the classroom. These beliefs are critical in their impact on teacher behavior and teacher expectations of ELLs. Remarkably, what preservice teachers believe about ELL issues is overlooked in research. The purpose of the present study was to look beyond these previously explored paths of ESL, bilingual, multicultural, and foreign language education to discover preservice Pre-K through $8^{\text {th }}$ grade mainstream teachers’ beliefs about language learning in order to better inform future teacher preparation programs.

The research questions used to accomplish the purpose of this study focused on what beliefs pre-service teachers at Texas A\&M University hold regarding second language learning and teaching before ESL coursework, how those beliefs change after

ESL coursework, and what variables influence these pre-service teachers' beliefs about English language learning and teaching?

A total of 354 individuals participated in the study. They were involved in ESL coursework during their participation in the study. The data were collected from August of 2006 to May of 2007.

This study had a mixed method design. The research instruments included a Likert-scale questionnaire and focus group interviews. The interviews were analyzed according to the constant-comparative method. The questionnaires were analyzed based descriptive statistics, paired sample $t$-tests, and hierarchical multiple regression.

Major findings of the study include that before ESL coursework, preservice teachers largely undervalued ELLs’ L1, yet they were aware of ELLs in mainstream environments and positive about ELLs themselves. Coursework was found to be effective in that after ESL coursework there was an obvious shift toward greater alignment in beliefs with principles of ESL education. Interviews underscored the role of field experience, teacher educators and ESL courses in impacting belief change.

## DEDICATION

My work is dedicated to my amazing husband Sam. Who would have dreamed this life and journey we are living? The spirit of encouragement that you possess has blessed me tremendously and helped me to keep going. Thank you for your sacrificial support of me in my studies even when you had plenty of your own school work to do. What a benefit to have walked through the Ph.D. process together. How many classes have we sat through together? How many nights have we put the kids to bed and sat down to work? How many weekends have we taken turns keeping the kids so the other could study? How many times have you run my errands on campus or helped me with my schoolwork? Thank you for all your help. Thank you for who you are. You bring out the best in me and for that I am so grateful. As Mo sings, "Oh the Lord is good to me." God has been so good in allowing me to partner with you. How rich I am to have you as my best friend and companion. I anticipate our future. I love you forever.

## ACKNOWLEDGEMENTS

I would like to thank my advisors, Dr. Zohreh Eslami, Dr. Blanca Quiroz, Dr. Radhika Viruru and Dr. Sharolyn Pollard-Duradola for their time and support. I would especially like to thank Dr. Eslami and Dr. Quiroz for their guidance throughout this dissertation process. Additionally, I would like to thank the ESL instructors at Texas A\&M who so graciously allowed me to conduct this study among their students.

I must also recognize the tremendous contribution of my parents Keith and Vicki Clark. Their personal sacrifice and prioritizing of family have made me the person that I am. Their consistent support, encouragement and understanding throughout the Ph.D. process have been unmatched. Mom, thanks for keeping the kids so that I could write. Dad, thanks for sharing mom, and for suggesting that I pursue this degree. And to my brother Cullen, thanks for listening, caring, and understanding. Appreciation is also due to Miss Chelsea and Miss Lindsey for their help with Mo.

I lovingly thank my two babies, Mo and Madeleine. Mo, thank you for being such a great sleeper so mommy could study and write. Thanks for helping me collect data. Good luck fitting your dissertation onto your Doodle Pro! Madeleine and Mo, thank you for making me want to be a better me so that you can be the best you.

Above all I thank my God, in whom I live and move and have my being. To God be the glory.

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## CHAPTER I

## INTRODUCTION

In the 2004-2005 school year, more than 4.8 million English language learners (ELLs) attended elementary and secondary public schools in the United States. These students comprised 9.9\% of the total public school population (NCELA, 2006). This is a 47.6\% increase from 1994-1995. Furthermore, 17.8\% of the households in the United States in 2000 regularly spoke a language other than English in the home (US Bureau of Census, 2003). These numbers represent students in classrooms throughout the U.S. and dispel any traditional assumptions of American monolingualism and monoculturalism.

Increasingly, English as a second language (ESL) teachers are not the only ones who have the responsibility to teach English language learners (ELLs). In fact, there is a great likelihood of mainstream teachers having ELLs in their classes (Jones, 2002). This stems from a variety of issues including limited state and federal funds that are inadequate for hiring sufficient numbers of ESL and bilingual certified teachers, governmental moves away from bilingual education programs, and increasing numbers of ELLs (Jones, 2002; Karabenick \& Noda, 2004).

The reality of ELLs in mainstream classrooms defies a variety of research demonstrating that non-native English speakers require between five and 10 years to gain a command of academic English that is comparable to native English speakers (Collier, 1989, 1992; Cummins, 1981a, 1982). Even students fortunate enough to receive ESL or

[^0]bilingual services may be tested out of them long before their English is proficient enough for academic purposes. ELLs are often dismissed from these ESL and bilingual programs though their interactional patterns and communication skills fall far behind their classmates who are native English speakers (Lee, 2004). There is a broad diversity that comprises the group we call ELLs, and they have been defined in various ways. The present study will hold to a broad definition of ELLs as "students whose first language is not English and who are in the process of learning English." (National Clearinghouse for English Language Instruction Acquisition and Educational Programs [NCELA], 2006)

Mainstream teachers, typically middle class, White, and female, are daily challenged with teaching increased numbers of linguistically and culturally diverse PK12 students who are ELLs (Jones, 2002; Gandara, Maxwell-Jolly, \& Driscoll, 2005; Osterling \& Fox, 2004; Schick Boothe, 1995; Suarez, 2003). Among PK-12 ${ }^{\text {th }}$ grade public school teachers in the United States, 83.7\% of them are White and 75\% are them are female (National Center for Education Statistics [NCES], 2006b). With this consistently homogenous teaching force and increasingly diverse student population as well as the heightened demands imposed through high-stakes testing, what mainstream teachers believe about English language learning and teaching is a powerful force in the education of diverse school children across the United States (Karabenick \& Noda, 2004; Lee, 2004; Osterling\& Fox, 2004; Terrill \& Mark, 2000).

A variety of studies have explored teachers’ beliefs about diversity (Brown, 2004; Karabenick \& Noda, 2004; McAllister, 2000; Osterling \& Fox, 2004; Pohan \& Aguilar, 2001; Schick \& Boothe, 1995). Significant attention has also been devoted to what preservice and inservice ESL and language teachers believe (Angelova, 2002;

Horwitz, 1985; MacDonald, Badger, \& White, 2001; Peacock, 2001; Savignon, 1976;
Yang, 2000). Yet the increased linguistic diversity in mainstream education classrooms has been largely ignored. This void demands further research regarding what these preservice teachers believe about English language learning and the relationship between these preservice teachers' experiences and beliefs.

By gaining an understanding of what mainstream pre-service teachers believe and what variables influence those beliefs, teacher education will be better informed as to its audience and the needs thereof. This present study will be valuable for informing the field of teacher education because it will allow teacher educators to be better prepared as they instruct education classes with insight into possible preservice teacher beliefs. Ultimately, further research such as this study can pave the way for better prepared preservice mainstream education teachers who will promote educational success for the increasing numbers of English language learners in United States.

## Background Information and Issues

## Theoretical Framework

Research dealing with teachers’ ways of thinking began in the late 1970s and early 1980s and became quite a common dimension of educational research in the 1990s. Because beliefs are so inherent to teacher behavior and student learning, beliefs have become a common framework of exploration in educational research. Even so, a widely accepted explanation of "beliefs" is still rather indefinite. Beliefs are typically defined in relation to knowledge and behavior and are recognized as value-laden (Borg, 2001).

Within this study the meaning of beliefs is based on the seminal work of Milton Rokeach who proposed that beliefs are "inferences made by an observer about underlying states of expectancy" (Rokeach, 1968, p. 2). In contrast to knowledge, which is based primarily on objective fact, belief is based primarily on evaluation and judgment. (Pajares, 1992; Vartuli, 2005) Beliefs determine expectations, influence choices, and serve an adaptive function that helps individuals "define and understand the world and themselves" (Abelson, 1979; Lewis, Parsad, Carey, Bartfai, Farris, \& Smerdon, 1990; White, 1999, p. 443). Beliefs possess such importance because nothing else is so strong an indicator of the decisions made by persons throughout their lives (Bandura, 1986; Dewey, 1933; Nisbett \& Ross, 1980; Pajares, 1992; Rokeach, 1968). Beliefs are powerful determiners of actions.

The influence of beliefs on actions impacts teacher behavior, thereby impacting student learning. For teachers, beliefs hold such influence because they are "the heart of teaching" (Vartuli, 2005, p. 82). Implicit and often subconscious beliefs manifest themselves in the expectations and assumptions teachers make about learning and learners. This was evidenced in Terrill and Mark's (2000) study of preservice teachers which found significant differences in expectations for learners from economically, racially, and linguistically different schools and backgrounds.

By exploring teachers' beliefs about English language learning, the present study seeks to make preservice mainstream teachers' beliefs explicit and intentional (Horwitz, 1985). McAllister (2000) explains that effectiveness in teachers of diverse students begins with their awareness of their own worldview. Once they understand this, then they have the foundation in place to begin to understand their students' worldviews.

Vartuli (2005) echoed this call for making students' belief systems explicit when she wrote, "Students and teachers have prior beliefs (mainly implicit) based on their experiences, knowledge, and values. These beliefs are often unconsciously held assumptions about children, classrooms, and content to be taught. To become explicit they must be the subject of reflection." (Vartuli, 2005, p. 82) It is urgent to address the underlying issues of teacher beliefs because thereby, the attitudes, perceptions, judgments, and ultimately, behaviors of teachers can be influenced (Pajares, 1992). Ultimately, these behaviors are critical to student learning (Spodek, 1988).

## Previous Research on Beliefs: Situating the Study in Context

Because so little research exists regarding preservice teachers’ beliefs about language learning, the range of literature explored for this study is also inclusive of research dealing with in-service teachers’ beliefs, pre-service and in-service foreign language and ESL teachers' beliefs, and beliefs related to diversity. Significant research has been conducted regarding preservice and inservice foreign language and ESL teachers' beliefs about language learning and teaching. The relevance of the research instruments used in these foundational studies requires some brief explanation.

The research for this study is based on the work of Horwitz (1985), Savignon (1976), and Lightbown and Spada (1999). Horwitz (1985) has historically studied the connection between students' attitudes and motivation in relation to their second language achievement. She describes how she helped the students in her foreign language methods class recognize their beliefs about language learning and teaching. She created the Beliefs About Language Learning Inventory (BALLI) and administered it
along with Savignon’s (1976) Foreign Language Attitude Survey (FLAS) to her students (Horwitz, 1985). Horwitz's purpose in the creation and administration of these instruments was to make students belief systems explicit so that they could become aware of their own beliefs. She recognized this to be the "first step in their development as foreign language teachers." (Horwitz, 1985, p. 333)

Savignon also sought to bring attention to the attitudes and motivations that language teachers bring with them to their classrooms. She felt this was the precursor to "determin[ing] what obstacles still lie in the way of creating the kinds of learning environments which would be most helpful for our students." (Savignon, 1976, p. 296) The FLAS is an instrument created by de Garcia, Reynolds, and Savignon as "a strategy for getting teachers to talk to each other about the values they hold." (Savignon, 1976, p. 301) Neither Horwitz nor Savignon actually tracked changes of students’ beliefs. Both used their instruments as awareness raising activities. Horwitz did note her perception that the administration of the instrument at the beginning of the course impacted her students' beliefs.

In light of the current demographic shift in the United States, the researcher began to consider how valuable it would be to explore the beliefs of mainstream teachers. Meskill and Chen (2002) found that in 1999, almost every teacher in U.S. schools could expect to have English language learners in his or her class. Mainstream classrooms around the country are increasingly filled with ELLs. Thus, mainstream teachers are rapidly becoming language teachers, themselves. Yet how many preservice teachers expect this reality, or have had the opportunity to explore their own belief systems in preparation for teaching English language learners?

## Teacher Preparation: Beliefs Do Change

There is an ongoing debate regarding the inflexibility of beliefs (Calderhead \& Robson, 1991; Kagan, 1992; Zeichner et al., 1987; Zuzovsky, 1995). Thus, Cabaroglu and Roberts (2000) set out to test the theory that beliefs are inflexible. Within their study, they question the inflexibility position based on three significant factors. First, they assert that findings of inflexibility could stem from ineffectual teacher preparation programs. The programs themselves are variables rather than constants in belief development. Second, data that compares results at the group level can hide significant changes in belief. Group mean scores, especially those derived from questionnaire rating scales, can hide individual changes. And last, how flexibility and inflexibility are defined can vary between studies. If the whole of a population must demonstrate a collective movement to demonstrate flexibility, then beliefs will likely be found inflexible. For the purpose of their research, and for this study as well, change is defined as "movement or development in beliefs." (Cabaroglu \& Roberts, 2000, p. 389) Cabaroglu and Roberts’ (2000) findings demonstrate flexibility and development in beliefs of the student teacher participants, thus strengthening arguments for teacher education as a valuable variable in the development of pre-service teachers' beliefs.

Heretofore, a generally overlooked dimension of the study of beliefs in educational research is in the arena of mainstream teachers' beliefs about English language learning. But of the existing literature on the topic, much emphasizes findings of change in beliefs. Meskill and Chen’s (2002) research population, for example, includes preservice and inservice teachers across disciplines. They found coursework and professional development activities to initiate a shift in beliefs regarding English
language learners. Also, Schick and Boothe (1995) conducted a study of the beliefs of teachers in either a graduate level ESL or culture class. They also found signs of positive change between the administration of their pre-test and post-test questionnaire at the beginning and end of the courses. Furthermore, Lee (2004) explores the patterns of bilingual Hispanic elementary teachers' changes in beliefs and practices while teaching science to English language learners. Lee found that intervention allowed for change in teachers' beliefs and practices. MacDonald, et al. (2001) also found changes in preservice ESL teachers' beliefs about English language learning during teacher education second language acquisition (SLA) courses as opposed to no significant changes for the control group who did not take an SLA course.

A wide variety of research gives credibility to the assumption of this study that beliefs do, in fact, change. The implication of this viewpoint is the value of and the need for research that can enhance teacher preparation.

## Instigators of Belief Change

Four primary factors have proven to impact teachers' beliefs. First, studies have demonstrated that beliefs can change as a result of experiences with persons from varied cultural backgrounds (Merryfield, 2000; Milner, 2005; Smith, Moallem, \& Sherrill, 1997). International and local travel has also proven to be a powerful determiner of beliefs (Milner, 2005; Smith, et al. 1997). Personal experience of discrimination is a third factor in belief change (Merryfield, 2000; Smith, et al., 1997). Finally, researchers have found that beliefs often change through educational experiences including teacher preparation classes (Cabaroglu \& Roberts, 2000; Smith, et al., 1997).

Research on preservice teacher beliefs is important because it is valuable for
informing teacher educators and shaping teacher preparation programs. Reevaluating the shape of teacher education throughout the United States is pertinent at this moment in history because of the dual force of shifting demographics coupled with increased pressures of high-stakes testing (Osterling \& Fox, 2004). Such issues have rendered traditional teacher preparation to be insufficient in the current context.

Continued ELL underperformance has been found to be the result of inadequate and haphazard teacher preparation (Garcia, 1994; Gersten \& Jimenez, 1998; Padron, Waxman, Powers, \& Brown, 2002; Varghese \& Stritikus, 2005). Currently, most preservice teachers graduate without any certification or significant training for working with ELLs (Menken \& Antunez, 2001; NCES, 2006a). Commins and Miramontes (2006) have called for a paradigm shift in teacher education that brings the leftover topics of linguistic and cultural diversity that usually find themselves tacked onto the end of their programs to the forefront as the foundational base of teacher preparation.

The disparity between the teaching force and the student population of current classrooms demands the preparation of all teachers to teach ELLs. Yet adequate preparation of these educators depends on insight into the beliefs that preservice teachers carry with them to the classroom. These beliefs are critical in their impact on teacher behavior and teacher expectations of ELLs. Remarkably, what preservice teachers believe about ELL issues is overlooked in research. Therefore there is an urgent need for the present study.

## Purpose of the Study

The purpose of the present study is to look beyond these previously explored paths of ESL, bilingual, multicultural, and foreign language education to discover preservice Pre-K through $8^{\text {th }}$ grade mainstream teachers' beliefs about language learning in order to better inform future teacher preparation programs. The research questions of this study include:

1. What beliefs do pre-service teachers at Texas A\&M University hold regarding second language learning and teaching before ESL coursework?
2. Do preservice teachers' pre-existing beliefs about second language learning and teaching change after ESL coursework?
3. What variables influence these pre-service teachers' beliefs about English language learning and teaching?

The present study will explore the variables that cultivate differences of beliefs among these future teachers. The Background Questionnaire will be employed in order to explore five main variables. Variables of interest include previous university coursework including ESL methods courses, international travel and living experiences, high school and college language learning experiences, relationships with bilingual or multilingual persons, and teaching experiences. The Follow-up Questionnaire largely focuses on demographic information. The study will explore how these variables relate to reported beliefs.

This study will also explore specific beliefs that these future teachers hold regarding second language learning. The three constructs of beliefs explored through the Second Language Learning Survey include what the subjects believe about ELLs,
language and language learning, and the locus of responsibility for teaching ELLs. This study will track the changes of these beliefs during a semester-long ESL course.

## Definitions of Terms

Change: "Movement or development in beliefs." (Cabaroglu \& Roberts, 2000, p.389) ELL: English Language Learners (ELLs) are typically defined as "students whose first language is not English and who are in the process of learning English." (NCELA) ESL: English as a second language (ESL) is an educational approach in which English language learners are instructed in the use of the English language. Their instruction is based on a special curriculum that typically involves little or no use of the native language, focuses on language (as opposed to content) and is usually taught during specific school periods. For the rest of the school day, students may be placed in mainstream classrooms, an immersion program, or a bilingual education program. Every bilingual education program has an ESL component (NCELA).

Mainstream Teacher: A teacher who is not an ESL, bilingual, or foreign language teacher. Mainstream teachers are often referred to as general, regular or content area teachers.

In-Service teacher: A teacher who is currently in the teaching force.

## LEP: Limited English Proficiency

Mainstream classes: "Classes designed for native or fluent speakers of English, in which no accommodations are made for ELLs." (NCELA)

Pre-service teacher: Undergraduate student in the field of Education
Second Language: This term is used in several ways and can refer to 1 ) the second
language learned chronologically, 2) a language other than the native language, 3) the weaker language, or 4) the less frequently used language. Second language may also be used to refer to third and further learned languages (NCELA). Second language is often referred to as L2.

Teacher preparation: This may also be referred to as teacher education or teacher training. In this paper, it typically refers to undergraduate courses in education.

## Participants

Participants comprising this study include 354 PreK-8 ${ }^{\text {th }}$ grade preservice teachers in a college of education at Texas A\&M University. This land grant university is situated in a community of approximately 130,000 in a rural area and has a student population of around 47,000 (Aggie Athletics).

During their participation in this study the participants were enrolled in Second Language Instruction and Assessment and/or Assessment of English Language Learners courses. Though the courses are typically taken in succession, some participants take the two courses simultaneously. All three BS degree plans in Interdisciplinary Studies require the Second Language Instruction course, while two of the three require the Assessment of ELLs course. This study includes all members of all sections of these two ESL courses who are in attendance on the first day of class as well as the follow up day during the end of the semester when data will be collected again. The vast majority of the participants is from an Anglo-American ethnic background and is female.

The course titled Second Language Instruction and Assessment is described in the student handbook as exploring "techniques and methods of intensive English instruction
for LEP students: lesson planning and instructional modification; use of instructional strategies and appropriate assessment practices." The course focuses on how to instruct ELLs in the mainstream classroom. Students learn ways to modify lessons to help the ELLs that they will teach. Some instructors pair their students with an ELL during the semester or partner the students with classes in local schools, and some do not. The prerequisite for taking the course is admission to teacher education program.

The course titled Assessment of English Language Learners is described in the student handbook as teaching "theoretical and practical aspects of ESL/EFL testing, including formal and informal assessment, procedure and instruments, assessments and referral, and processes of ESL with special needs and gifted ESL learners." The course builds on the Second Language Instruction course, focusing on documentation and assessment procedures in ELL instruction. They learn how to document growth of ELLs' academic performance by learning to design and use of rubrics, portfolios, and personal anecdotes. The prerequisite for the course is Introduction to Multicultural Education, and Second Language Instruction, though this is loosely enforced.

Participants in these courses are typically junior level students. These participants are overall pursuing certification to teach from Pre-K through $8^{\text {th }}$ grade children. Some are mostly pursuing the PK-4 Generalist Certification while others are seeking the Middle Grades Certification. A few are seeking High School certification.

## Instrument Development and Testing

Extensive reading within the field of beliefs research in language learning informed instrument development. This reading led to the discovery that while ESL and
language teacher beliefs have been the object of substantial research, a significant void exists in research regarding mainstream preservice teachers' beliefs. Due to this finding, the available instruments that evaluated preservice ESL and language teachers' beliefs offered a beginning point. Questions were selected that could be relevant to mainstream teachers from Horwitz's (1985) 27-item Likert-scale Beliefs About Language Learning Inventory (BALLI), Savignon’s (1976) 53-item Likert-scale Foreign Language Attitude Survey (FLAS), and Lightbown and Spada’s (1999) 10-item Likert-scale survey of popular ideas about language learning. Some questions were adapted to make them more relevant to preservice teachers and new questions were also created.

The next step was to interview various instructors of the ESL methods courses. The purpose of these semi-structured interviews was to gain insight so as to increase the relevance of the instruments for the participant population. Their descriptions of their previous students in ESL methods courses indicated a largely monolingual student population with minimal international experience. They noted hostility toward nonWhite instructors, and racial and linguistic differences in general. The instructors indicated that students generally displayed disinterest in the ESL courses and questioned why it was required since they had no intention of teaching ESL and didn't expect to have ELLs in their classes. The instructors portrayed the students as typically feeling that it wasn't their responsibility to teach students who come to the U.S. and don't speak English.

To deepen her understanding of the research population even further, some of the students' coursework from an ESL methods class was also explored. In these materials, some students viewed ELLs as behavior problems. Some mentioned how

English is an easy language to learn. They felt that correcting ELLs is time consuming for teachers. They also indicated the belief that a first language other than English interferes with English language learning. Based on the interviews with the instructors and these findings from looking at students' coursework, the instruments were adapted further.

The resulting product is the Second Language Learning Survey that includes 20 Likert-scale items. The Likert scale choices range from 1 (strongly disagree) to 6 (strongly agree). Each of the questions falls into one or more of the following categories of teachers' beliefs about language and language learning, the locus of responsibility for teaching ELLs, and English language learners (ELLs).

The second instrument is a Background Questionnaire that included 13 questions regarding relevant variables about the participants' backgrounds. It will be administered with the Second Language Learning Survey at the beginning of the semester. Some of the questions are in a yes/no or multiple choice format. Others ask for a brief short answer explanation. The questions addressed issues such as participants' previous teacher preparation coursework, international experiences, language learning experiences, previous ESL teaching experience, and their relationships with bilingual and multilingual persons.

The third instrument, the Follow-up Questionnaire, will be administered with the Second Language Learning Survey at the end of the semester. This document is intended to lead to greater understanding of the students who are sitting in our teacher preparation classes and preparing to teach our children by exploring demographic information and participants' future career plans.

Focus group interviews are the fourth instrument involved in the study. Focus groups were conducted at the end of the semester. They explored belief change as well as the variables instigating such change. These four instruments are summarized in the Summary of Research Instruments in Table 1.

The first two instruments were piloted with a small group of ESL methods summer school students in July of 2006. This group was selected because of its similarity with the future participants in the proposed study. The researcher visited their class the week previous to the administration of the pilot and explained her request for students to complete a survey after the following class session. Upon returning the following class period, eight students voluntarily stayed and completed both the survey and the background questionnaire. Then verbally and in writing they gave feedback to improve the instruments. The participants pointed out unfamiliar terms, unclear formatting and directions, and questions that lacked clarity. The students were timed and it was found that it usually took just under 10 minutes to complete the English Language Learning Survey and the Background Questionnaire. Instruments were adapted based on the information elicited from the pilot study.

## Procedures

The present study takes a mixed methods approach to discovering pre-service teachers' beliefs about English language learning and teaching. The quantitative instruments are influenced by qualitative research conducted through interviews and the study of relevant course documents. The Survey and the Background Questionnaire included quantitative items will be administered at the beginning of a semester. The

Table 1
Summary of Research Instruments

| Instruments | Information Elicited | Source |
| :--- | :--- | :--- |
| Second Language Learning <br> Survey | Beliefs about second language <br> learning <br> (Centered on three constructs <br> including beliefs about ELLs, <br> language and language <br> learning, who is responsible <br> for teaching ELLs.) | Researcher-constructed survey <br> given to pre-service teachers in <br> ESL classes |
| Administered both at the <br> beginning and at the end of <br> the class | Background information <br> (Exploration of variables of <br> previous life experiences: <br> language learning, <br> international travel, <br> relationships with <br> internationals, teaching <br> experiences, and language <br> learning.) | Researcher-constructed <br> questionnaire given to pre- <br> service teachers in ESL class |
| Administered once at the <br> beginning of the class | 13 questions on previous <br> experiences |  |
| Follow-up <br> Questionnaire | Follow-up information <br> Researcher-constructed <br> questionnaire given to pre- <br> service teachers in ESL class |  |
| Administered | (Exploration <br> of demographics as well as <br> teaching experiences within <br> the course.) | 9 questions on demographics, <br> course experiences |
| Focus Group Interviews | Belief change and variables <br> impacting beliefs | Researcher-constructed <br> questions employed by <br> researcher to facilitate <br> discussion between participants |
| Conducted with six groups <br> after ESL coursework | (the explores beliefs and belief <br> (hange as a result of ESL <br> coursework.) | 7 questions facilitated by <br> researcher |

Survey will be administered again at the end of the semester along with the Follow-up
Questionnaire. Qualitative data will be collected through interviews conducted after the administrations of the aforementioned instruments.

At the beginning of the first day of class, before the instructor introduces the course, the instruments will be administered. The end of the survey packet includes two
copies of the consent form. One of the pages is the copy for the participants to tear off and keep. The other copy of the consent form is to remain attached to the packet and is for the participant to sign. The instrument administrator explains this part of the process before students complete the instruments.

Participants who are simultaneously enrolled in both ESL methods courses complete the instruments in only one of their classes. The survey administrator will explicitly reiterate that the data is completely confidential. The participants' instructors will not have access to the data. The researcher, herself, will administer the instruments to as many classes as possible. In the case that more than one class meets at the same time or unavoidable circumstances interfere with personal administration of the instruments, another Ph.D. candidate will collect the data. The course instructor will not administer or handle the instruments. The students' names will be required on the surveys so that they can be matched with their post-survey at the end of the semester.

During the $11^{\text {th }}, 12^{\text {th }}$, or $13^{\text {th }}$ week of the semester depending on the university calendar and ESL methods course instructors’ schedules, the researcher will return to the same classes and administer the same Second Language Learning Survey as is administered at the beginning of the semester. The Background Questionnaire will not be employed on the second occasion. Instead, the Follow-up Questionnaire will be administered. Based on the scores of the pre and post surveys, the researcher will select participants for interviews.

The researcher will conduct focus group interviews with six groups. These six groups will be selected and grouped according to the demonstration of change on the Second Language Learning Survey. Around six students will be asked to participate in
each semi-structured focus group interview. Interviews will be held in a small, quiet, centrally located conference room on campus depending on convenience to the participants. The same procedure will be followed in both the fall 2006 and spring 2007 semesters.

As a female Anglo-American, the researcher comes from a background that is seemingly very similar to many of the participants. Like most of them, she is a native Texan. She completed her Bachelor's degree in order to teach, just as they are seeking to do. And like many of them plan to do, she taught primary students in Texas’ public schools. The expectation was that they would be open in sharing with the researcher because she appears to be very much like them.

The fact that the researcher will personally conduct the interviews has significant advantages. The researcher will be able to interact with the participants personally, so she can gain a feel of the tone of the interviews and openness or reservation of the participants. She will be able to take steps to make the participants feel comfortable and safe in sharing. She also has the freedom to follow the flow of the discussion rather than a regimented script so that she can maximize her interaction with the participants.

At the same time, there are some disadvantages to personally conducting the interviews. The role as a researcher creates an unequal power structure. Participants could view the researcher as an outsider rather than an insider, which may limit their responses. This is compounded by the researcher's higher level of education. Furthermore, being somewhat older than them might inhibit the participants from sharing openly and fully.

This study was presented to the Internal Review Board in the Summer of 2006 for expedited review at which time it received approval. This study did not pose any significant threats for the participants. One minor threat could be an emotional discomfort instigated by the reflection of participants on their beliefs. Participants from the ESL methods courses have the freedom to refuse to participate in the study. Those who choose to take part in the study have the freedom to refuse to answer any questions. There is no penalty or reward based on participation or lack thereof for survey participants. Interview participants will be given a $\$ 20.00$ restaurant gift card as an incentive and in appreciation for their time. University students' participation and beliefs will be kept confidential. Data will be securely stored in the researcher's office at her home. Data and consent forms will be kept on file for three years after completion of the study. Audio tapes will be destroyed immediately after transcription.

## Data Analysis

A confirmatory factor analysis of the 20 survey items on beliefs will be conducted to obtain a measure of the constructs of beliefs regarding English language learning and to examine reliability issues. The first research question regarding what beliefs preservice teachers at Texas A\&M University hold regarding second language learning and teaching before ESL coursework will be answered with descriptive statistics including group means and standard deviations. The second analysis will explore the difference between the participants' belief at the beginning and end of the ESL class exposure by means of paired sample $t$-tests. The final research question addresses what variables influence these pre-service teachers' beliefs about English language learning and
teaching. These variables will be explored by means of hierarchical multiple regression analysis to see what factors might predict that change as well as qualitative analysis of the focus group interviews.

For qualitative data analysis, interviews with preservice teachers will be tape recorded and the researcher will transcribe them. The constant-comparative method will be employed in order to determine themes within the interviews (Bogdan \& Biklen, 2003).

## Limitations

There are three specific limitations to the present study. First, this is a narrow study focusing exclusively on Texas preservice teachers. Therefore, generalizability of the findings of this study may be a limiting factor.

Second, the use of a self-report instrument is sometimes considered to be a limitation to research. This can generate a desirability affect. Thus participants of both surveys and interviews may be more inclined to give answers that they expect would please the researcher. In this case, triangulation through interviews and the questionnaires are employed to increase validity of such a survey.

Third, the study is limited by any personal biases hold by the researcher. Naturally, the researcher held expectations, perceptions, and her own personal beliefs about preservice teachers as well as beliefs about English language learning and teaching. These naturally impact her construction of the instruments, conducting of the interviews, and data analysis.

## CHAPTER II

## REVIEW OF THE LITERATURE

This chapter is designed to give a survey of the literature that is most pertinent to beliefs, preservice teachers, English Language Learners (ELLs), and teacher preparation. The chapter begins with a conceptual framework of beliefs that defines the concept of beliefs generally and then in terms of teacher beliefs, belief change, and the importance of beliefs.

Building on this conceptual foundation of beliefs research, the chapter goes on to include reviews of research in the three key concept areas including teacher education, ELLs, and English language learning and teaching as they relate to teacher beliefs. The review of literature on teacher education in the first section focuses on teacher beliefs in relation to teacher education, and teacher education's impact of change or no change on those beliefs. The second section, which reviews ELL literature, includes conceptual information that describes current demographic shifts and defines the ELL and teacher populations. It also includes research studies regarding ELLs as well as the impact of teacher preparation on ELLs and their teachers. The third and final segment of research studies keys in on ELL issues in teacher education, and preservice and inservice teacher beliefs about English language learning and teaching.

The format of this review starts broad with a general look at beliefs and funnels down until it narrows to the heart of the study which is preservice teachers' beliefs about English language learning and teaching in mainstream environments.

## Conceptual Framework

## The Construct of Beliefs in History

Beliefs research dates back to the field of psychology in the early 1900s. After the 1920s, however, interest in beliefs waned (Thompson, 1992). It was not until the 1960s with the work of some psychologists such as Milton Rokeach that the subject was revisited. In the 1970s, the inception of cognitive science opened the door to further pursuits of beliefs research (Abelson, 1979). A transformation in the focus of education research began at this time. Heretofore, the focus had included only a behavioral emphasis wherein teachers’ intentions were largely ignored (Clark \& Peterson, 1986; Shavelson \& Stern, 1981). But the development of cognitive science provided a venue for education researchers to give increased attention to teacher cognition. This focus involves teacher thinking, including teacher beliefs. This development catapulted the study of beliefs in the 1980s in a variety of fields, including education.

## The Concept of Beliefs

The concept of beliefs has proven resistant to consistent definition on a large scale. A variety of scholars have defined the term in a variety of ways, and no one definition has gained significant prominence. Perhaps due to this ambiguity, other researchers have used the term without defining it. This lack of clarity and consistency has both led to, and been heightened by, the use of the term beliefs interchangeably with multiple other terms such as attitudes, values, perceptions, theories, and world view, among a variety of others (Pajares, 1992). Pajares was accurate in his declaration that belief is a "messy construct." (p. 1)

In order to encourage a clarity and consistency in this present study, it is important that what is meant by the term beliefs is made explicit through exploration of the most vital literature available on the concept. Simple definitions, however, are rarely available to concisely define beliefs in the literature. Often beliefs are defined in relation to other concepts. First, how scholars define beliefs and belief systems will be explored. Then beliefs will be defined in light of knowledge, as well as attitudes.

One of the earliest instigators of beliefs research was psychologist Milton Rokeach whose work was seminal in the revival of beliefs research (1968). Rokeach (1968) spells out beliefs as "inferences made by an observer about underlying states of expectancy." (p. 2) Therein he also defines beliefs as "any simple proposition, conscious or unconscious, inferred from what a person says or does, capable of being preceded by the phrase 'I believe that....'" (p. 113)

Rokeach (1968) explains three underlying premises to beliefs. First, there are different types of beliefs. Second, these beliefs differ in their importance to an individual. And finally, the centrality of a belief directly parallels the degree to which that belief is likely to change. He explains this centrality as a "connectedness" that involves the influence and inter-relatedness a belief has with other beliefs (p. 5). Greater connectivity and centrality of a belief indicates less inclination for that belief to change.

One further definition of belief that is germane to this review originated with John Dewey. Dewey (1933) characterized belief as "something beyond itself by which its value is tested; it makes an assertion about some matter of fact or some principle or law." (p. 6) He emphasized the value of beliefs in that they deal with issues that we do not yet have knowledge of, but we have a compelling degree of confidence. He recognized the
fluidness of matters in their transfer in being categorized from belief to knowledge and vice versa. The interfacing of these terms leads us to explore them in light of one another. Beliefs and Knowledge

The term belief has been used synonymously with a variety of terms. This interchange has created a considerable amount of confusion, particularly when employed correspondingly with the term knowledge. Because beliefs and knowledge are highly interrelated, distinguishing between the two has historically proven daunting (Elbaz, 1983; Kagan, 1992; Nisbett \& Ross, 1980).

In the literature of the field of education, distinctions between beliefs and knowledge are often overlooked. Kagan, for example, unites the two by defining belief in light of knowledge. She defines teacher belief as "a particularly provocative form of personal knowledge that is generally defined as pre- or inservice teachers' implicit assumptions about students, learning, classrooms, and the subject matter to be taught." (Kagan, 1992, p. 65-66) She further underscores the lack of differentiation between belief and knowledge in her definition of knowledge as "belief that has been affirmed as true on the basis of objective proof or consensus of opinion." (p. 73) For Kagan, the subjectivity of the concepts of belief and knowledge leave little differentiation between the two. Thus, one significant premise of her research is that "teachers’ professional knowledge can be regarded more accurately as belief." (p. 73)

Though the transition point between knowledge and beliefs is a gray area, there are those in educational research who have underscored differences between belief and knowledge. For example, Bandura asserted that beliefs serve as a mediator for a person's knowledge base, and ultimately influence action (1982, p.126; Pohan \& Aguilar, 2001).

Furthermore, Tillema's (1995) investigation of the relationship between beliefs and learning gave evidence that teachers' beliefs served to mediate knowledge acquisition. Teachers acquired the knowledge most closely corresponding with their beliefs.

In what is likely the most extensive examination of the topic, Nespor (1987) draws on the work of Abelson (1979) in delineating four characteristics that differentiate beliefs and two differentiating belief systems from knowledge and knowledge systems. First, beliefs often include existential presumptions regarding entities such as God, laziness, or object permanence, or the nonexistence of such entities. Rokeach (1968) identified these as the primitive, personal beliefs that belong to the core of the belief system and are rarely open to change. In the realm of education, teachers believe students to embody such entities. This can greatly impact how teachers view their students and how they approach teaching them.

Second, alternative realities are part of beliefs. These realities may be the mental creation of an ideal situation and play a role in defining goals. For example, a teacher's vision of the perfect classroom is an influential belief, like a fantasy that she may try to enact through her classroom practices.

Third, in contrast to knowledge, beliefs tend to favor the affective and evaluative. Whereas with knowledge one may know something about a concept, idea, or field, a belief about the same thing would carry an associated feeling. The most common distinction between belief and knowledge is that beliefs are primarily rooted in evaluation and judgment, whereas knowledge finds its roots in fact (Pajares, 1992, p. 313). Knowledge typically infers that there is some supporting evidence not required by beliefs. A dimension of beliefs that Abelson mentions but Nespor does not emphasize is
that of that certitude. Beliefs can be held with different degrees of certainty. Nisbett and Ross (1980) evidence this distinction in their delineation between "theories" (beliefs) and "generic knowledge." (p.28) It is notable, however, that they view beliefs and knowledge as two kinds of knowledge structure.

Nespor's fourth distinction is that knowledge lends itself to a more semantic system of storage that breaks things down logically, whereas beliefs store data episodically according to prior experiences. Nespor asserts that those experiences influence the interpretation of subsequent situations. A good example of the influence of this episodic dimension of beliefs in education research is evident in a study by Calderhead and Robson (1991). They found preservice teachers' images of teaching to powerfully influence what preservice teachers intake from what is presented in their courses as well as their analysis of theirs and others' classroom practice.

We will explore belief systems in more depth in the following section. However, we briefly address them in light of Nespors' differentiation of belief systems from knowledge systems. Nespor (1987) defined belief systems as "loosely-bounded systems with highly variable and uncertain linkages to events, situations, and knowledge systems...bound up with the personal, episodic, and emotional experiences of the believer." (p. 321) In contrast, he describes knowledge systems as more distinctly defined structures that grow and develop only in accordance with more strict guidelines.

Nespor cites two further characteristics as differentiating the two. Nonconsensuality, or the disputability of various beliefs, is inherent to belief systems. Beliefs do not require the agreement of a group, or even consistency with a person's other beliefs. As Abelson points out regarding beliefs, the believer generally grasps that others
may disagree. Though with that said, the personal nature of belief systems does not lend them to evaluation from outside sources as easily as do knowledge systems. Nespor explains that a change in beliefs typically has to stem from something as weighty as "a conversion or gestalt shift." (p. 321) Whereas knowledge systems grow and change, belief systems are relatively more static. Knowledge implies a verifiable truth not expected of beliefs.

Finally, in what Nespor refers to as "unboundedness," belief systems are less dependent on logic and more fluid in their organization of domains. The relevance of those beliefs may be tied to the experiential, whereas knowledge systems have more distinct, defined domains.

As these scholars evidenced, beliefs and knowledge differ. But why focus on beliefs rather than knowledge for this present study? Teachers may have access to much the same knowledge through education and literature, but their teaching will differ according to their beliefs. Arguably, beliefs are considered more powerful in their influence over pre-service teachers' learning, decisions, and behaviors than is knowledge (Calderhead \& Robson, 1991; Ernest, 1989; Nespor, 1987). Furthermore, beliefs have been found to filter knowledge acquisition and influence knowledge construction. (Kagan, 1992; Nisbett \& Ross, 1980; Posner, Strike, Hewson, \& Gertzog, 1982; Tillema, 1995) Also, Nespor (1987) concluded that regardless of their peculiarities, beliefs, more than knowledge, are responsible for task and problem definition and organization, and are effective in predicting behavior. This will be addressed more substantially later when we explore the importance of teachers' beliefs.

## Belief Systems

Beliefs are not isolated and independent. They exist in the framework of systems. Rokeach defined a belief system as "having represented within it, in some organized psychological but not necessarily logical form, each and every one of a person's countless beliefs about physical and social reality." (1968, p.2) He uses the atom as a metaphor describing belief systems. Within the "atom" of a belief system, there is a continuum of beliefs ranging from the central to the peripheral. Peripheral beliefs are less influential and more open to change, whereas central beliefs are more intense, powerful, an incontrovertible.

Those central beliefs form the nucleus of a belief system. Such a core is a stable structure that is unlikely to change. Rokeach refers to these core beliefs as "primitive" beliefs that are developed early and are basic truths upon which the rest of the system is built. These beliefs are highly interrelated with many other beliefs. Therefore, to change in them radically impacts a large number of other beliefs.

Rokeach (1968) also describes three more peripheral types of beliefs including authority beliefs, derived beliefs and inconsequential beliefs. The authority beliefs develop from the influence of persons and groups of authority. Derived beliefs come from a source other than a direct experience such as some sort of text. Inconsequential beliefs are simple matters of taste. These three types of beliefs are less nuclear to the structure of the belief system, less connected to other beliefs, and are therefore less important and more controvertible.

## Beliefs and Attitudes

Due to the emphasis on behavioral research in the 1950s and 1960s, teachers’ attitudes had enjoyed significant attention. In the shift toward investigation of cognition, however, beliefs began to replace attitudes in the research spotlight (Richardson, 1996). Attitudes came to hold a more affective connotation while beliefs were viewed as a cognitive concept.

Rokeach (1968) explained attitudes in terms of beliefs, defining attitude as a "relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner." (Rokeach, p. 112) Rokeach asserted that clusters of interrelated beliefs actually make up attitudes. Thus, he depicted attitudes as subsystems of beliefs (p.123). Rokeach's explanation, while valuable in recognizing the two concepts, was still limited in distinguishing the two.

Fishbein and Ajzen (1975) moved further to individualize the concepts of attitude from belief. They describe attitudes as more evaluative or affective when they explain, "Affect refers to a person’s feelings toward an evaluation of some object, person, issue, or event; cognition denotes his knowledge, opinions, beliefs, and thoughts about the object." (p.12) Fishbein and Ajzen tie beliefs to information and differentiate attitudes as an evaluation of something or someone. As beliefs are formed, an automatic and simultaneous attitude is developed. Belief assessment generally measures persons’ attitudes.

In spite of such efforts at distinction, differentiation between the two terms has often not succeeded on a wide scale in education research. As Pajares explains, the interconnection of beliefs within various attitudes about education, society, race, and
other issues can create life-shaping values, influence perceptions, and dictate behaviors (Pajares, 1992). Such an interconnection has paved the way for great interplay in language usage. The terms are largely employed in an interchangeable manner (Such as Garcia-Nevarez, 2005). Much like the situation with beliefs research, the term attitudes is not explicitly defined in many attitudes research studies (Such as Lee \& Oxelson 2006; Reeves, 2006). This is not surprising given the lack of consensus on terminology of beliefs, knowledge, and attitudes (Richardson, 1996).

The effort in this present study is toward clarity of definition, delineation, and general agreement with previously established distinctions in relevant terminology. To be clear, this present study differs from language attitude research, which is a branch of study focusing on students’ and teachers’ feelings toward a language. Because the focus herein takes a more cognitive interest in language teaching and learning in a mainstream environment, this study focuses on beliefs. This present review has largely excluded studies that employ the term "attitude" rather than "belief." Though in some cases the terms are used interchangeably, much research fails to define the use of such terminology and ambiguity leaves room for doubt about the meaning of the terms. Therefore, I have chosen to mark the boundaries of this study to principally include specifically "beliefs" research.

## Defining Teacher Beliefs

Just as scholars have struggled to agree on a general definition for belief, there has been a similar challenge in defining teacher beliefs. A variety of terminology and meaning have been employed. For example, some have referred to teacher beliefs as
"preconceptions" (Clark, 1988; Wubbels, 1992) and "implicit theories." (Clark, 1988; Munby, 1982; Weinstein, 1989) Others have preferred to use the term "teacher perspectives." (Goodman, 1988; Tabachnick \& Zeichner, 1984) As previously addressed in the discussion of knowledge, Kagan defines teacher belief as "a particularly provocative form of personal knowledge that is generally defined as pre- or inservice teachers’ implicit assumptions about students, learning, classrooms, and the subject matter to be taught." (1992, p. 65-66)

Pajares (1993) also made an effort toward clarity in his definition of preservice teachers' beliefs as "the attitudes and values about teaching, students, and the education process that students bring to teacher education—attitudes and values that can be inferred by teacher educators not only from what preservice teachers say but from what they do." (p.46) As Pajares (1992) emphasized, reference to teachers' beliefs in educational research typically is referring to their educational beliefs rather than their broader, general belief system.

A variety of conceptual research and literature reviews are available on the topic of teachers’ beliefs. Among those that inform this study are Pajares (1992), Fang (1996) and Brown (2004). Fang (1996) reviews research on teacher beliefs and practices from the late 1970s until its publication in 1996. Brown (2004) reviews quantitative instruments and studies of teachers' beliefs, attitudes and values with regards to diversity since 1985. And Pajares, (1992) is a foundational analysis of the research on teachers' beliefs from the inception of the concept.

## The Nature of Preservice Teacher Beliefs

Perhaps the best way of defining preservice teacher beliefs is to explore what previous research has discovered about them. A variety of research has shown teacher beliefs to be established and well developed. Some studies have linked beliefs personal experiences and culture. Other studies have emphasized that teachers' beliefs are enduring, and consequential. These are five dimensions that we will address in an effort to illustrate the nature of preservice teacher beliefs.

First, preservice teachers enter education programs with well-developed beliefs about learning and teaching already in place (Calderhead \& Robson, 1991; Florio-Ruane \& Lensmire, 1990; Holt-Reynolds, 1992; Tabachnick \& Zeichner, 1984; Wubbels, 1992). As Bandura emphasized, modeling is the means through which most behavior is learned (1986). These preservice teachers' beliefs are rooted in the modeling they have observed throughout at least 13 years and 13,000 hours of classroom experience before graduation from high school (Lortie, 1975). Lortie referred to this as the "apprenticeship of observation". A significant problem with this apprenticeship is that that the preservice teacher has gained only a student-centered perspective that is often remembered differently than it was experienced (Barclay \& Wellman, 1986; Feiman-Nemser \& Buchmann, 1987).

Another dimension of preservice teacher beliefs is that they are typically rooted in personal history-based lay theories and cultural myths (Britzman, 1986; Holt-Reynolds, 1992). Holt-Reynolds explains these theories are "beliefs developed naturally over time without the influence of instruction." (1992, p. 326) Preservice teacher beliefs often develop through enculturation and social construction. As they observe and imitate what
goes on around them, they assimilate into a particular culture (Pajares, 1992).
Furthermore, the widening cultural divide between teachers and students yields a cultural mismatch. Cultural beliefs of most preservice teachers come predominantly from a White, monolingual, middle-class culture since that is who comprises the vast majority of the teaching force.

Third, these lay theories that Holt-Reynolds (1992) describes are often implicit. They have naturally developed throughout years of experiences and observations in a variety of contexts and often lie unearthed and subconscious (Holt-Reynolds, 1992; Kagan, 1992). Another term used for lay theories, or beliefs, is "implicit theories" (Clark, 1988; Weinstein, 1989). Clark underscored that the term "implicit theory" which is often used synonymously with "beliefs" refers to unspoken systems of teacher thought (1988, p. 6). The implications of Weinstein's (1989) research indicate that making beliefs explicit is an undeniably important part of teacher education in two respects. First, making preservice teacher beliefs explicit is valuable for teacher educators to be effective in teaching future teachers. Furthermore, teacher educators need to investigate their own implicit theories for the overall strengthening of teacher education programs. A fourth dimension of teachers' beliefs is their tenacity. In general, beliefs are staunchly inclined to persevere (Abelson, 1979; Nespor, 1988; Nisbett \& Ross, 1980; Rokeach, 1968). Yet in the case of perservice teachers, they seem to be even more enduring than those of trainees in other professions. When coming to a field of study such as law or medicine, a stranger has less established beliefs in place and the initial encounter with the new environment can be quite jarring. Yet for preservice teachers, they are insiders in an old, familiar environment and they have many established
expectations and entrenched beliefs (Pajares, 1993, p.46). Thus, by nature, preservice teachers' beliefs are highly tenacious and resistant to change (Brousseau, et al., 1988; Kagan, 1992; McDiarmid, 1990; Tabachnick \& Zeichner, 1984).

Holt-Reynolds' (1992) study of preservice teachers found that they used their personal history-based beliefs and knowledge as the standard by which to test new material introduced to them instead of testing their beliefs by the arguments and principles they were being taught. Other studies have found that instead of changing the beliefs, preservice teachers tend to leave college more comfortable with the beliefs they came with (Feiman-Nemser \& Buchmann, 1987; Tabachnick \& Zeichner 1984). Zeichner \& Tabachnick (1981) describe a variety of studies that have found beliefs to change during university studies, only to revert back during the first year of teaching. As Pajares points out, beliefs typically endure unless deliberately challenged (1992).

How can beliefs be held so tenaciously even when discredited? Nisbett and Ross (1980) offer significant insight into the resilient nature of beliefs. For example, twisting conflicting evidence to fit previously held beliefs would be expected on an emotional level. However, even cognitive and information-processing principles work to turn conflicting evidence into evidence favoring discredited beliefs. Thus, prior beliefs impact memory and interpretation so that beliefs color and distort memories in order to sustain those beliefs. This same pattern is evident not only in memories, but in daily perceptions which direct behaviors in such a manner that reinforce the original belief. Though Nisbett and Ross demonstrate that belief change does not depend on logic or necessity, this does not mean that beliefs are incapable of change. We will explore the topic of belief change further in upcoming investigation.

Consequentiality is a fifth dimension to the nature of teachers' beliefs. Beliefs are highly consequential in that they are the most reliable predictors of behaviors (Bandura, 1986; Clark \& Peterson, 1986; Nisbett \& Ross, 1980; Rokeach, 1986). In the words of Rokeach (1968) "All beliefs are predispositions to action." (p. 113) More specifically to teachers, these beliefs influence perceptions and judgments, thus determining classroom behavior (Clark, 1988). These beliefs are also consequential in that they impact teacher decision making (Shavelson \& Stern, 1981).

With respect to preservice teachers, their beliefs are consequential in that they filter learning in teacher education courses. Some of the beliefs they come with are compatible with the learning goals of their teacher education programs, however some interfere (Florio-Ruane \& Lensmire, 1990; Posner, et al., 1982; Scheurman, 1996). These beliefs can be problematic and limiting in that preservice teachers may interpret what they learn in their education programs differently than their professors purpose (Bird, Anderson, Sullivan \& Swidler, 1993; Calderhead \& Robson, 1991). Incoming beliefs are consequential to teacher educators because, as Anderson and colleagues warn, in order for teacher educators to be effective they "must understand the knowledge and beliefs that their students bring and how that knowledge will likely influence what is learned." (Anderson, et al., 1995, p. 150)

## How Beliefs Are Developed and How They Change

After so much evidence of the incontrovertibility of beliefs, is there even the possibility that beliefs would change? This is one of the most controversial issues in teacher education research. Both nature and origin determine that some beliefs are more
resilient than others (Abelson, 1979; Bandura, 1986; Clark, 1988; Lortie, 1975; Nisbett \& Ross, 1980; Rokeach, 1968). The most long-standing beliefs are more difficult to change, however newer beliefs are more vulnerable (Abelson, 1979; Clark, 1988; Munby, 1982; Nespor, 1987; Nisbett \& Ross, 1980; Rokeach, 1968). Yet, as evidenced in the work of these same scholars, it is clear that even core beliefs may change and less central beliefs are considerably more open to change. We will explore a variety of studies in the remainder of this review that evidence belief change, beginning with an exploration of the origins of beliefs and instigating factors that can incite belief change.

## Origins of Beliefs

Before looking at how beliefs may be influenced to change, it is important to note how these beliefs begin. Richardson (1996) describes three categories of experiences from which beliefs originate. First, personal experiences are critical to the development of personal, familial, and cultural beliefs that are evident in constructs such as world view or self-concept. An example of literature on this topic that has found the influence of personal experience on teaching practice includes Clandinin and Connelly (1991).

School and instructional experiences provide a second type of background that, as previously discussed, serve as what Lortie referred to as an "apprenticeship of observation." (Lortie, 1975) Britzman (1986) is one example of an exploration of how such institutional experiences serve to deeply entrench certain beliefs about teaching and learning in preservice teachers. The term "life history studies" evidenced in some belief research is often used in reference to research that involves both personal experience along with school and instructional experience (Richardson, 1996, p.106).

A final type of experience Richardson discusses is experience with formal knowledge. This formal knowledge refers to "understandings that have been agreed on within a community of scholars as worthwhile and valid." (Richardson, 1996, p.106) This knowledge may be experienced in things such as school, media, or literature. This third type of experience includes teacher preparation programs. This type if experience is usually considered the least influential upon beliefs. These originators of beliefs are evident in the larger research base included throughout this review that demonstrates the powerful role of life experience in teacher belief formation.

## Instigators of Belief Change

While experiences are fundamental to initial belief development, they are also critical to belief change. Before exploring this and other instigators of belief change, it is important to distinguish between two types of beliefs. Kagan (1992) differentiates personal beliefs as either filters that interfere with learning or foundations that facilitate learning. Foundational beliefs align with, rather than contradict, new information being presented. Beliefs that contradict the new information being presented hinder learning.

According to Posner and colleagues, learning is "a process of conceptual change." (1982, p.212) So how do we deal with the filtering beliefs that interfere with such learning and change? In light of these two types of beliefs, Kagan identifies three steps inherent to effecting belief change. Previously we discussed the nature of preservice teachers' beliefs and one of the characteristics was the implicitness of those beliefs. Making those beliefs explicit is a first step to impacting change. Nespor speaks of this in terms of helping future teachers to become conscious of their beliefs (1987). Second, it is necessary to exhibit the deficiencies and discrepancies inherent to flawed beliefs. Posner
explains that there must be dissatisfaction before conceptual change can occur. Then after the beliefs have been recognized and challenged, a third step is to offer opportunities to integrate the new information and thereby replace or reform the problematic beliefs. Nespor emphasizes that self-awareness of personal beliefs and facing the invalidity of those beliefs is useful only if that third step is taken where new beliefs are available to fill the vacuum created in the first two steps (1987).

Lived experiences are highly influential and can play a pivotal role in any of the steps of belief change mentioned above. In Smith, Moallem, and Sherrill’s (1997) study of preservice teachers' beliefs about cultural diversity, they found four experiential factors that were critical to instigating belief change in preservice teachers. Direct experiences with persons from diverse cultures, educational influences, travel, and personal experiences of discrimination all emerged as powerful agents of belief change for preservice teachers. These experiences are crucial in their affect on preservice teacher beliefs and how preservice teachers respond to teacher education programs.

One further study that has identified the value of experiences is Merryfield (2000). In exploring teacher educators who were most effective in preparing teachers for diversity, Merryfield found several of the same factors to have influenced these educators as Smith, Moallem, and Sherrill (1997) found impacted preservice teachers. Some of the factors Merryfield found include personal encounters with diverse individuals and personal experiences being discriminated against or being the outsider. For middle class, White educators, such experiences typically occurred while living internationally. She describes the impact of such experiences on beliefs when she explains,

The experiences created a felt contradiction between beliefs, expectations or knowledge and the multiple realities of the experience. The contradictory nature of the experiences often led to puzzlement and sustained reflection. Many of these experiences were not easy to understand, and it took time for the educators to make sense of them within the contexts of their world views. In order to fit the new experiences into their life experiences, the teacher educators at times deconstructed previously held assumptions or knowledge and considered new ideas and explanations.... The teacher educators critically examined fundamental assumptions about reality and truth, power and culture that they had before taken for granted. (p. 339-349)

Without such an experience, White, middle class preservice teachers typically cannot know the experience of being the minority and cannot see the ethnocentricity of the environment in which they teach.

Suarez (2003) also found the value of international experiences in non-English speaking countries for native English speaking teachers. The experience of being the linguistic "other" caused teachers to develop increased empathy with ELLs. Those teachers expected that empathy to determine changes in their future pedagogy. The exploration of studies of teacher beliefs in the remainder of this review will look further into belief change and the factors in those studies eliciting such change.

## Why Studying Teachers' Beliefs Is Important

Studying teachers' beliefs is a crucial undertaking for a variety of reasons. In the upcoming pages we will explore five reasons for studying teachers’ beliefs including
beliefs' impact on learning, the nature of beliefs, the insufficient body of empirical research on the topic, the power of beliefs over classroom practice, and the influence of beliefs on teacher expectations.

First, beliefs are important because they influence knowledge construction for pre-service teachers in teacher education programs. The study of preservice teachers’ beliefs is important and valuable for many of the reasons just mentioned. For example, these beliefs are powerful due to their role in filtering or facilitating knowledge acquisition. This has strong implications for teacher preparation because such beliefs impact how preservice teachers hear and understand what they are taught and determines what they are able to learn. Furthermore, preservice teachers cannot change beliefs they are unaware of. For teacher educators, gaining an understanding of these preservice teachers' beliefs allows educators and teacher education programs to make an optimum impact (Smith, Moallem \& Sherrill, 1997). As Pajares explains, "When beliefs are left unattended, no instruction is likely to have much effect. Students simply incorporate new ideas into old frameworks." (1993, p.47) Preservice teachers' beliefs inform their interpretation and definition of concepts and dimensions inherent to teacher education programs (Nespor, 1987). Thus, insight into these beliefs can aid in program development and can help teacher educators avoid miscommunication.

Second, by their very nature beliefs are important. A dimension of beliefs that we have explored is their voracious tenacity. One of the very reasons why beliefs are so resilient to change is because they are so important. Beliefs give life meaning. Beliefs are critical to how we center ourselves in our world, helping us interact on a social and cultural level and provide "structure, order, direction, and shared values." (Pajares, 1992,
p. 318) Belief systems help us cope with the cacophony of discordance that surrounds us. As Pajares explained, in time, people find a place of comfort within their beliefs and eventually gain their self-identify through those beliefs (1992). Beliefs lie at the heart of self identity, and in much the same way, teacher belief "lies at the very heart of teaching." (Kagan, 1992, p.85)

Studying preservice teachers' beliefs is also important because it has received insufficient attention in empirical educational research. In Munby's review of teacher belief research, he underscored the necessity of such study when he said, "The significance of teachers' belief or implicit theories to our understanding of teacher decision making and teacher thinking cannot be over-emphasized. Yet, it would seem that these are inadequately treated in the current research." (Munby, 1982, p.216) Since Munby made this statement, much has been done. Yet, there is much left to explore.

A fourth explanation for the necessity of studying teacher beliefs is the influence of those beliefs on classroom practice. Teachers' beliefs serve as a filter upon which they base a plethora of judgments and decisions (Nisbett \& Ross, 1980; Shavelson \& Stern, 1981). Pajares reflects on the gravity of this when he explains, "If Bandura (1986) is correct that efficacy beliefs are the single strongest predictors of individual behavior, of the choices and decisions they make throughout their lives, then studying the efficacy beliefs of preservice teachers becomes an indispensable enterprise." (Pajares, 1993, p.50)

Nespor (1987) has noted two ways that beliefs are relevant to classroom practice. First, beliefs are influential in teacher thought process as they direct task definition. This involves how teachers see problems and carry out tasks. Furthermore, Nespor asserts that these beliefs direct memory recall, the attitudes and emotions that color those memories,
and the reconstruction of those memories when they are remembered. These factors have strong implications for teacher education and how teachers implement what they learn.

Two specific research studies that have evidenced the correlation between teacher beliefs and classroom practice include Johnson (1992) and Anning (1988). Johnson’s (1992) study demonstrates findings that teachers' theoretical beliefs paralleled their instructional practices in literacy instruction. It is interesting that at the date of Johnson's publication, she notes that no such investigation had been conducted regarding literacy instruction for ELLs. Thus, the intention of her research was to focus on ESL teachers’ beliefs. Anning's (1988) research included six inservice teachers. She also found that what those teachers believed about learning linked directly to the teaching strategies they employed.

Finally, it is essential to study teacher beliefs due to their influence on teachers' expectations of students, and subsequent impact on student achievement (Crano \& Mellon, 1978; Cooper, 1979; Good, 1981; Smith, 1980; Waxman \& Padron, 2002). Winfield (1986) defined expectations as a part of belief systems colored by a variety of things such as previous experiences with diverse students and how much personal responsibility a teacher will assume for student learning. She explains that teachers behave differently toward low-expectation students than they do to high-expectation students. These differences in behavior, rooted in beliefs by way of expectations, can lead to significant disadvantage for low-expectation students such as less interaction with them and calling on them less often.

Terrill and Mark (2000) conducted a study involving expectations of preservice teachers' in a Foundations of Education course. The study explored the expectations for
learners in different setting with different variables. They found preservice teachers' expectations for students from diverse racial and linguistic backgrounds to differ greatly from their expectations of White, monolingual students. They also indicated increased discomfort in working with second-language learners. Among their recommendations, Terrill and Mark call on teacher education programs to conduct similar research so that teacher educators can be aware of and address preservice teachers’ expectations. They also advise the intervention of field experiences in diverse settings, and encourage reflection on personal beliefs that preservice teachers may become aware of through such experiences. If we want to influence teacher education and subsequent practice, we must take into consideration the implications of beliefs, in the form of expectations, on that education and practice.

## Teacher Education

## Preservice Teacher Beliefs in Relation to Teacher Education

Teacher education is referenced throughout this present review of the literature because of its close relationship with the focus on preservice teachers' beliefs. While it is not possible or warranted to exhaustively review the research on teacher education herein, it is valuable to explore it within the boundaries of its relationship to preservice teachers' beliefs and belief change.

Teacher education is a general term that refers to both in-service teacher professional development as well as preservice teacher preparation (Urdan, 1996). As pointed out by Tatto (1998), there is not a great deal of empirical research regarding the successful impact teacher education makes on teachers' beliefs. Previously established
beliefs are highly influential in how preservice teachers filter, take in, and respond to what they are taught in their teacher education programs. Scholars suggest that for teacher education programs and teacher educators to obtain the maximum influence, they first have to uncover and target the beliefs preservice teachers possess. (Nespor, 1987; Pajares, 1993; Smith, Moallem \& Sherrill, 1997; Weinstein, 1989). Otherwise, the biographies, personal histories, or the "apprenticeship of observation" hold more sway than the teacher education programs (Lortie, 1975).

Within the context of teacher education we will look at three different types of studies. The first group focuses on prospective teacher beliefs in relation to teacher education. Then the next two groups illustrate the effects of teacher education as either inciting change or resulting in no change of beliefs. Whether teacher education instigates belief change is important because it is essential to the very premise of teacher education and influential in teacher education policy (Tatto, 1998).

A valuable and incredibly relevant case study for unearthing and changing preservice teachers' beliefs was conducted collaboratively by Holt-Reynolds along with some of her colleagues (Anderson \& Holt-Reynolds, 1995). Through her previous experience instructing a particular methods course, Holt-Reynolds recognized that the material she presented to her students was evaluated by her students based on their underlying pedagogical beliefs. She developed a theory that those students would evaluate the material she presented in light of their beliefs and eventually dismiss significant course concepts or learn them only superficially. For this study, HoltReynolds taught a methods course and her colleagues attended all classes and conducted interviews with eight preservice teacher participants. Holt-Reynolds theorized that she
must elicit and engage the preservice teachers' beliefs and took three steps to do so. First, she offered experiences that usurp rash judgments students would make when she first introduced a concept. Then, she employed a series of instruction and events that led preservice teachers through processes which demonstrated failure of their previous beliefs about learning or teaching. Her last step was to fill the mental space she had helped preservice teachers create by modeling a new method.

The results of the study showed significant change in the beliefs of some students, and no change in others. This led her to several conclusions. First, she concluded that her students possessed beliefs she had not uncovered. Holt-Reynolds suggested slowing down to listen more and expanding her strategies to notice those beliefs. She also noted the value of considering the contexts that originally shaped those preservice teachers' beliefs. Second, she found that the preservice teachers had beliefs they did not yet know they had. For this, she encouraged helping them to "overhear their own thinking." (Anderson \& Holt-Reynolds, 1995, p.21) Third, she decided that there were some beliefs that she didn’t yet know how to engage. Ultimately, this research conducted by HoltReynolds and her colleagues is valuable to teacher educators in that it evidences the powerful role that beliefs play in limiting the impact of teacher preparation and encourages teacher educators to explore how their students' beliefs interact with their own teaching context.

Challenging preservice teacher beliefs for greater impact of teacher preparation is also evident in Hollingsworth's 1989 study. Based on their representation of a wide variety of views, Hollingsworth selected 14 from a population of 53 teacher education candidates. A substantial quantity and variety of interviews, observations, and tertiary
data sources informed the study. Hollingsworth's findings, like Anderson and HoltReynolds, also reiterated the necessity of taking preservice teachers’ beliefs into consideration in teacher education. Both Hollingsworth (1989) and Anderson \& HoltReynolds (1995), encourage identifying preservice teachers’ beliefs as a means to understand their learning. Whereas Anderson and Holt-Reynolds encouraged this for greater effectiveness of teacher educators in preservice teacher courses, Hollingsworth recommends the consideration of beliefs to inform student-teacher placements and supervision.

Hollingsworth's (1989) report of the first year of a three-year qualitative research endeavor underscores the value of mental disequilibrium created in preservice teachers through having their beliefs challenged. She encourages placements for these preservice teachers that force them to work with supervisors and cooperating teachers who think differently than themselves. Differences increased depth of cognitive development gained through preservice teachers' experience.

To reference one other relevant study, Minor, Onwuegbuzie, Witcher and James (2002) conducted a mixed methods study of 134 preservice teachers in college teacher preparation courses to investigate their beliefs regarding effective teachers. Whereas Hollingsworth (1989) and Anderson and Holt-Reynolds (1995) focused on teacher educators' awareness of preservice teacher beliefs, Minor and colleagues emphasized preservice teachers gaining an understanding of their own beliefs. The study emphasizes the need among preservice teachers to identify their beliefs and look at them as they align to the pedagogical and curricular dimensions of the disciplines in which they intend to work. Furthermore, Minor and colleagues noticed a significant diversity among those
participants' beliefs. This is a valuable point for teacher educators to be aware of as they approach teaching many students who hold a wide variety of beliefs. Prospective Teacher Beliefs, Personal Biographies, and Teacher Education

Anderson and Holt-Reynolds (1995) briefly pointed out the value of gaining greater knowledge of the historical context that influences preservice teacher belief development. This valuable point has been emphasized in the work of Britzman (1986) and Holt-Reynolds (1992) and requires consideration. Britzman's article is not an empirical study. However, it addresses an issue that is significant to this review of beliefs and teacher education. Britzman's study is valuable to teacher education because it warns of the broader cultural impact that comes from the inbreeding of pedagogical beliefs based on cultural myths and institutional biography that propagate more of the same. While we have already noted that beliefs limit and influence what can be learned in teacher preparation courses, Britzman addresses the broader picture of larger scale cultural impact of replication of the status quo. He encourages preservice teachers in exploring their educational biography so that their learning and teaching escapes the absolute control of societal forces and continuation of cultural myths.

Holt-Reynolds (1992) also explores a similar concept which she refers to as "personal-history based beliefs." In an effort to gain insight specifically into these biographical beliefs, she specifically narrowed her participant base to include only preservice teachers with no field experience. She conducted six interviews each with nine preservice teachers involved in a course whose content traditionally was not received well. The first three interviews dealt with participants' previous school, home, and community experiences, whereas the last three dealt with impressions from the course.

Holt-Reynolds was not the course instructor. None of the nine accepted the course instructor's assertions. She found that preservice teachers used their memories of their experiences as students as their points of reference for establishing a generalizable premise for their decision making as teachers.

This study is useful to teacher educators as it leads to several conclusions. For preservice teachers, exploring their personal histories allows for the exhumation of beliefs that are encased in experiences. Thereby, preservice teachers may reconsider their beliefs. Holt-Reynolds warns, however, that those beliefs are often the very reason preservice teachers want to be teachers and that teacher educators must be cautious. Preservice teachers' beliefs aught to be carefully considered by teacher educators as well because they are valuable tests against which teacher educators can test their researchbased principles. For teacher educators, the study also underscores the value of identifying and addressing preservice teachers' rationales, how they use their beliefs to defend their decision making. Holt-Reynolds’ research also emphasizes the necessity of explicitness. Communication between the professor and the students was limited because they unknowingly defined same key concepts and terms differently. And finally, it reiterates the characteristics of preservice teacher beliefs previously discussed including that they are well-developed and tenacious.

## Teacher Education, No Change

As Hollingsworth (1989) found, preservice teachers' beliefs are typically staunch in their resistance to change. This hot button of debate within the field of teacher beliefs is well documented in a variety of research (Brousseau, et al., 1988; Kagan, 1992).

Within the arena of beliefs research and teacher education, there are several studies we
will explore that found teacher education to incite no change in teachers' beliefs. Then we will look at several studies wherein teacher education was found to instigate belief change.

Doolittle, Dodds, and Placek (1993) conducted a three-year longitudinal study of 16 preservice physical education teachers' beliefs about good teaching and the purposes of physical education by means of questionnaire, interviews and written coursework. Instead of discussing the overall group and key trends and themes that might be more generalizable and helpful, their article only focuses on three of these 16. The ultimate finding is that though the beliefs of these three preservice teachers appeared to develop, they did not show any marked change. This study echoes Holt-Reynolds (1992) as well as McDiarmid (1990) in its assertion that beliefs are not apt to change. It also supports Minor and colleagues’ (2002) finding regarding the wide variety of beliefs with which preservice teachers come to teacher education programs.

One of the most valuable dimensions of this study is Doolittle and her colleagues' explanations of possible reasons for the lack of belief change evidenced in the study. First, inconsistent program messages could have played a role. Misperceived program messages are a second possible explanation. This parallels the miscommunication between professor and students in Holt-Reynolds’ (1992) study. Third, the cognitive disequilibrium described earlier in Hollingsworth (1989) may have been insufficient to insight change. Doolittle and colleagues (1993) believe the most realistic explanation is that the program itself was not designed in a manner conducive to instigating belief change by explicitly confronting preservice teachers' belief systems. They point out how the study underscores a weakness among many teacher educators as far as taking the
responsibility to elicit, address, and offer and environment conducive to change students’ beliefs.

As referenced earlier, McDiarmid’s (1990) study looked specifically at the role of teacher education field experiences in belief change. In light of Brousseau and Freeman's (1988) assertion that teacher educators typically reinforce existing beliefs rather than challenging them, McDiarmid designed his introductory teacher preparation course to include observing an experienced and unconventional instructor. This was only a limited experiment that covered four weeks and 18 hours. The findings parallel those of Doolittle, Dodds, and Placek (1993). McDiarmid's study shows that preservice teachers did in fact explore their beliefs and began to understand the pitfalls of some traditional teaching beliefs, yet he asserted great skepticism about the impact of the course.

One further study that is relevant and valuable is Peacock's (2001) investigation of preservice ESL teacher beliefs. Though it differs fundamentally from this present study in its focus on ESL teachers rather than mainstream teachers, its basic premise has some similarities. Recognizing the influence of preservice teachers' beliefs, and the possible detrimental affects on preservice teachers' teaching and their future students’ learning, Peacock conducted a 3-year longitudinal study of belief change among 146 preservice ESL teachers in Hong Kong. His study evidences tenacity of beliefs over the three year period and he asserts that the detrimental beliefs may be even less open to change than other beliefs.

This study seems to exemplify what Doolittle and her colleagues felt was the reason for lack of belief change in their research. It seems that the program itself was not
designed with the purpose of instigating belief change by explicitly confronting preservice teachers' belief systems. Rather, after recognizing that their beliefs were not changing, Peacock seemed to sense that as Brousseau and Freeman (1988) pointed out, existing beliefs were simply being reinforced rather than questioned. As a result, Peacock developed an instruction package for encouraging reflection. This study evidences the validity of recommendations from other studies we have explored in its call for a focus on beliefs as central to preservice teacher core courses. It also emphasizes the importance of teacher educators seeking to instigate change of beliefs at the beginning of teacher education programs.

## Teacher Education, Change

This resistance to change presents an incredible challenge to teacher educators and teacher education programs on both theoretical and practical levels. If preservice teachers' beliefs do not change, what would be the purpose in preservice teacher education? However, Darling-Hammond (2000) explains that a growing collection of empirical research evidences the influence of teacher education on teacher effectiveness. As we will see, teacher education is making a difference.

Cabaroglu \& Roberts (2000) offer three explanations for lack of belief change suggested by a number of studies. First, they assert that findings of inflexibility could stem from the consideration of teacher preparation programs as constants rather than variables. But not all teacher education programs are created equal. The tenacity of beliefs may say more about the program than it does about preservice teachers' belief systems. Second, there is the problem of group-level statistics. Individual variations within a group typically tend to cancel one another out, thereby giving the impression
that no change occurred when in fact, on an individual level, quite a lot of variation could have transpired. This was evident in Tillema (1998), which we will discuss later in this section. Finally, the meaning attributed to findings of "inflexibility" are varied. For example, the term could be used to signify a lack of dramatic change. "Inflexibility" could also indicate that a group in its entirety has failed to move in a single direction. Thus, flexibility would be veiled.

With this in mind, we will explore several studies evidencing belief change, and some that simultaneously show belief stability. Some of the studies are included for their relevance to the topic of language acquisition (Cabaroglu \& Roberts, 2000; MacDonald, et al. (2001). One is included because of its methodological parallel to this present study (Wilkins \& Brand, 2004). Others are addressed because they are such notable studies in beliefs research (Doyle, 1997; Nettle, 1998; Tillema, 1998).

First, the previously referenced Tillema (1998) study is a valuable example of how findings of stability of beliefs can be influenced by group data analysis. It involved a pedagogical beliefs inventory pretest and posttest administered to 124 first year preservice teacher education students. What is significant about this study is that at a group level, the pretest and posttest showed negligible difference. Yet, when Tillema looked at pretest and posttest differences for individuals, $72 \%$ of the participants showed belief change. This study evidences the challenge of group level statistical analysis for beliefs pretest and posttest design. Another pertinent point of interest is that among those evidencing change, the change did not necessarily parallel the course's intention.

Cabaroglu and Roberts (2000) included 20 preservice teachers in a 36 week teacher preparatory course. Data included three in-depth interviews as well as multiple
questionnaires. Cabaroglu and Roberts found 19 of the participants indicated belief change. Important to their findings are the significant variability of the content and degree of this change. They also emphasize the "cumulative and evolutionary" nature of belief change (Cabaroglu \& Roberts 2000, p.398). Employed within the study is their dynamic model of belief development including a variety of change process categories. Admittedly, this leads to a very broad definition of belief change.

Wilkins and Brand (2004) is one further study exploring the influence of a methods course on preservice teachers' beliefs. It involved a pre and post survey offered on the first day of class and at the end of the course. Wilkins and Brand found a shift in preservice teachers' beliefs toward a greater consistency with course instruction. They assert the value of teacher education for developing beliefs in preservice teachers that are consistent with sound pedagogy and current research.

Along with these, a variety of studies show that even though beliefs are tenacious, preservice teacher education has been successful in instigating belief change. Nettle (1998) questioned Kagan’s (1992) literature review which concluded that there is a lack of change in preservice teachers' beliefs. Nettle (1998) points to various studies that have called Kagan’s report into question (see Dunkin, 1995; Grossman, 1992). Nettle’s (1996) review of literature on student teachers’ belief change since Kagan’s study identified 20 studies, of which 18 indicated changes of belief and 15 found evidence of the stability of beliefs. Nettle proposes that based on the weaknesses of Kagan's study, and based on the findings of his own review of the literature, teacher beliefs are in fact both stable and changed through teacher education. He supports this with data from his own study on belief change and stability of 79 primary student teachers.

MacDonald, Badger, and White (2001) parallel Nettle (1998) in these findings of not only stability of beliefs, but simultaneous belief change. Their exploration of preservice teachers' beliefs involved the use of Lightbown and Spada’s (1999) questionnaire about language learning which they administered at the beginning and end of a course regarding second language acquisition (SLA). There was also a control group who completed the questionnaire but did not take the course. The control group did not show belief change, while preservice teachers who participated in the SLA course did show change regarding some SLA issues and did not show change regarding others.

A sub-group of preservice teachers are student teachers who are involved in student teaching. This is typically an extensive field experience that comes after coursework is completed at the end of a teacher education program. As we discussed earlier, beliefs are powerful because of their role in self-identity. This is particularly relevant for preservice student teachers because of the transformation that occurs in teacher education programs as preservice, and particularly student teachers’ viewpoints transition from that of a student to that of a teacher during their field experience (Cabaroglu \& Roberts, 2000; Doyle, 1997). As this occurs, preservice teachers have to deal with this transition of identity from 'self-as-student' to 'self-as-teacher.' (Cabaroglu \& Roberts, 2000, p.388) This transformation of identity ties closely to belief development.

Doyle (1997) looked specifically at belief change related to field experience for more than 300 teacher education students. Data included reflective journals, lesson plans, and pre and post field experience surveys. The study found field experience to be highly valuable to the change process, herein specifically influencing student teachers’
beliefs about teaching and learning. As the aforementioned studies evidence, teacher preparation courses as well as field experiences are integral to teacher education programs that are influential in belief formation for preservice teachers.

## English Language Learning and Teaching

This review has laid the foundation of a framework for beliefs, defining and exploring it extensively. Then it built upon that foundation in an exploration of teacher preparation in light of beliefs change and tenacity. Now, in narrowing the review of literature further, this exploration comes to the heart of the matter, looking specifically at the most relevant literature to the topic of preservice teachers' beliefs about English language learning and teaching in the mainstream classroom. First this review will lay the foundation of a conceptual framework regarding English language learners (ELLs). Then it will look at some studies addressing ELLs in light of teacher education. Because the body of research is so minute we will explore some studies that may not be perfectly relevant. For example, they may deal with inservice teachers instead of preservice teachers. Then there are a handful of highly relevant studies which will be explored.

## ELL Conceptual Framework

There is a "new 'norm'" in public school classrooms today where language, culture, and socio-economic diversity has replaced the traditional norm of Englishspeaking, White, and middle class (Commins \& Miramontes, 2006, p.240). A significant part of this new face in public classrooms is comprised of the linguistically diverse ELL population. Demographic transformation has led to drastic increases of ELLs in public schools over the last decade, thereby changing the face of mainstream classrooms and
creating a need for all teachers to be equipped to teach ELLs (Gersten, 1996; Menken \& Antunez, 2001; Nieto, 2002). As Jones explains, The majority of children who are in the process of learning English as a Second Language are actually in regular, mainstream, English only classrooms taught by monolingual classroom teachers, teachers who have not received any preparation for teaching English as a Second Language. (2002, p. 42)

A combination of social, political, and economic factors have resulted in less ESL and bilingual education opportunities, thus forcing ELLs into "regular", "general", "mainstream", "English-only" settings for part if not all of their school days. These terms are largely used in an interchangeable manner, typically without explicit definition in the literature. For the sake of clarity I will offer a brief explanation for the terminology that is clear in the literature. Penfield has defined the "regular classroom" as "a setting in which subject matter and literacy skills are taught entirely in English and the majority of the students are native speakers of English." (1987, p. 21) Furthermore, the term "English-only" is commonly used in reference to California's implementation of Proposition 227 effort to eliminate bilingual education (Necochea \& Cline, 2000). However, "mainstream" is the term most often employed and the one used in this present study. The term mainstream has been defined as "Classes designed for native or fluent speakers of English, in which no accommodations are made for ELLs." (NCELA)

## English Language Learners (ELLs)

ELLs include a sizeable and very diverse range of students (LaCelle-Peterson \& Rivera, 1994). Furthermore, they are the fastest growing population in our public schools
(Harper \& de Jong, 2004). ELLs are non-native English speaking students with limited proficiency in English. Some of them are native-born while others are foreign-born (Waggoner, 1993). They speak languages other than English at home and possess a different cultural heritage than mainstream students, and often other ELLs (LaCellePeterson \& Rivera, 1994; Waggoner, 1993). They may be involved in ESL or bilingual education, though with the elimination of many such opportunities, they are often mainstreamed (Waxman \& Padron, 2002). Because of the breadth of the spectrum of ELLs, they are defined broadly for the purposes of this study as "students whose first language is not English and who are in the process of learning English." (NCELA)

While ELLs may learn enough English to communicate in a short amount of time, it can take many years to gain a command of English that is normal for their grade level (Collier, 1989a; Cummins, 1981). Even after these students learn enough English to test out of these programs, the time it takes to develop academic English abilities comparable to native speakers takes much longer (Collier, 1987, 1989a; Collier \& Thomas, 1988; Cummins, 1982). As they enter mainstream classrooms, they still require language development assistance which they must receive from mainstream teachers. According to Harper and de Jong, "most ELLs spend the entire instructional day in mainstream classrooms." (2004, p.152; Menken \& Holmes, 2000) Therefore, it is critical and urgent that mainstream teachers be equipped to meet the needs and face the increased demands of teaching diverse students. Mainstream teachers actually make up a critical part of ESL and bilingual education (Evans, Arnot-Hopffer \& Jurich, 2005).

## Teachers of ELLs

There is a dichotomous trend in educational demographics in the United States today. The number of ELLs is increasing (Garcia, 1996; NCELA, 2004). However, the number of educators prepared to teach them is not (Menken \& Antunez, 2001; Garcia in Sikula, 1996). Furthermore, there is an increasing gap between students and teachers in terms of socio-economic status, race, and language background (Gomez, 1994; Sleeter, 2001; Terrill \& Mark, 2000). For the purpose of this study, what is significant about these differences is that they influence teachers' beliefs about ELLs in mainstream classrooms and beliefs about their role in teaching these ELLs.

Public school teachers in the United States are vastly White, female, middle class, and monolingual. As we explored earlier, these teachers' beliefs about learning and teaching are largely informed by their personal experiences as students in White, middle class environments. Those experiences very well may have never challenged their beliefs about ELLs or prepared them for working with ELLs. Yet about $56 \%$ currently teach at least one ELL (Waxman, Tellez, \& Walberg, 2006). It is not only ESL or bilingual teachers who are teaching ELLs. In fact, less than 20\% of teachers working with ELLs are certified in either area (Waxman, et al., 2006). The vast majority of educators are not qualified, either by certification or inservice training, to meet the needs of ELLs in their classrooms (Garcia, 1994; Menken \& Antunez, 2001; Penfield, 1987). Menken and Holmes (2000) report that $70 \%$ of those teaching ELLs have not had training to do so. For the purpose of this present study, a broad definition of ELL teachers is required since ESL, bilingual, and mainstream teachers are all responsible for ELL education.

## The Role of Teacher Preparation in Making Education More Effective for ELLs

## History of ELL Teacher Preparation

Beyond beginning bilingual education in the late 1960s, preparing teachers for ELLs was not even considered until the 1980s (Tellez \& Waxman, 2006). In 1990, Garcia (1990) drew attention to the poor teacher preparedness for ELLs. His report as well as other factors including increasing numbers of ELLs ushered in a number of new policies and programs in the 1990s that provided preparation for ELL instructors. Increasingly, coursework and field experiences are available in teacher education programs to prepare teachers for ELLs, but there is a long way to go. Present-day Teaching of ELLs

Sadly, those teaching ELLs still feel ill-equipped to meet their needs (Lewis, et al., 1999; Mercado, 2001). They feel this way rightfully since almost half of teachers with ELLs in their classes have had no education in methods for ELL instruction (Waxman, et al., 2006). Teacher education programs are going to have to change in order to meet the needs of this increasingly diverse demographic (Osterling \& Fox, 2004). Preparing all teachers to teach ELLs must become an intentional priority rather than a fringe concern (Commins \& Miramontes, 2006). It must not be just preservice ESL and bilingual teachers who receive high quality teacher preparation to work with ELLs (Jones, 2002).

## How We Prepare All Teachers

An essential part of this preparation is helping preservice teachers identify and reflect on their beliefs about linguistic differences. Mainstream teachers' beliefs can
impede integration of ELLs in mainstream classrooms, both socially as well as academically (Penfield, 1987). Thus, it is critical that these beliefs be addressed before teacher education students begin their careers as educators. This yields strong implications for teacher preparation programs.

In their suggestions for addressing linguistic diversity, Commins and Miramontes encourage, "Today’s teacher candidates should all have the kinds of experiences that will allow them to identify the set of beliefs and assumptions they hold about teaching and learning and about the children with whom they will interact." (2006, p. 241) and colleagues state this even more firmly when they express that "TE [teacher education] programs need to become the site at which TE students' preconceived beliefs about linguistically and culturally diverse pupils and practices are interrogated. Unfortunately, most TE programs have yet to respond to this need." (Costa, McPhail, Smith, and Brisk, 2005, p. 105)

The relevance of teacher education programs to today's diverse classroom depends on teacher educators who will create environments conducive to exploring, challenging, and developing beliefs. Teacher educators must get to know students’ incoming beliefs and engage them over time so that they have the opportunity to change. Increased relevance also requires the cooperation of the larger teacher education program working in unity to examine their program and make changes in the program as well as individual courses to intentionally better prepare preservice teachers for teaching ELLs (Costa, et al., 2005). Field experiences and student teaching experiences in diverse contexts is another step for teacher education programs to increase relevance (Waxman \& Padron, 2002). Osterling and Fox (2004) is a study we will explore later on that is an
example of an effort to update a multilingual/multicultural education course to increase its relevance to the increasing linguistic diversity preservice teachers will face in their teaching careers.

## Why Teacher Preparation Is Important for ELLs

Teacher preparation is valuable in that it improves quality of teachers for ELLs (Tellez \& Waxman, 2006). Inadequate teacher preparation is one of the primary reasons for ELL underperformance in educational contexts (Garcia, 1994; Jiminez \& Barrera, 2000; Padron, et al., 2002; Varghese \& Stritikus, 2005). One finding of Gandara and her colleagues’ (2005) research of California teachers was that teachers who received greater preparation for working with ELLs had more confidence that they were able to work successfully with ELLs. Yet many of these teachers had minimal or no teacher education for working with ELLs over the five years previous to the study (Gandara, et al., 2005).

Teacher preparation for diversity is also important for program accreditation. The National Council for Accreditation of Teacher Education (NCATE) has emphasized the importance of preservice teacher preparation for linguistic and cultural diversity by including a Standard for Diversity as one of its six standards required of teacher education programs (2001). In many teacher education programs, this takes shape as a multicultural education course. However, some teacher preparation programs are specifically addressing issues of linguistic diversity (Jones, 2002).

Another reason teacher preparation for ELLs is so critical is the increasing linguistic diversity in mainstream classrooms. There cannot be the great disparity between generalists and specialists because all teachers increasingly play critical roles in

ELL instruction. Nieto eloquently depicts the reality of classrooms in public schools today and in the future when she explains:

There has often been a wide-spread assumption that language minority students are the responsibility of specialists such as ESL and bilingual teachers, and perhaps after leaving the program, of special education teachers. But we can no longer delude ourselves that this is the case. Language minority children and young people are found, or soon will be found, in almost every classroom around the country. As a result, all teachers of all backgrounds who teach in all schools need to be adequately prepared to teach them. Hence, I suggest that teachers need to develop competence in specific subject matters and, even more significantly, in the attitudes and values they have concerning young people of language minority backgrounds. (2002, p. 205)

Such a new reality requires changes on the part of educators and teacher educators. Teacher educators can help preservice ESL and bilingual teachers learn the value and necessity of collaborating together to serve ELLs more effectively (Sakash \& Rodriquez-Brown, 1995). Such collaboration is one of the suggestions encouraged by Meskill and Chen (2002) and Clair (1993) among others. Mainstream teachers could benefit immensely from the resource of ESL and bilingual teachers. Yet without appropriate preparation, illusions of division of responsibility will continue to interfere with such collaboration (Evans, et al., 2005).

## Research Regarding Teacher Education and English Language Learning and

## Teaching

## Moving ELL Issues to the Forefront of Teacher Education

Because literature on the influence of teacher education on belief change is scant with regards to preservice mainstream teachers of ELLs, we will cast with a broad net to include a few of the more recent studies that deal with the influence of teacher education on belief change in multicultural education courses. Multicultural education is relevant to ELLs because it focuses on diversity issues which include language diversity.

Osterling and Fox (2004) as well as Costa, McPhail, Smith, and Brisk (2005) both attest to the increasing cultural and linguistic diversity in mainstream US classrooms. They assert that this change demands a critical review of teacher education programs so that teacher preparation can be modified in such a way as to prepare future teachers to meet the needs of the diverse population. Theirs are very different studies with a very similar premise. This review will look at each in turn.

Osterling and Fox's (2004) action research study was intended to inform the updating of a graduate teacher education course. Qualitative data included in-class dialogues, electronic postings, interviews, student assignments, and observations of 28 students collected over a semester-long course. Based on their experiences in the course, they suggest the value of cross-cultural faculty teams teaching courses together. Like other studies we have reviewed, they encourage offering students opportunities for selfinquiry and reflection. They also underscore the value of a dialogic approach, culturally sensitive instruction as well as assessment, and active use of online technology.

Costa and colleagues'(2005) endeavor looks at changing the broader teacher education program rather than one specific course as did Osterling and Fox. With a view of program transformation, this teacher education faculty participated in an institute on ELLs so that they could better prepare preservice teachers for the linguistic and cultural diversity that is a reality in $21^{\text {st }}$ century classrooms. This institute was the first step for the integration of language diversity issues throughout education courses, moving away from the typical designation of such concerns to a specific language or multicultural education course. This institute instigated change on both personal and program levels. Participants including teacher educators, other educators, and graduate students were able to reflect on their own beliefs and biases and were able to learn new information about ELLs. Participants also implemented changes to course syllabi as well as their approaches to teaching about ELLs, which impacted the broader program curriculum. This study is valuable in that it demonstrates an important step that may need to come in advance of teacher educators being able to adequately prepare preservice teachers to serve effectively in diverse classrooms.

One of the most relevant studies of teacher education and ELL concerns involves a project called Training All Teachers. University faculty, inservice teachers, and graduate students all participated in Meskill \& Chen’s (2002) effort to influence teacher beliefs with regards to ELL issues. Meskill \& Chen report a variety of common myths regarding ELLs and language. For example, many in the United States believe in the superiority of the English language and the inferiority of other languages. Some assert that native languages are a handicap to English language learning. Such beliefs transfer to a more personal level where ELLs are perceived to have a deficit. Furthermore, ELLs
and their families may be treated more negatively as such deficit thinking caries over to interpersonal contact. The training in Meskill and Chen's study was designed to confront such myths. Meskill and Chen beautifully articulate the danger of such myths as they warn,

Children will continue to be left behind if the deficit camp continues this and similar campaigns of underscoring difference as deficit rather than difference as asset and will consequently perpetuate the kind of societal misconceptions that undermine supportive educational contexts for English language learners. (p. 9) Teacher education possesses a powerful role in avoiding this failure, as Meskill and Chen's research revealed. A questionnaire administered at the end of the training evidenced increased awareness of ELL issues and positive belief change among participants.

## Inservice and Preservice Teachers' Beliefs Regarding English Language Learning and Teaching

There are several different dimensions to the research literature regarding preservice teachers' beliefs about English learning and teaching in mainstream classrooms. At this point we will explore a number of the most pertinent studies that deal with inservice and preservice teachers' beliefs regarding English language learning and teaching. Then we will finally reach the very most relevant studies that also focus on preservice teachers working with ELLs in mainstream classrooms.

The following studies span the academic disciplines and settings and vary from small to very large studies. They are quite relevant to the premise of this review of
literature because of the insights they give into teachers' beliefs about teaching ELLs. Nierstheimer, Hopkins, and Schmitt conducted a two-phase study about which they published in 1996. Then Nierstheimer, Hopkins, Dillon and Schmitt offered a follow-up publication in 2000. The 1996 study sought to explore preservice teachers' beliefs about "teaching children at risk of failing to learn to read." (p.18) Because of the overlap between this population and ELLs, this study is included herein. Nierstheimer and colleagues’ (1996) qualitative study included 67 preservice teachers in a reading methods course over a three-semester time period. This qualitative study included an open-ended questionnaire administered on the first day of class and formal interviews, which were both analyzed by means of within-case and cross-case analyses.

In their 1996 study, Nierstheimer, Hopkins, and Schmitt found these preservice teachers believed that children's reading problems stemmed from causes outside of school such as problems inherent to the child or parent/home situations. Furthermore, these preservice teachers did not see it as their responsibility to help these students when they themselves became classroom teachers. They expected parents or specialists to take that responsibility. Nierstheimer and colleagues key in on the relevance of these findings when she explains, "this study has far-reaching implications for teacher education because it relates to an already common concern that practicing teachers abrogate responsibility for teaching the hardest-to-teach children to specialist teachers." (p. 22) She therefore admonishes teacher educators to be aware of such beliefs so that they may offer experiences and activities that will help develop preservice teachers develop more accurate and appropriate beliefs about learning and teaching.

The second phase of this study by Nierstheimer, Hopkins, Dillon and Schmitt (2000) explored the same preservice teachers' belief change regarding struggling literacy learners throughout the same teacher preparation course. Yet a significant variable in this particular part of the study included experiences with Reading Recovery. The participants were involved in a 12 week practicum program of tutoring and assessing struggling readers. Data included pre and post course questionnaires as well as interviews, small-group discussions, observations, and student artifacts. Within-case and cross-case analyses were again used to analyze the data. The major finding of the study was a change of belief in preservice teachers toward accepting responsibility for helping students who were struggling with learning to read. Their beliefs about literacy teaching and learning demonstrated change. This evidences that the right kind of interventions can be effective in impacting preservice teachers' beliefs, which will ultimately influence their practice as classroom teachers.

Such change in belief and practice was also evident in Lee's (2004) exploration into inservice bilingual teachers. His is a study of cultural congruence where Hispanic teachers taught Hispanic students in culturally relevant ways. One common struggle for teachers of ELLs in mainstream classrooms is how to teach both English literacy and subject content knowledge at the same time. This same struggle is evident in Lees’ study as teachers face the combined responsibility of literacy and science instruction with ELLs. Over the course of this three-year study, teachers experienced changes of belief as well as practice through a reflective and generative process. Furthermore, they came to see that for their ELLs, language and literacy development was part and parcel with content area instruction. Along those same lines, Gandara and her colleagues’ (2005)
study also found inservice teachers struggle with the simultaneous responsibility of teaching both language and subject matter to ELLs.

One further current study we will review regarding inservice teachers beliefs about ELLs was conducted by Karabenick and Noda (2004). This was a large quantitative study of 729 teachers in a school district with high numbers of ELLs. This study was initiated by the school district due to recent influx of ELLs into mainstream classrooms and lack of sufficient funding to provide sufficient ESL and bilingual staff. The district believed it to be a more affordable solution to meet the needs of ELLs by providing inservice education to all of the district's teachers. The study found generally favorable attitudes toward ELLs, though a highly substantial number of teachers evidenced negative attitudes as well. The study revealed an information gap and widespread need for professional development regarding ELL issues. Beliefs uncovered by the study were used to inform later professional development sessions toward instruction regarding ELL issues such as second language acquisition and academic achievement.

Both preservice teachers, as in the Nierstheimer studies (1996 and 2000), and inservice teachers', as in Lee's (2004), and Karabenick and Noda’s (2004) research divulge the current necessity of exploration and correction of teachers' beliefs regarding English language learning and teaching. This evidence of misinformed beliefs is recurring in studies to be explored in the next section as well.

## Inservice and Preservice Teachers’ Beliefs Regarding English Language Learning and Teaching in Mainstream Classrooms

The most relevant research explores issues of inservice and preservice teachers' beliefs regarding ELLs in mainstream classrooms. We will begin by exploring two qualitative studies of inservice teachers. Then we will finish with an exploration of four other research studies of preservice teachers that employ both qualitative and quantitative approaches.

Over the course of a year, Clair studied three mainstream teachers who had ELLs in their classes. The data collected in these case studies came from interviews, observations, and journals. Among her findings and the implications of her research, several things stand out in their relevance to this review of literature. Her 1993 report on the study emphasized the need for collaboration between ESL and mainstream teachers. Clair also called for increased research on teacher beliefs and behavior, and for preservice teacher preparation which can treat those beliefs.

The emphasis in Clair's 1995 article about the same research shifts to look at the study in terms of these mainstream teachers' need for professional development with regard to ESL students. Clair uncovered two significant problems, both of which are relevant to this literature review. First was the problem of a desire for quick fixes such as instructional ideas and materials. Clair asserts that this belief in the value of quick fixes stems from teacher education that creates curriculum implementers rather than constructors of learning. Second, and highly relevant, is the problem of inaccurate beliefs regarding second language acquisition. Clair emphasizes the danger of participants’
belief that "good teaching is good teaching." (1993, p.192-193) This belief minimizes the social and academic challenges of ELL integration, overlooks how people differ in second language acquisition, and devalues specialized knowledge regarding ELL issues.

As Clair did, Penfield (1987) also conducted a qualitative study of mainstream (regular) inservice teachers’ beliefs about ELL issues. Penfield included in her study data collected from an open-ended questionnaire to 162 mainstream teachers teaching ELLs who lacked any ESL training. She sought specifically to ascertain their implicit beliefs regarding ELLs and ESL teachers. Clair and Penfield largely overlap in their findings including their recognition of the need for collaboration between ESL and bilingual teachers with mainstream instructors. Penfield spells this out by calling for ESL teachers not only to help mainstream teachers through cooperation and collaboration, but also to train mainstream teachers in service workshops. Both Clair and Penfield also emphasize the need for mainstream teachers to receive training in teaching ELLs.

The final four studies we will explore continue to deal with mainstream educators' beliefs regarding ELL issues, but they shift from exploring inservice to preservice teachers. Thus, the implications are stronger for teacher preparation programs rather than inservice teacher education.

As was discussed earlier in our exploration of why teacher preparation is so important for ELLs, one of the National Council for Accreditation of Teacher Education (NCATE) standards required for teacher education programs is diversity. Inherent in this standard is the goal that teacher candidates be equipped to help all children learn (NCATE, 2000). One of NCATE's suggestions for readying these preservice teachers calls for field experiences for that will allow them to work with diverse populations.

Both Marx (2000) and Hadaway (1993) conducted studies dealing with that very suggestion.

Hadaway (1993) recognized that the location of the teacher preparation program in which she taught limited the opportunities her students had for diversity in their field experiences. Thus, she developed a letter exchange experience for her students. Hadaway's study included 30 preservice teachers in the fall semester and 35 in the spring semester. Unfortunately, Hadaway gives minimal insight into her methodology and instruments. It is not evident whether the instruments used are of a qualitative or quantitative nature.

A survey she administered before the experiment began revealed that the preservice teachers had extremely limited experiences with linguistic diversity in terms of working with non-native English speakers, speaking other languages themselves, or traveling or living outside of the state or internationally. She randomly matched these preservice teachers with ELL pen pals with whom they corresponded throughout a semester. At the end of the semester, Hadaway administered a post-survey and also gave opportunity for reflection on their learning and experiences in the experience. The two surveys along with the correspondence demonstrated an increased understanding of diverse populations as well as a positive change in preservice teachers' attitudes toward working with ELLs.

Like Hadaway's (1993) study, Marx (2000) also underscores field experience in a teacher preparation methods course. In Marx's study, preservice teachers tutored ESL students over the course of a semester. Her intention was to expose preservice teachers’ beliefs about their ESL students. Fourteen participants in the course agreed to interview
with Marx regarding their experiences. This study had a variety of limitations, however, its findings are worth noting. Marx concluded that preservice teachers who were White held substantially lower expectations than did Hispanic preservice teachers for their tutees. Deficit thinking was characteristic of White tutors who could not relate to tutees academic, social and language backgrounds and therefore ruled Hispanic culture to be a detrimental factor. Marx goes a step further than Hadaway in her insistence that field experience must be connected with interaction of a teacher educator who will challenge preservice teacher beliefs and offer opportunities for discussion and reflection.

One of the most substantial studies of preservice teachers' beliefs about English language learning includes Jones (2002) mixed methods study of 91 preservice teachers in an Educational Foundations course. She administered a survey of belief statements regarding language acquisition and preservice teachers rated them according to a Likert scale. There was also a qualitative dimension to the study based on preservice teachers' previous experiences with ELLs. Jones examined preservice teachers' reported beliefs in light of their reported experiences. Her findings were more positive than she expected as the majority of participants reported previous experience working with ELLs and were generally in alignment with research regarding key bilingual/ESL education concepts. A pattern of the study was that those with experiences working with ELLs had stronger opinions and greater alignment of their beliefs with research than those without such experience. The more their experiences involved direct one-on-one interaction with ELLs, the greater the degree of alignment.

Jones’ findings suggest that field work with ELLs is influential and helpful for preservice teachers. She, like Marx, emphasizes the need to offer preservice teachers
guidance and opportunities for reflection during their field experiences so as to maximize their learning and belief development. Jones recognized the identification of these preservice teachers' beliefs to be foundational to meeting their teacher preparation needs regarding ELLs.

In one final study, we will look at the adaptation of a teacher preparation program. This adaptation was necessitated by practicalities of scheduling concerns for a group of preservice teachers. Yet it proved to be an experiment in increasing the effectiveness of preservice mainstream educators for their future role in teaching ELLs. Recognizing the diversity pervasive in mainstream classrooms, Evans, Arnot-Hopffer, and Jurich (2005) seized upon the opportunity of combining the mainstream preservice teachers with bilingual preservice teachers. Participants included 10 bilingual education students and 18 mainstream education students who chose to participate in the semester-long, combined block. The data collected in this qualitative study includes course syllabi, field notes, observations, and students' written reflections and were analyzed according to the constant comparative method.

Evans and her colleagues found that the two individual groups did come together to form a community of linguistically and culturally diverse students. They experienced tension and struggle, yet Evans and colleagues found mainstream preservice teachers to be open and interested in bilingual education, and the overall experience to be a positive one. While mainstream preservice teachers benefited greatly from more exposure to education regarding teaching ELLs and challenges to their cultural beliefs, issues such as language differences required that the program be diluted some from what preservice bilingual teachers would generally experience. Thus, while there is a clear value to
having the two separate programs, this study underscores the value of combining the students more frequently, and earlier in their teacher preparation programs to better prepare all preservice teachers for teaching ELLs that will be in their classrooms.

## Summary of Chapter

In their review of research, Brookhart and Freeman explain that one of the major criticism of research regarding preservice teachers, their beliefs, and teacher education is that it has largely been atheoretical and ahistorical (1992). As a result of these weaknesses, this review has sought to be thorough, mindful of theory, and inclusive of history.

Though a wide scale adoption of a definition of beliefs has largely resisted a consistent definition, this review has sought to define the term and clarify the concept of beliefs in relation to knowledge and attitudes. Beliefs have been described in terms of their role as filters for knowledge acquisition and predictors of behavior. They vary in strength, with peripheral beliefs being less influential and more flexible, and central beliefs being more powerful and incontrovertible.

Research demonstrates that preservice teachers enter teacher education programs with a diverse range of well-developed beliefs. These are often based on personal history and cultural beliefs. The implicit nature of these beliefs requires making them explicit, both for preservice teachers to recognize and confront them and for teacher educators to be aware of them so they can address them accordingly. Research has shown that beliefs can be highly resistant to change, depending on their level of connectivity to other
beliefs. Yet, much research has demonstrated that beliefs can change. This finding has powerful implications for the role of teacher preparation.

Some steps that have been found to instigate belief change include making beliefs explicit, illustrating the flaws of the belief, and allowing for experiences and information to replace or reform adverse beliefs. Other research has found that experiences in second language learning, educational influences, personal experiences with persons of diverse cultures, personal experiences of being discriminated against, and travel experiences all function as agents of belief change.

Belief change is important among preservice teachers because of the cultural and linguistic gap between them and their future students. As demographic data reflects, our public school classrooms are experiencing a dichotomous transformation. Teachers are increasingly White, middle class, and monolingual while their students are increasingly children of color who come from a variety of linguistic and cultural backgrounds. What they believe about children who differ from them will impact classroom practice, including how they interact with, and their expectations of diverse learners. This ultimately impacts such students' success or failure.

Preservice teachers' beliefs are also important to teacher preparation in that those beliefs determine how preservice teachers hear the information presented to them in their education courses. Awareness of preservice teachers’ biographical backgrounds and their subsequent beliefs has been demonstrated in the research to empower teacher educators to more effectively instruct preservice teachers. Research has shown that such awareness increases effectiveness in designing courses that more effectually address problematic beliefs and instigate belief change.

The proven tenacity of beliefs makes efforts at belief change a significant undertaking in teacher education. Researchers have offered a variety of explanations for lack of belief change in preservice teachers. These include inconsistent or misperceived messages of teacher preparation programs, or programs that are not explicitly designed to elicit and address preservice teachers' beliefs. Courses that do not create sufficient cognitive disequilibrium may not elicit belief change. Researchers have also addressed explanations for research findings of no change. These include failure to recognize the variability of teacher preparation programs, thereby considering them as constants rather than variables. Another factor is how lack of belief change is defined. Furthermore, group level statistics can hide evidence of individual change of beliefs.

Demographic data indicates that a transformation has changed the face of mainstream classrooms and magnified the need for all teachers to be equipped to teach ELLs. A variety of studies have described the diverse body of ELLs who are so increasingly prevalent in mainstream classrooms. ELLs are "students whose first language is not English and who are in the process of learning English." (NCELA) This involves a sizeable and very diverse range of students. They comprise the fastest growing population in our public schools. Some are native-born while others are foreignborn and they come from a variety of cultural heritages, but they all are non-native English speakers who speak languages other than English at home. Some ELLs may be involved in ESL or bilingual education, while many are mainstreamed. They may learn enough English to communicate in a short amount of time, but take much longer to develop academic English abilities comparable to native speakers.

Teachers of ELLs include ESL, bilingual, as well as mainstream teachers.

They are predominantly White, female, middle class, and monolingual. Research indicates that the vast majority of mainstream teachers not only feel ill-equipped to meet ELL needs, but they in fact are not qualified, either by certification or inservice training. This means that teacher education programs must change to meet needs of diverse demographic by making ELL issues an intentional priority rather than fringe concern and by preparing all teachers to teach ELLs.

So how do teacher preparation programs adapt to meet the needs of ELLs and preservice teacher? Research offers some suggestions. First, teacher educators must gain an awareness of students' beliefs about linguistic differences. Teacher educators must also help preservice teachers identify and reflect on their beliefs about linguistic differences. Furthermore, the larger teacher education program must work together to improve individual courses as well as implement program-wide changes. One of these program-wide changes needs to include the offering of field experiences and student teaching experiences in diverse contexts.

The research also evidences why teacher preparation is so critical to ELL issues. Inadequate teacher preparation is one of the primary reasons for ELL underperformance. However, research also shows that teacher preparation increases teacher confidence and improves ELL teacher quality. Such preparation is critical since increasingly blurred lines between generalists and specialists cause all teachers play critical roles in ELL instruction. Teacher preparation is also valuable in helping preservice mainstream, ESL, and bilingual teachers learn to collaborate. Furthermore, The National Council for Accreditation of Teacher Education has implemented a standard for diversity that requires teacher preparation programs to make teacher preparation for diversity a priority.

A few recent studies have begun to call for intentional efforts by teacher preparation programs to move ELL issues to the forefront of teacher education by implementing change in individual courses as well as the broader teacher education programs. These studies are few and small, but they are new studies and their very existence gives hope that this is increasingly an area of importance to education research.

This lack of research is not surprising. In fact, there is a tremendous gap in the literature exploring preservice teachers' beliefs about English language learning and teaching in mainstream classrooms. Because of the ephemeral body of research on the topic, this review has had to cast a wide net. Such breadth has led to the inclusion of studies of preservice as well as inservice teachers, and research that is not directly related to mainstream classrooms. It also underscores the need for further research.

Never was there such an appropriate time in the history of education for research regarding preservice teacher beliefs as they relate to ELLs. In the present study, I attempt to involve a larger number of participants than are included in most research on the topic. Most of the available studies involve relatively small numbers of participants. The research included in this review involves a variety of qualitative, quantitative, and mixed methodologies. The present study will include mixing methodologies for a more inclusive and strong body of findings than previous studies have offered. Furthermore, the present study will be valuable to filling a void by extending the existing body of presevice teacher beliefs research to include ELL issues. It will also contribute to the research base that informs teacher preparation programs for preparing preservice teachers of ELLs.

## CHAPTER III

## RESEARCH METHODOLOGY

This chapter will address the methods used to study mainstream preservice teachers' beliefs about English language learning and teaching. It begins with an explanation of the mixed methods design of this study. Then the chapter goes on to include what the researcher has done in selecting participants and developing research instruments for this present study. The chapter details how the instruments were used and how the research was conducted. Furthermore, the chapter also addresses approaches that will be employed for data analysis.

## Design of Study

## Defining Mixed Methods Research

Mixed methods is a relatively new approach to research. It is still in its formative years and scholars do not wholly agree on a variety of the key issues in the field (Tashakkori \& Teddlie, 2003). Because of its newness, it is essential to detail some definitions that are important to the investigation at hand.

Generally, scholars agree that mixed methods is combining quantitative and qualitative measures in a single study. This, however, is just one part of how scholars define mixed method research. Mixed-method inquiry can take a variety of forms and can differ from traditional quantitative and qualitative methods slightly or drastically (Greene, 2001). Seemingly, the definitions vary as much as the designs. For the purpose of this study, mixed method research is defined according to Creswell, and colleagues
(2003) as research that "involves the collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research." (p.212)

## Mixed Method Research Design

Over the years a variety of scholars in several different disciplines have attempted to organize the various models for mixed method research according to specific classifications. Creswell, Clark, Gutmann, and Hanson (2003) developed an outline of designs which is directly applicable and most recent in terms of the discipline of educational research. They identify six basic designs for mixed methods research including the sequential explanatory design, sequential exploratory design, sequential transformative design, concurrent triangulation, concurrent nested design, and the concurrent transformative design.

The concurrent nested design simultaneously implements quantitative and qualitative measures (Creswell, et al., 2003). As seen in Figure 1, the nested design has a clearly primary method directing the study with a secondary method embedded in it. It is in the analysis phase that the data are mixed. This design could be useful in a variety of ways. For example, the secondary method is used to add broader perspective than what a quantitative or qualitative approach alone could offer. Sometimes the secondary method can enlighten a dimension of the study that is not explainable by the predominant approach. Concurrent nested design is also useful for occasions that call for the use of different methods for different groups of participants or levels of inquiry. The figure
included to illustrate the design comes from Creswell, Clark, Gutmann, \& Hanson (2003).


Figure 1. Concurrent Nested Design

## Summary of Mixed Methods and the Present Study

The nature of the present research interest does not fall easily into a strict positivist or naturalist paradigm. It is a complex social and cultural topic that calls for a mixed methods approach to the study of pre-service teachers' beliefs about English language learning and teaching. The research questions propelling the present study have roots in both quantitative and qualitative worldviews as they inquire about both what preservice teachers believe and how they developed those beliefs.

There are several advantages to mixing methods in this study. First, the study involved the use of a self-report survey. Triangulation through interviews and a questionnaire increased the validity of such a survey. Complementarity is a benefit to this mixed methods study as the survey, questionnaire, and interviews overcome the
weakness of any one approach and offer variety of strengths. These varied approaches are included in order to "elaborate, enhance, illustrate, or clarify one another." (Greene, 2001, p. 253) Another purpose for the use of mixed methods is research development. The researcher conducted interviews to inform the survey she created. Furthermore, the use of mixed methods allowed access to a broader range of tools that facilitate the accomplishment of the dual goals of discovering not only what pre-service teachers believe, but also the variables influencing those beliefs.

Employing the "concurrent nested" design, the researcher began with several quantitative instruments and selected from them and adapted them based on qualitative interviews (Creswell, et. al, 2003). The resulting quantitative survey was implemented simultaneously with a qualitative questionnaire. Qualitative interviews were conducted with specific participants based on the results of the post-survey. Interviews also allowed a deeper level of inquiry. This design allows the qualitative to enlighten the quantitative approach.

## Research Questions

1. What beliefs do preservice teachers at Texas A\&M University hold regarding second language learning and teaching before ESL coursework?
2. Do preservice teachers' pre-existing beliefs about second language learning and teaching change after ESL coursework?
3. What variables influence these preservice teachers' beliefs about English language learning and teaching?

## Participants

Participants in this study include 354 preservice teachers in the College of Education and Human Development at Texas A\&M University in College Station, Texas. This land grant university is situated in a city of approximately 130,000 in a rural area and has a student population of around 47,000 (Aggie Athletics). The school has traditionally attracted students interested in agriculture and engineering. Students come from every state in the United States and 100 foreign countries (TAMU Electronic Undergraduate Catalog, College of Education and Human Resource Development, 20042005). The institution has been classified by the Carnegie Foundation as a Research I institution.

In spite of the representation of many countries, the university does not have a large percentage of internationals. Petersons explains that international students make up only $1 \%$ of the student body and about $80 \%$ are Anglo-American (Peterson's). The undergraduate education department echoes this lack of diversity. The vast majority of the participants were homogenous in their demographic and experiential backgrounds. Specifically, 90.5\%, identified themselves as being from an Anglo-White ethnic background. Ninety-five percent were female. The vast majority of the participating preservice teachers (65.4\%) indicated that they were seeking pre-K-4 ${ }^{\text {th }}$ grade certification. Thirty percent of the participants indicated that they were seeking middle grades certification. The remaining 5\% indicated their pursuit of secondary or Special Education certification or a combination of certifications.

These participants had been previously admitted to the College of Education and Human Development. This College was established in 1969. It includes almost

4000 undergraduate and about 1200 graduate students. The College is accredited by the National Council for Accreditation of Teacher Education (NCATE). It offers a variety of degrees including B.S., M.Ed, M.S., Ed.D, and Ph.D. The participants in this study were typically seeking a B.S. degree with a major in Interdisciplinary Studies in the teacher education program. Options for teacher certification through this department include pre-K-4 ${ }^{\text {th }}$ grade generalist certification, middle grades 4-8 math/science certification, and middle grades 4-8 language arts/social studies certification.

Participants were selected due to the fact that they were enrolled in the teacher education program ESL methods course titled 'Second Language Instruction and Assessment' and/or the course 'Assessment of English Language Learners' during the fall of 2006 or spring of 2007 and had not previously completed either of these courses. This present study included members of all sections of these ESL methods courses in the fall semester of 2006 and spring semester of 2007 who were in attendance on the first day of class as well as the follow up day during the end of the semester when post-data was collected again. Though the courses are typically taken in succession, some participants were taking both ESL methods courses simultaneously. 'Second Language Instruction and Assessment'is required for all three of the BS degree plans in Interdisciplinary Studies. 'Assessment of English Language Learners' is required for two of those three. Those who had participated in the fall and were in an ESL methods course again in the spring were asked to not participate the second time.
'Second Language Instruction and Assessment', is a required course in their teacher preparation program. It is described in the student handbook as exploring "Techniques and methods of intensive English instruction for LEP students: lesson
planning and instructional modification; use of instructional strategies and appropriate assessment practices." (TAMU Electronic Undergraduate Catalog, Interdisciplinary Studies, 2004-2005). The course focuses on how to instruct ELLs in the mainstream classroom. Students learn ways to modify lessons to help the ELLs that they will teach. Some instructors pair their students with an ELL during the semester or partner the students with classes in local schools, and some do not. The prerequisite for taking the course is admission to the teacher education program.
'Assessment of English Language Learners’, is also a required course for two of the three BS degree plans in Interdisciplinary Studies. It is described in the student handbook as teaching "theoretical and practical aspects of ESL/EFL testing, including formal and informal assessment, procedure and instruments, assessments and referral, and processes of ESL with special needs and gifted ESL learners." (TAMU Electronic Undergraduate Catalog, Interdisciplinary Studies, 2004-2005). The course builds on 'Second Language Instruction and Assessment', focusing on documentation and assessment procedures in ELL instruction. Students learn how to document growth of ELLs' academic performance by learning to design and use rubrics, portfolios, and personal anecdotes. The recommended prerequisites for the course are 'Introduction to Multicultural Education’, and 'Second Language Instruction and Assessment’, though this is loosely enforced.

Participants in these ESL methods courses are typically junior level students. These participants were targeted for the present study because of their intent to teach in mainstream classrooms. They were also targeted because of the desire to investigate the impact that the ESL methods courses on their beliefs about English language learning and
teaching. These beliefs that they bring to teacher education courses are important to their teacher preparation experience as well as their future classroom behaviors.

Another group that should be recognized includes the ESL methods course instructors who allowed their students to participate in the study. There were seven course instructors. Four of the seven were non-native English speaking teachers (NNESTs).

## Instrumentation

Questions were selected from Horwitz's (1985) 27-item Likert-scale Beliefs About Language Learning Inventory (BALLI), Savignon’s (1976) 53-item Likert-scale Foreign Language Attitude Survey (FLAS), and Lightbown and Spada’s (1999) 10-item Likert-scale survey of popular ideas about language learning. The questions which were selected were included because of their dual applicability to both language teachers as well as mainstream educators. Questions were adapted to make them more relevant to mainstream teachers and new questions were created.

The next step was to interview various instructors of the ESL methods courses. The purpose of these interviews was to gain insight so as to increase the relevance of the instruments for the population that would participate in the study. These semi-structured interviews were guided by four main questions:

1. What preconceptions do pre-service teachers come to these classes with?
2. Do you notice any particular preconceptions regarding English language learners
(ELLs), English as a Second Language, or English language learning?
3. What are pre-service teachers' beliefs about having ELLs in their classes?
4. What are pre-service teachers beliefs about whose responsibility it is to teach English to ELLs?

To further increase insight into the sample, coursework was studied from ESL methods students. Such "documents" in qualitative research may include a broad variety of written records and provide a valuable source of evidence in qualitative inquiry. (Erlandson, Harris, Skipper, \& Allen, 1993, p.99) The documents explored included end-of-semester portfolios from an ESL methods class. These portfolios included a collection of various coursework, including journal entries about preservice teachers' experiences in tutoring ELLs. Based on the interviews with the instructors and these findings from my exploration of students' coursework, instruments were adapted further.

The resulting scale was a Second Language Learning Survey that included 20 Likert-scale items. The Likert scale choices ranged from 1 (strongly disagree) to 6 (strongly agree). In order to avoid a response set, some questions were worded negatively. The possible range of scores on this survey ranged from 13-78. Negative items were reverse keyed to reflect a degree of positivity or negativity toward ELLs and languages other than English. Scores of 0-3.0 generally indicated an intolerance and negativity toward ELLs and languages other than English. Scores of 3.1-6.0 suggested more positive beliefs.

The second instrument used in the study was the Background Questionnaire that included 13 questions regarding relevant variables about the participants' backgrounds. It was administered with the Second Language Learning Survey at the beginning of the semester. The questions were either yes/no, multiple choice, or required a short answer. (See appendix 2.)

The third instrument, the Follow-up Questionnaire, was administered with the Second Language Learning Survey at the end of the semester. This document was created to explore issues that could not be addressed until the end of the as well as demographic information. Table 2 concisely depicts the composition and nature of the three instruments.

The first two instruments were piloted with a small group of ESL methods summer school students in July of 2006. This group was selected because of its similarity with the future participants in the proposed study. Eight students voluntarily completed both the survey and the background questionnaire. Then they gave feedback to improve the instruments.

The participants' feedback pointed out unfamiliar terms, unclear formatting, and unclear questions. In order to be able to make arrangements for the administration of the instruments, the researcher timed the students and found that it generally took just under 10 minutes to complete the English Language Learning Survey and the Background Questionnaire. Instruments were adapted based on the information elicited from the pilot study.

## Table 2

## Composition and Nature of Instruments

| Instrument | Number and Description of Items | Description of Instruments | Date of Administration |
| :---: | :---: | :---: | :---: |
| Second <br> Language <br> Learning <br> Survey | 20 Likert-scale items range from 1 (strongly disagree) to 6 (strongly agree). | Researcher-constructed survey given to pre-service teachers in ESL methods classes <br> Instrument explores beliefs about English language learning | Fall <br> --August, 2006 <br> --November, 2006 <br> Spring <br> --January, 2007 <br> --April, 2007 <br> Administered at both beginning and end of course |
| Background Questionnaire | Thirteen yes/no, fill-in-the-blank, and multiple choice items. | Researcher-constructed questionnaire given to preservice teachers in ESL methods classes <br> Explores previous experiences including coursework, international travel, exposure to foreign languages and culturally diverse persons | Fall <br> --August, 2006 <br> Spring <br> --January, 2007 <br> Administered once at the beginning of the course |
| Follow-up Questionnaire | Nine multiple choice and short answer items. | Researcher-constructed questionnaire given to preservice teachers at the end of their ESL methods classes <br> Explores demographics, experiences within the ESL methods course in which participants completed the instrument, and future career plans | Fall <br> --November, 2006 <br> Spring <br> --April, 2007 <br> Administered once at the end of the course |
| Focus Group Interview | 7 questions facilitated by researcher | Researcher-constructed questions employed by researcher to facilitate discussion between participants <br> Explores beliefs and belief change as a result of ESL coursework | Fall <br> --November, 2006 <br> Spring <br> --April, 2007 <br> Administered once at the end of the course |

## Factor Analysis

After a pilot study, 20 items were retained. The decision to retain these items was made based on their face and content validity. Unclear items were dismissed. Given that items belonged to different conceptual constructs including beliefs about ELLs, language and language learning, and the responsibility for teaching ELLs, a factor analysis was conducted to determine the cluster of items that seemed to correspond to the different concepts.

The clustering of the 20 items was evaluated by means of a principal components factor analysis (PCA) with a Varimax rotation using SPSS Version 14.0. The suitability of data for factor analysis was assessed before applying PCA. This analysis involved a sample of 354 participants in the fall of 2006 and spring of 2007. The correlation matrix evidenced a variety of coefficients of .3 and above, indicating the data's suitability for factor analysis.

## Reliability and Validity

The reliability of the Likert-scale questions on the fall and spring pretest Language Learning Survey was evaluated according to the three components established through the aforementioned factor analysis. Component 1 evidenced a Cronbach’s Alpha value of .640. The Alpha coefficient for Component 2 was .612 . For Component 3 it was .742. While a . 7 Alpha coefficient is often recommended, reliability depends on the study's sample size. Thorndike, Cunningham, Thorndike, and Hagan (1991) recommend a reliability coefficient of .50 for groups over 100 . In the current study which exceeds 100 participants, each construct is securely above this .50 recommendation.

To increase reliability of the data, each class of participants was provided the same information and directions before the administration of the instruments. The researcher and two other Ph.D. candidates who were trained in the administration of the instruments collected the data for this study. Participants were always assured of their privacy, and that their professors would not have access to the instruments or results. Furthermore, all of the interviews and transcriptions were conducted by the researcher.

The use of a self-report instrument is sometimes considered a limitation to research. In this case, triangulation through interviews and the questionnaires were employed to increase validity of such a survey. Admittedly, this is a narrow study focusing exclusively on one university's pre-service teachers. Therefore, the lack of generalizability of the findings of this study may be considered a threat to validity.

## Data Collection Procedures

As previously discussed, the present study took a mixed methods approach to discovering pre-service teachers' beliefs about English language learning and teaching. The aforementioned instruments, though qualitative in topic, were largely quantitative in form. Qualitative procedures were valuable in the development of the survey and questionnaire instruments. Qualitative exploration also followed these surveys, based on the results gained from administrations of the instruments. The following sections will separately explore quantitative and qualitative approaches, and analysis.

All of the instructors of the ESL methods courses were contacted prior to the beginning of the fall 2006 semester. Six sections of each course were offered by eight instructors. All instructors agreed to allow their students to participate and data was
collected in all classes at the beginning of the fall semester. For data collection at the end of the semester, however, one instructor one section was unable to allow her class to participate in the end-of-the-semester survey. Therefore, the surveys collected from her students at the first of the semester were not included in this study. The same procedure was followed before the spring 2007 semester. Four sections of 'Second Language Instruction and Assessment' and six sections of ‘Assessment of ELLs’ were offered by six instructors. All instructors agreed to allow their students to participate and data was collected in the beginning and end of the semester in all ten spring sections.

The researcher administered the Second Language Learning Survey as well as the Background Questionnaire at the beginning of the first day of all ESL methods classes in the fall of 2006 and spring of 2007. These two instruments were included in a packet that also included two copies of the Internal Review Board (IRB)-approved Consent Form. The IRB form explained the voluntary basis of the study, offered information on the researcher and her faculty advisors, and included a space for signature of consent to participate in the study. The participants tore off one copy of the consent page to keep for their records. Then participants signed the other copy of the consent form, which remained attached to the packet. The researcher explained this part of the process before students completed the instruments.

Participants who were simultaneously enrolled in both methods courses in the same semester completed the instruments in only one of their classes. Those who were enrolled in the classes successively in the fall and spring semesters were asked only to participate in the study in the spring if they had not participated in the fall. Participants were informed that their confidentiality would be strictly observed and that their
instructors would not have access to the data and their responses would in no way impact their grade in the class. It was necessary to require the students' names on the survey so that this could be matched with their post-survey and questionnaire at the end of the semester.

During the $11^{\text {th }}, 12^{\text {th }}$, or $13^{\text {th }}$ week of the semester depending on the university calendar and ESL methods instructors’ schedules, the Second Language Learning Survey as was administered again. The Background Questionnaire was not employed on the second occasion. Instead, the Follow-up Questionnaire was administered. Data collection proceeded in the manner evidenced in the following Table 3 and Table 4.

Table 3
Fall 2006 Data Collection Schedule

| Pre-Date | Data <br> Collector | Post-Date | Data <br> Collector | Number <br> Enrolled | Number of <br> Participants |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 8-28-06 | Ph.D. <br> student | $11-13-06$ | self | 46 | 39 |
| $8-28-06$ | self | $11-13-06$ | Ph.D. <br> student | 45 | 33 |
| $8-29-06$ | self | $11-14-06$ | self | 42 | 29 |
| $8-29-06$ | self | $11-14-06$ | self | 45 | 27 |
| $8-29-06$ | self | $11-14-06$ | self | 38 | 22 |
| $8-30-06$ | self | $11-15-06$ | self | 38 | 26 |
| $8-29-06$ | self | $11-16-06$ | self | 40 | 34 |
| $8-28-06$ | self | $11-27-06$ | self | 38 | 24 |
| $8-28-06$ | self | $11-27-06$ | self | 39 | 20 |
| $8-31-06$ | self | $11-30-06$ | self | 41 | 26 |
|  |  |  |  | Total: 412 | Total: 280 |

Table 4
Spring 2007Data Collection Schedule

| Pre-Date | Data <br> Collector | Post-Date | Data <br> Collector | Number <br> Enrolled | Number of <br> Participants |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1-19-07 | Ph.D. <br> student | $4-3-06$ | self | 30 | 18 |
| $1-24-07$ | self | $4-4-06$ | self | 45 | 33 |
| $1-25-07$ | self | $4-5-06$ | self | 45 | 26 |
| $1-22-07$ | self | $4-9-06$ | self | 41 | 28 |
| $1-23-07$ | self | $4-10-06$ | self | 43 | 24 |
| $1-18-07$ | self | $4-12-06$ | self | 25 | 8 |
| $1-18-07$ | self | $4-12-06$ | self | 39 | 20 |
| $1-23-07$ | self | $4-16-06$ | Ph.D. <br> student | 32 | 11 |
| $1-19-07$ | self | $4-30-06$ | Ph.D. <br> student | 23 | 11 |
| $1-19-07$ | self | $4-30-06$ | Ph.D. <br> student | 40 | 21 |
|  |  |  |  | Total: 363 | Total: 200 |

Data collection among all of the ESL methods classes resulted in 480 surveys. The difference between the number enrolled and the number of participants is due to three factors. Only participants that completed both the pre survey on the first day of class and the post survey at the end of the same semester were included in the study. If the person missed either day, their data was not included. Also, some surveys were not usable because the student did not give their name or sign their consent form. Also, students who completed the survey in the fall and then took the other ESL methods course in the spring were not allowed to complete the survey a second time. From the 480 surveys, the 354 belonging to those who had not previously taken either of the ESL methods courses were included in the present study.

The qualitative dimension of data collection was focus group interviews. Such
an approach is valuable independently or in combination with other research approaches. It is particularly valuable to the present study because as Kleiber explains, "The major strength of the focus group method is its ability to elicit opinions, attitudes, and beliefs held by members of the sample." (2004, p.97) The purpose of these interviews was to exemplify the type of beliefs expressed in the surveys. Focus group approach was selected because it allows for interaction among peers so that participants would feel empowered to share their beliefs, ideas and experiences freely without being intimidated by or uneasy with the researcher or one another. Such a design was also selected rather than individual interviews because through interaction with others, people often come to recognize their own beliefs and perceptions (Kleiber, 2004). Participants are selected based on a commonality that exists between themselves and the other members of the group, and also a common interest with the researcher (Parker \& Tritter, 2006). These groups have been noted for their value in yielding insight into survey responses in that "people from the sample can assist in the interpretation of what respondents may have been thinking when they answered a question." (Kleiber, 2004, p. 92)

Participants were selected based on a comparison of the pre- and post- scores on the Second Language Learning Surveys administered to the preservice teachers at the beginning and end of the fall semester. The same procedure was employed in the spring semester as well. Based on those scores, the preservice teachers were categorized in three groups: those demonstrating numerically positive change, negative change, and no change. They were selected in this manner so that these commonalities would help them to feel at ease enough to express their beliefs honestly among like-minded peers. As Parker and Tritter explain, focus group interviews are to encourage people to "discuss
specific topics in order that underlying issues (norms, beliefs, values), common to the lives of all participants, might be uncovered." (2006, p.24)

Participants with extreme scores were considered first. Interviewees were also selected by convenience. Groups of students were identified that fit the three change categories and were all enrolled in the same classes. This allowed the researcher a greater opportunity to make contact with them and increased the likelihood that they would be available to participate at a common time. Considering the extreme homogeneity of the population, this was an appropriate strategy for participant selection. And the one notable variance was represented in the inclusion of males. Then arrangements were made with their instructors to meet with the students. No explanation was given to the course instructors as to why these specific students were selected. Instructors allowed the researcher to meet with the selected students briefly during their class time to request and schedule focus group interviews.

The researcher conducted all of the focus group interviews. Focus groups are typically conducted in a relaxed atmosphere in which participants are encouraged to discuss topics that underlie personal beliefs and the researcher's role is that of facilitator and listener (Parker \& Tritter, 2006). Interviews were held in a small, quiet, centrally located conference room in the primary education building on campus that has a round table conducive to eliciting discussion. The same procedure was followed in both the fall 2006 and spring 2007 semesters. Focus groups began with snacks, nametags, and selfintroductions. Then some explanation was given to lay the groundwork for focus group interviews. This included an explanation that the role of the researcher was to pose questions and listen in on the discussion. The participants' role was to talk and ask one
another questions. It was clarified that consensus was not necessarily the goal and that a diversity of opinions was acceptable. The explanation underscored that no opinion or perspective was unacceptable and they were encouraged to speak freely. With their approval, all interviews were tape-recorded. Because of this, the necessity that they only speak one at a time was emphasized.

Based on the survey questions, the researcher composed seven questions to be used during the interviews to stimulate discussion. Some of the questions were intended to get the participants comfortable with talking. Others were specifically chosen to look more deeply at concepts addressed in the survey and answer the research questions. (See interview questions in Table 5.)

Table 5

Focus Group Interview Questions

| Have you taken 'Second Language Instruction and Assessment' or 'Assessment of <br> ELLs'? |
| :--- |
| If you were advising the leadership of the College of Education, what would your <br> insight be regarding these two courses for the benefit of future students? Keep? Get rid <br> of? Change? Are they valuable? |
| How do you think those classes will influence your future teaching? |
| Did you work with an ELL this semester? Tell us about that experience. |
| How did your ESL methods class prepare you or not prepare you for working with the <br> ELL? For teaching in your future classroom? |
| How have your beliefs about ESL, teaching ESL students, and language learning <br> changed this semester. |
| What has influenced those beliefs? |

Different questions were emphasized depending on the groups and the flow of the interviews. Questions were also added that emerged based on the participants' conversations.

Focus group interviews were held in December of 2006 with three groups. These groups came from the classes of three different professors and varied in number depending on the number asked to participate and their availability. The focus group for positive change came from the cohort who simultaneously took both ESL methods courses from the same instructor. They included two male and two female preservice teachers. The instructor of these participants was a female with her Ph.D. The group demonstrating no change came from an 'Assessment of ELLs' class and was made up of five females. This instructor was a female Ph.D. student. And the group that demonstrated negative change came from a 'Second Language Instruction and Assessment' course and included two females and one male. Their instructor was a female with a Ph.D.

The second round of focus group interviews was held in April of 2007. In the interviews from the previous semester, the researcher's experience with the "no change" focus group led her to the conclusion that such a category is bogus. Whether their scores reflected it or not, the interviews suggested that preservice teachers held different views after coursework. The particular "no change" group that was selected for interviews in the fall semester actually voiced positive change in the interview. For this reason, the research design was adapted in the second semester to only include positive and negative change groups.

In April, three groups were selected from three different professors' classes. The first group was from a 'Second Language Instruction and Assessment' class and demonstrated positive change. Five were requested to participate and three actually were able to participate. Their instructor was a Ph.D. student. The second interview group
came from an 'Assessment of ELLs' class. Four of the five requested preservice teachers were able to participate. This group demonstrated negative change and had the same instructor as the fall positive change group, a female with a $\mathrm{Ph} . \mathrm{D}$. The final spring interview group included four of six requested students from a different 'Second Language Instruction and Assessment’ class who demonstrated positive change. All participants in spring focus groups were females. Though the interview questions were largely same in the fall and spring semester interview, the researcher did adapt and add questions and tried to tailor the questions more closely to the research questions.

As a female Caucasian American, the researcher comes from a background that is seemingly very similar to many of the participants. Like most of them, I am a native Texan. I completed my BS in Education just as they are seeking to do. And like many of them plan to do, I have taught early childhood and primary students in Texas’ public schools. My expectation was that they would be comfortable in sharing their beliefs with me because I appear to be very much like them.

Yet I also recognized some disadvantages in conducting the interviews myself. My role as a researcher, for example, creates an unequal power differential. They could view me as an outsider rather than a peer, which could have limited their responses. This is compounded by my higher level of education which might have caused them to view me more like they view their instructors rather than an equal. Furthermore, being somewhat older than them might have inhibited the participants from sharing openly and fully. I sought to overcome these issues by increasing their comfort level through allowing them the support of their peers, and also by creating a casual environment in the interviews through snacks and conversations that preceded the interviews.

Overall, I found that conducting the interviews myself had much greater advantages than enlisting and training a college student would have had. I was able to interact with the participants personally, so I was able to gain a feel of the tone of the interviews and openness or reservation of the participants. I was also able to take steps to make the participants feel comfortable and safe in sharing their beliefs. Furthermore, I had the freedom to follow the flow of the discussion rather than a regimented script so that I could maximize my interaction with the participants.

## Internal Review Board

The present study was presented to the Internal Review Board (IRB) in the summer of 2006 for expedited review at which time it received approval. The study did not pose any significant threats for the participants. One minor threat could have been an emotional discomfort instigated by the reflection of participants on their beliefs. Participants had the freedom to refuse to participate in any or all parts of the study. Those who chose to take part in the study had the freedom to refuse to answer any questions. There was no penalty or reward based on participation or lack thereof for the survey portion of the study.

An amendment was filed with, and approved by, the IRB office in order to allow me to give focus group interview participants a $\$ 20.00$ restaurant gift card in order to encourage their participation and show my appreciation for their time. Data is securely stored in the researcher's office at her home. Data and consent forms will be kept on file for three years after completion of the study. Audio tapes were destroyed immediately after transcription.

## Data Analysis

Descriptive statistics were used for variables and outliers were identified. After reviewing the outlier surveys, it was evident that the scores were not a result of error. Exploratory statistical procedures of the outliers indicated that the extreme scores did not substantially impact the mean. Therefore, the cases were retained within the body of data.

Answering the first research question required a descriptive approach. It addressed the beliefs indicated by the 354 survey participants who had not completed either ESL methods course. This section explored the group means and standard deviations of the pretest Second Language Learning Surveys.

The second research question explored the change in beliefs based on ESL methods coursework. Paired sample t-tests were be run for pre and post scores to indicate change in belief. Qualitative data from focus group interviews was also integrated to answer the second research question.

The third research question sought to answer what variables might impact the beliefs of these preservice teachers. For this purpose standard multiple regression analysis was explored for the three different constructs to see how variables interrelate in this study. Focus group interviews were also used to investigate the variables involved in belief change.

Qualitative data analysis was involved in answering the second and third research questions. For qualitative data analysis, interviews with preservice teachers were tape recorded and the researcher personally transcribed them. The constantcomparative method was employed in order to determine themes within the interviews
(Bogdan \& Bilken, 2003). Glaser and Strauss (1967) introduced this approach to data analysis which, as indicated by its name, continuously draws comparisons between incidents and categories until a theory is evident. The goal is to "construct categories or themes that capture some recurring pattern." (Merriam, 1998, p.179)

Merriam (1998) pointed out several steps that are inherent to the constantcomparative method and were used in the qualitative data analysis of the present study. Analysis is actually a continuous process beginning in the data collection phase. After data collection, this unfolding and ongoing analysis requires re-reading transcripts. During this review, the researcher marks the transcripts with comments and notes. These markings are thereafter grouped and categorized, with categories reflecting the research's purpose. After categories are established, the researcher reviews the transcripts in light of the established categories. It is from these categories that the researcher is able to evaluate descriptively, as well as interpret the data by making inferences, drawing conclusions, and developing theories. As Merriam succinctly explains, "when categories and their properties are reduced and refined and then linked together by tentative hypotheses, the analysis is moving toward the development of a theory to explain the data's meaning." (p.192)

## CHAPTER IV

## RESULTS

The nested mixed method design was used to study preservice teacher beliefs about English language learning and teaching. Data was collected through a questionnaire and students’ change in beliefs about English language learning and teaching after ESL coursework was measured by comparing scores in a pre and post measure. Follow up interviews in focus groups with strategically chosen subjects were used to exemplify the process of change or the lack of change in students' beliefs. This chapter is mainly organized in four sections to address the instruments as well as the three research questions of the study.

## Factor Analysis

After a pilot study, 20 items were retained. The decision to retain these items was made based on their face and content validity. Unclear items were dismissed. Given that items belonged to different conceptual constructs including beliefs about ELLs, language and language learning, and the responsibility for teaching ELLs, a factor analysis was conducted to determine the cluster of items that seemed to correspond to the different concepts.

The clustering of the 20 items was evaluated by means of a principal components factor analysis (PCA) with a Varimax rotation using SPSS Version 14.0. The suitability of data for factor analysis was assessed before applying PCA. This analysis involved a sample of 354 participants in the fall of 2006 and spring of 2007. The
correlation matrix evidenced a variety of coefficients of .3 and above, indicating the data's suitability for factor analysis. The Kaiser-Meyer-Oklin Measure of Sampling Adequacy (.691) exceeded the recommended value of .6 (Kaiser, 1970; 1974). Furthermore, the Bartlett's Test of Sphericity (Bartlett, 1954) demonstrated statistical significance ( $\mathrm{p}<.000$ ), supporting the factorability of the correlation matrix.

Principal components analysis evidenced seven components with eigenvalues exceeding 1 , explaining $17.2 \%, 10.1 \%, 9.5 \%, 6.4 \%, 6.1 \%, 5.9 \%$, and $5.3 \%$ of the variance respectively. The following table 6 depicts the identification of principal components.

Table 6
Identification of Principal Components

| Component | Eigenvalue | Decision | \% of Variance |
| :--- | :--- | :--- | :--- |
| 1 | 3.447 | accept | 17.2 |
| 2 | 2.016 | accept | 10.1 |
| 3 | 1.894 | accept | 9.5 |
| 4 | 1.289 | reject | 6.4 |
| 5 | 1.216 | reject | 6.1 |
| 6 | 1.180 | reject | 5.9 |
| 7 | 1.063 | reject | 5.3 |

The scree plot displayed a distinct break between the third and fourth components. Cattell's (1966) scree test was employed in determining to retain three components for further exploration. The scree plot is included in Figure 2.

## Scree Plot



Figure 2. Scree Plot

The three components were explored more fully through the following Varimax rotation. This rotation evidenced strong loadings in each component with little overlap in loadings between components. Where there was overlap, specifically on questions 4 and 13, the questions were grouped with Component 2 because of their interpretability within the component. Some survey items were excluded because they either did not load at . 3 or above, or due to lack of logical agreement with the components. The three-component solution explained a total of $36.8 \%$ of the variance with Component 1 accounting for 13.36\%, Component 2 explaining 12.27\%, and Component 3 contributing 11.15\%. Table 8 presents the factor loadings for the survey.

Table 7
Factor Loadings of Items on the Second Language Learning Survey

| Second Language Learning Survey | Factor <br> Loading |  |  |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
| Parents of ELLs should speak English to their children at home. | . 82 |  |  |
| Parents of ELLs should have their children speak English at home. | . 79 |  |  |
| Students should be proficient in English before being integrated into the regular classroom. | . 44 |  |  |
| Speaking a first language other than English interferes with learning English. | . 40 |  |  |
| Language learning requires a special aptitude. | . 42 |  |  |
| It is important for general education teachers to learn how to teach ELLs. |  | . 61 |  |
| When I have my own class, I expect that some of my students will be ELLs. |  | . 57 |  |
| It is not my responsibility to teach English to students who come to the US and do not speak English. |  | . 53 |  |
| I can effectively instruct ELLs in the content areas I will teach. |  | . 39 |  |
| Teaching ELLs is the job of the ESL teacher, not the regular education teacher. |  | . 33 |  |
| An ELL's accent is a detriment to her or his educational development. |  |  | . 88 |
| ELLs have behavior problems in the classroom. |  |  | . 84 |
| ELLs' grammatical errors always require corrections. |  |  | . 78 |

Factor analyses revealed a three-factor solution. Loadings of items are listed in Table 7. According to Lambert and Durand's (1975) recommendation, 0.3 is the criterion for the minimum loading value. Items loading on the first factor (component) centered conceptually on beliefs about language and language learning. Items loading on the second component centered conceptually on beliefs regarding the locus of responsibility for language learning. The third component included items addressing beliefs about English Language Learners.

# Research Question 1: What Beliefs Do Preservice Teachers at Texas A\&M University Hold Regarding Second Language Learning and Teaching before Coursework in ESL? 

Descriptive analysis was used to answer this question by identifying participants’ pre-existing beliefs about English language learning and teaching. The degree of their (dis)agreement with the survey items was assessed by using a 6-point Likert scale. Possible survey item responses ranged from 1, for "strongly disagree" to 6 for "strongly agree." Wording of particular survey items was reversed in order to prevent response bias. As a result, negative items were reverse coded so that scores could be calculated with lower scores reflecting more negative beliefs and higher scores reflecting more positive beliefs. Item-specific means and standard deviations as well as component means for the data on the Second Language Learning Survey items are presented in Table 8.

Table 8
Descriptive Statistics for Participants $(N=354)$ before ESL Coursework

| Variables | Mean Pre | SD |
| :---: | :---: | :---: |
| Component 1: Language \& Language Learning |  |  |
| 11. Parents of ELLs should speak English to their children at home. | 2.88 | 1.164 |
| 10. Parents of ELLs should have their children speak English at home. | 2.91 | 1.244 |
| 02. Students should be proficient in English before being integrated into the regular classroom. | 3.19 | 1.299 |
| 05 . Speaking a first language other than English interferes with learning English. | 4.23 | 1.261 |
| 19. Language learning requires a special aptitude. | 3.32 | 1.145 |
| Component 1 Total | 16.53 | 3.917 |
| Overall Component 1 Mean | 3.31 |  |
| Component 2: Locus of Responsibility |  |  |
| 16. It is important for general education teachers to learn how to teach ELLs. | 5.05 | 1.073 |
| 08. When I have my own class, I expect that some of my students will be ELLs. | 5.14 | . 883 |
| 13. It is not my responsibility to teach English to students who come to the US and do not speak English. | 4.57 | 1.364 |
| 20. I can effectively instruct ELLs in the content areas I will teach. | 4.13 | 1.185 |
| 04. Teaching ELLs is the job of the ESL teacher, not the regular education teacher. | 3.88 | 1.357 |
| Component 2 Total | 22.77 | 3.711 |
| Overall Component 2 Mean | 4.55 |  |
| Component 3: English Language Learners |  |  |
| 17. An ELL's accent is a detriment to her or his educational development. | 3.93 | 1.318 |
| 18. ELLs have behavior problems in the classroom. | 4.00 | 1.332 |
| 15. ELLs' grammatical errors always require corrections. | 3.47 | 1.235 |
| Component 3 Total | 11.40 | 3.379 |
| Overall Component 3 Mean | 3.80 |  |
| Overall Mean for 1, 2, and 3 | 3.89 |  |

The interpretation of means for the 6-point Likert scale allows for insight into the magnitude of change. Mean scores hold the following meanings for items 8,16 , and 20: 1-1.49 indicates "strongly disagree", 1.5 to 2.49 for "disagree", 2.5 to 3.49 for "slightly disagree", 3.5 to 4.49 for "slightly agree", 4.5 to 5.49 for "agree" and 5.5 to 6 for "strongly agree." All other items were reverse keyed, therefore the meaning of the scores are as follows: 1-1.49 indicates "strongly agree", 1.5 to 2.49 for "agree", 2.5 to 3.49 for "slightly agree", 3.5 to 4.49 for "slightly disagree", 4.5 to 5.49 for "disagree" and 5.5 to 6 for "strongly disagree." These negative items were reverse keyed so that the higher scores are above 3.5 indicate an increasingly greater degree of agreement with research and current practice and more positive beliefs. The lower scores are below 3.49 indicates increasing disagreement with research and current practice and more negative beliefs.

Table 8 indicates preservice teachers' pre-existing beliefs. The first component displays the lowest means of the survey including item $11(M=2.88 S D=1.164)$, item $10(M=2.91, S D=1.244)$, and item two $(M=3.19, S D=1.299)$ with a component mean of 3.1. This indicates a general lack of exposure to principals of language learning and teaching. The second component has the highest means, with a mean rating in the "agree" range of 4.5 to 5.49 for three of the five items $(M=5.05, S D=1.073 ; M=5.14$, $\mathrm{SD}=.883 ; \mathrm{M}=4.57, \mathrm{SD}=1.364$ ). This indicates an incoming awareness of the responsibility of mainstream teachers in the education of ELLs. The third component includes an overall mean response of 3.8 indicating very neutral beliefs about ELLs. The overall mean for all components is 3.89 .

Component 1 deals with preservice teacher belief regarding language and language learning. The items comprising this component address respondents' beliefs regarding the utility of English in the home and in the classroom as well as how aptitude and the first language impact English language learning. Responses to four of the five items in Component 1 show the lowest item-specific means of the survey with an overall lowest component mean $(\mathrm{M}=3.31)$. Overall, this component's values are expressing the prioritizing of English usage as opposed to the use of native language. Within this component, preservice teachers indicate a belief that parents of ELLs as well as ELLs themselves should speak English at home $(M=2.88, S D=1.164 ; M=2.91, S D=1.244)$. They also indicate agreement that English proficiency should be a prerequisite for entry into mainstream classrooms $(\mathrm{M}=3.19, \mathrm{SD}=1.299)$ and that special aptitude is involved in language learning $(\mathrm{M}=3.32, \mathrm{SD}=1.145)$. The highest mean in the component comes from their slight disagreement with the statement: "speaking a first language other than English interferes with learning English" ( $M=4.23$, $S D=1.261$ ). Overall, the component reflect beliefs about the language learning process that are uninformed by research.

The second component explores preservice teachers' belief regarding the locus of responsibility for teaching ELLs. It includes the highest item-specific means as well as the highest overall component mean $(\mathrm{M}=4.55)$. The questions relate to beliefs about ELLs in the mainstream and mainstream teachers' roles in teaching ELLs. The preservice teachers agree that they expect to have ELLs in their classes $(M=5.14, S D=$ .883). They agree that it is important for mainstream teachers to learn how to teach ELLs $(M=5.05, S D=1.073)$ and that it is their responsibility to teach ELLs $(M=4.57, M=$
1.364), and slightly agree that they can effectively do so ( $M=4.13, S D=1.185$ ). They slightly disagree with the idea that teaching ELLs is the ESL teacher’s job rather than that of the mainstream teacher $(M=3.88, S D=1.357)$. These means indicate expectations that parallel the current practice of ESL inclusion in mainstream classes.

Component 3 addresses participants' beliefs about English language learners. Educators may view ELLs’ linguistic difference as either an asset or deficit. "Deficit thinking" is when teachers view difference as a deficit rather than an asset in the mainstream classroom. The component mean of 3.80 indicates that participants view ELLs and their differences in a slightly positive light. They slightly disagree with beliefs that ELLs have behavior problems $(M=4.0, S D=1.332)$ and that their accent impedes academic development $(M=3.93, S D=1.318)$. However, they slightly agree that their grammatical error always requires correction ( $M=3.47$, $S D=1.235$ ).

The overall mean of the three components being at a 3.89 on a scale of 1-6 shows a mid-range indicator of belief. Though these beliefs are not strong, it is notable that overall incoming beliefs were found to be positive. These scores are valuable in providing a baseline for comparison with post-instruction results.

## Research Question 2: Do Preservice Teachers' Pre-existing Beliefs about Second Language Learning and Teaching Change after ESL Coursework?

The second goal of this research study is to investigate how preservice teachers' incoming beliefs differ from their outgoing beliefs after taking ESL classes. This is explored with descriptive statistics, paired-samples t-test, and themes detected through constant-comparative qualitative analysis of interviews.

Table 9
Descriptive Statistics for Participants Before and After ESL Coursework ( $N=354$ )

| Variables | Mean <br> Pre | SD | Mean <br> Post | SD |
| :--- | :--- | :--- | :--- | :--- |
| Component 1: Language \& Language Learning |  |  |  |  |
| Parents of ELLs should speak English to their children at <br> home. | 2.88 | 1.164 | 3.28 | 1.241 |
| Parents of ELLs should have their children speak English <br> at home. | 2.91 | 1.244 | 3.29 | 1.296 |
| Students should be proficient in English before being <br> integrated into the regular classroom. | 3.19 | 1.299 | 3.75 | 1.294 |
| Speaking a first language other than English interferes <br> with learning English. | 4.23 | 1.261 | 4.46 | 1.323 |
| Language learning requires a special aptitude. | 3.32 | 1.145 | 3.47 | 1.275 |
| Component 1 Total | 16.53 | 3.917 | 18.24 | 3.931 |
| Component 1 Mean | 3.31 |  | 3.65 |  |
| Component 2: Locus of Responsibility |  |  |  |  |
| It is important for general education teachers to learn <br> how to teach ELLs. | 5.05 | 1.073 | 5.21 | 1.005 |
| When I have my own class, I expect that some of my <br> students will be ELLs. | 5.14 | .883 | 5.33 | .911 |
| It is not my responsibility to teach English to students <br> who come to the US and do not speak English. | 4.57 | 1.364 | 4.86 | 1.244 |
| I can effectively instruct ELLs in the content areas I will <br> teach. | 4.13 | 1.185 | 4.44 | .977 |
| Teaching ELLs is the job of the ESL teacher, not the <br> regular education teacher. | 3.88 | 1.357 | 4.41 | 1.234 |
| Component 2 Total | 22.77 | 3.711 | 24.25 | 3.617 |
| Component 2 Mean | 4.55 |  | 4.85 |  |
| Component 3: English Language Learners | 3.00 | 1.332 | 4.76 | .977 |
| An ELL's accent is a detriment to her or his educational <br> development. | 3.93 | 1.318 | 4.83 | 1.126 |
| ELLs have behavior problems in the classroom. | 4.047 | 1.235 | 4.36 | 1.151 |
| ELLs' grammatical errors always require corrections. | 3.47 | 3.379 | 13.95 | 2.229 |
| Component 3 Total | 11.40 | 4.65 |  |  |
| Component 3 Mean | 3.80 |  |  |  |
|  |  |  | 5.62 | 7.198 |
| Total change from all three components |  |  |  |  |

A comparison of descriptive statistics for pre and post survey as seen in Table 9 show every item-specific and component mean to be higher in the post survey than in the preliminary survey indicating that they were more positive and aligned with research and current practice. The range of possible scores was 13 to 78 and the overall mean postsurvey score of 56 showed a mean increase of 5.62 points.

The first component, which deals with beliefs about language and language learning, shows an increase in mean from the pre $(M=3.31)$ to post $(M=3.65)$ survey scores. These means indicate that before ESL instruction preservice teacher beliefs about language and language learning were in "slight" disagreement with research, but after ESL instruction their beliefs were in "slight" agreement with principles of ESL instruction. Whereas the means still do not indicate strong beliefs, the shift from disagreement to agreement is quite notable.

The second construct investigates beliefs about the locus of responsibility for teaching ELLs and demonstrates the most positive preliminary beliefs $(M=4.55)$ and an even higher mean $(M=4.85)$ in the post survey. This demonstrates an increase in the magnitude of agreement with current practice in ELL instruction and preservice teachers’ increased confidence in their abilities to instruct ELLs.

Construct 3, which deals with beliefs about ELLs, evidences the largest amount of increase between pre and post survey scores. The change shows that outgoing students are considerably more positive about ELLs after ESL coursework. The construct mean score increases from a 3.80 to 4.65 showing a decrease in the magnitude of their agreement with myths about ELLs. These changes are presented in Table 10.

A paired-samples t-test was conducted to examine if there was a significant change in preservice teachers' scores on the Second Language Learning Survey before and after ESL coursework. The results show that there was a statistically significant change in the Second Language Learning Survey scores for each of the three constructs from the pre-survey $(M=50.71 S D=7.885)$ to the post-survey $[M=56.45, S D=7.496$, $\mathrm{t}(353)=15.421, \mathrm{p}$ <.0005]. This is presented in Table 10. In order to determine the magnitude of the effect, eta squared was calculated. The eta squared statistic indicated a large effect size for the first (.16) and second (.15) and third component (.37) as well as the overall total (.29). Cohen (1988) indicates $.01=$ small effect, $.06=$ moderate effect, and .14=large effect.

Integrated Data Analysis of Component 1: Beliefs about Language and Language Learning

The first component, which deals with change in beliefs about language and language learning, shows an increase in mean from the pre $(M=3.31)$ to post $(M=3.65)$ survey scores. These means were the lowest in comparison to the other components before and after ESL coursework. There was a statistically significant increase in survey scores from the pre-survey $(M=16.5, S D=3.9)$ to the post-survey $[M=18.24, S D=$ 3.93, $\mathrm{t}(353)=8.276, \quad \mathrm{p}<.0005]$.

Two themes relating to the first component emerged during focus group interviews. The first theme was the important role of parents in English language learning. The second theme was related to the value of the first language in English language learning and teaching.

Table 10
Paired Sample t-Test for Pre and Post Instruction Survey Scores ( $N=354$ )

| Variables | Mean | SD | $t$ | Sig. $\boldsymbol{P}<.05$ | Eta |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Component 1: Language \& Language Learning |  |  |  |  |  |
| Parents of ELLs should speak English to their children at home. | . 407 | 1.281 | 5.974 | . 000 | . 09 |
| Parents of ELLs should have their children speak English at home. | . 376 | 1.389 | 5.089 | . 000 | . 07 |
| Students should be proficient in English before being integrated into the regular classroom. | . 551 | 1.490 | 6.956 | . 000 | . 12 |
| Speaking a first language other than English interferes with learning English. | . 226 | 1.511 | 2.814 | . 005 | . 02 |
| Language learning requires a special aptitude. | . 147 | 1.336 | 2.068 | . 039 | . 01 |
| Component 1 Total | 1.706 | 3.878 | 8.276 | . 000 | . 16 |
| Component 2: Locus of Responsibility |  |  |  |  |  |
| It is important for general education teachers to learn how to teach ELLs. | . 161 | 1.223 | 2.478 | . 014 | . 02 |
| When I have my own class, I expect that some of my students will be ELLs. | . 192 | 1.060 | 3.408 | . 001 | . 03 |
| It is not my responsibility to teach English to students who come to the US and do not speak English. | . 288 | 1.435 | 3.779 | . 000 | . 04 |
| I can effectively instruct ELLs in the content areas I will teach. | . 308 | 1.204 | 4.813 | . 000 | . 06 |
| Teaching ELLs is the job of the ESL teacher, not the regular education teacher. | . 528 | 1.432 | 6.939 | . 000 | . 12 |
| Component 2 Total | 1.477 | 3.566 | 7.794 | . 000 | . 15 |
| Component 3: English Language Learners |  |  |  |  |  |
| An ELL's accent is a detriment to her or his educational development. | . 904 | 1.489 | 11.422 | . 000 | . 27 |
| ELLs have behavior problems in the classroom. | . 757 | 1.488 | 9.576 | . 000 | . 21 |
| ELLs' grammatical errors always require corrections. | . 895 | 1.403 | 12.006 | . 000 | . 29 |
| Component 3 Total | 2.556 | 3.309 | 14.536 | . 000 | . 37 |
| Total change from all three components | 4.898 | 7.588 | 12.146 | . 000 | . 29 |

Two items in this component dealt with parents and the role of home language in second language learning. In the post-survey, respondents still disagreed with research that shows the importance of the development of the first language and the value of the use of that language in the home. However, the magnitude of that belief decreased indicating a lesser degree of agreement that that parents (pre $\mathrm{M}=2.88$; post $\mathrm{M}=3.28$ ) and children (pre $M=2.91$; post $M=3.29$ ) should speak English at home. The tension between old beliefs and new was exemplified in several interviews where some participants expressed increased understanding of the value of the native language while other participants held parents responsible for English language learning.

One interviewee mentioned how "it's all up to the parents" to determine the language used in the home (Eleanor). Some interview participants attributed students’ success or failure in learning English to the parents, seemingly blaming parents for the lack of English acquisition when they use the native language at home. Megan, for example, said "I think a lot of it depends on what side the parent is on-whether they're encouraging their student or whether they're trying to keep them from learning the language because they don’t want them to assimilate." Kayla also addressed a struggle between avoiding assimilation and taking on English when she discussed what language should be used at home:

I think it depends on the student and their home situation, if their parents are encouraging, 'Oh, learn English.' Or if they go to school and they have to be in this English mode and they go home and they have to be in Spanish mode...if the parent is still like, 'No, you need to keep these roots with our native culture and don't try to change.'

Other interviewees emphasized the importance of the first language in maintaining the familial culture and avoiding assimilation. For example, Patricia recognized, "Making them lose their home language could also be like, 'You need to get rid of your culture.'" Jana also elaborated:

I think it's important for the parents to still talk their native language, because if you don't and you still have family in that other country you are losing that identity. If you just speak to your children in English they may only learn English, forget their old language, and they won't be able to communicate to their family back in their old country, so I think it's really important to keep that in the home still, and not try to assimilate to the American culture completely.

Patricia also explained, the home language is valuable in terms of cultural heritage, but it is also an asset to second language learning:

That [ $1^{\text {st }}$ language] would be their connection to their family, their culture, and like we talked about before, already having a knowledge of your own language could help you to learn another language...we talked about it in class...if you know sentence structure or something you can, you might be able to learn it better in another language because you already have that background knowledge of language.

Julie also underscored the value of the first language in language learning but emphasized the teachers' role in encouraging first language usage in the home. She explained:"We learned that it [their first language] is the foundation for development and we should encourage them to read in their home language and talk to their family and we're supposed to encourage parents to do that."

Another survey item in the language and language learning component dealt with whether "speaking a first language other than English interferes with learning English" (pre $M=4.23$; post $M=4.46$ ). Participants expressed increased disagreement with this statement in the survey scores and this disagreement was reflected in the interviews as well. After ESL coursework, Kara and Sara addressed the value of background knowledge of a first language in informing and aiding in learning English. Kara explained:

Well we've learned also that if they, obviously, if they come in knowing a language then they have the capacity to learn a language and so like, that being said, like it is an advantage for them to have a home language just because we know yes, then they can then learn English.

Sarah also offered:
And they also have that background knowledge, so as they're learning the new language they have something to relate back to. It's not like they come in trying to learn a language and they don't know anything. They have this whole entire resource of this language and all the things that they've learned from that so...they have the concept of the different things. It's just getting the right words for it.

Integrated Data Analysis of Component 2: Beliefs about the Locus of Responsibility for Second Language Learning and Teaching

The second component, which deals with change in beliefs about the locus of responsibility for English language teaching, shows an increase in mean from the pre (M $=4.55)$ to post $(\mathrm{M}=4.85)$ survey scores. The pre and post survey scores were higher for
this component than for the other two components. These means indicate expectations of the current practice of ESL inclusion in the mainstream that parallel current practice. They also indicate increasingly positive beliefs about the responsibility of teaching those ELLs. There was a statistically significant increase in survey scores from pre-survey (M $=22.77, \mathrm{SD}=3.71)$ to the post-survey administration $[\mathrm{M}=24.25, \mathrm{SD}=3.61, \mathrm{t}(353)=$ 7.794, $\mathrm{p}<.0005]$.

Items in this component dealt with preservice teachers' beliefs about whose responsibility it is to teach ELLs and if they expect and are equipped to teach ELLs. Two themes relating to these items surfaced during focus group interview analysis. First, interviewees mentioned what they believe about their ability to "effectively instruct ELLs". They also discussed the expectation that they as mainstream teachers are responsible for teaching ELLs and will have them in their classes.

As interview participants discussed their beliefs about their abilities to teach ELLs contradictions emerged. Even within individuals, participants verbally grappled with their future role as teachers of both native and non-native English speakers. Sarah captured the internal tension in her comment:

It's a little scary thinking about it. It's a lot of responsibility and there's a lot of pressure on the teachers because they want to make sure that all their students are learning all of the material that they need to. And it's hard enough to just plan a curriculum that will get everything in and make sure that the children are enjoying themselves and learning everything, and to throw children with special needs into the mix and then also children who don't know English at all just kind of creates a
whole new dimension.... But I also do have confidence because I know we've been prepared here.

ESL coursework inspired confidence in some participants and a desire to teach ELLs. The coursework seemed to be pivotal in participants' expectations for successfully teaching ELLs. The anxiety of "how do I help them" is contrasted with some consolation that they learned strategies and had training in their ESL coursework. Natalie verbalized this juxtaposition in her statement: "Well I think ...that it’s really intimidating and it's something you can't really know until you put it into practice but...once you get thrown into that situation [teaching ELLs] you'll make it work and we'll use everything we learned." Lori also spoke to the impact of the ESL coursework when she said:

Coming into this class I was like, "Great. Like, what am I going to learn?" I don’t have to speak any other language so I kinda came in closed minded. But coming out now, I'm going to feel a lot better in the classroom, with all the kids, so I think it's just knowledge of how to teach it and work with these kids..., they are closed minded, they are frustrated because they don't understand how to work with them and having these classes. We've been given so many tools on how to do that for our future.

In contrast, coursework left some like Thomas feeling overwhelmed with a new awareness of responsibility and feelings of inadequacy to meet those demands: "With these two [ESL] classes I feel like I've learned a lot. But I feel like I come out asking a lot more questions instead of actually understanding what needs to be done." In the case of Thomas, coursework increased awareness, which thereby increased concern. This
concern with the upcoming responsibility of instructing ELLs, as Sue explained, was not negative as if they didn't want to teach them. It was more of a concern that they might not be fully equipped to teach ELLs or be effective in that role: "It's kind of scary. I was going to say, that's one thing that's changed. I mean, I'm starting to wonder if I'm going to be prepared to do it or not. That's a lot of responsibility to teach the ELLs, and I don't want to deny them the same experience all the other students have." Both in the survey and in the interviews, participants generally agreed that they could effectively instruct ELLs (item 20; pre $\mathrm{M}=4.13$; post $\mathrm{M}=4.44$ ). The mid-range score on the survey was paralleled by the mild confidence that interview participants voiced regarding their abilities.

The second theme that emerged in the interview analysis that gave insight into the second component was participants' expectations regarding ELLs in the mainstream. The increased belief that they, as mainstream teachers, will be responsible for teaching ELLs and need to learn how to teach them emerged in survey scores as well as interviews. Interviews indicated that the ESL coursework increased this belief. Like Natalie said after a semester of ESL coursework, "It was a huge culture shock 'cause I didn’t, I had no clue that there was even such a thing, or how to teach it." Kim agreed, "I didn't realize how much... the primary [mainstream] teacher needs to know about that."

Participants agreed that it is their personal responsibility to teach ELLs (pre $\mathrm{M}=$ 4.57; post $M=4.86$ ). Their strongest belief in the component was that ELLS would be in their future classrooms (survey question 8 pre $M=5.14$; post $M=5.33$ ). Such beliefs were voiced by Jana: "Anywhere, even if you go outside of Texas, you're going to have some kind of immigrant student...I don't know if I'll have a lot, but I'll have some."

The mean score of all the component 2 items showed significant change in belief. Moreover, interview data also showed changes in belief. After the ESL coursework, Jessica verbalized a shift in expectations: "I think I'm more aware...that I'll have them [ELLs] in my class." Eleanor also verbalized an increased awareness at the end of the semester when she reported,

I'm staying in Texas, so I just, it's a given for me that I'm going to get some form of ELL student....Whenever I first started thinking about becoming a teacher I was like, 'Oh, I won't have to teach them or anything or do anything.' ...I was kinda, in a way, against it...but I know now that there will be students like that.... Kara also indicated a new expectation at the end of the semester:

Coming into it...I just assumed that, you know, 'Oh, whenever I get into a classroom I'm not going to have ELL students. They're all going to be in bilingual classes or they're all going to be in ESL. I'm not going to have kids who are in special ed'...But you do. That's the reality of it. And we definitely...we've learned so much about how to adapt our teaching to help these kids...so it’s been very beneficial.

Margaret reiterated this expectation of ELLs in the mainstream and underscored her belief in the importance of mainstream teachers learning to teach ELLs (16 pre $\mathrm{M}=$ 5.05; post $\mathrm{M}=5.21$ ) when she said, "You just can't push them off into a corner and pretend they're not there....They're going to be there and need to know, we really do need to know this stuff."

Item 4 which asked about teaching ELLs being the job of the ESL teacher had the lowest mean score. (pre $\mathrm{M}=3.88$; post $\mathrm{M}=4.41$ ). A considerable increase in score
indicated increased belief that teaching ELLs goes beyond the ESL classroom. Analysis of the interviews confirmed this change of belief. For example, Martha explained about ELLs in the mainstream "I think it’s a bigger problem than I realized when I first started the class. Not a problem, just a bigger, there's more than I thought there was and it's more of an issue for teachers....I just, I never realized it until...this semester, how many, how that does affect all teachers, whether you're an ESL teacher or not."

## Component 3: Beliefs about English Language Learners

The third component, which deals with change in beliefs about English language learners shows an increase in mean from 3.80 to 4.65 . This mean change showed the most drastic difference among the three components. There was a statistically significant increase in survey scores from the pre ( $\mathrm{M}=11.398, \mathrm{SD}=3.38$ ) to post-survey [ $\mathrm{M}=$ 13.95, $\mathrm{SD}=2.23, \mathrm{t}(353)=14.536, \mathrm{p}<.0005$ ]. Items in this component dealt with preservice teachers’ beliefs about English Language Learners, specifically including views about ELLs' accents, behavior, and grammatical errors. The issue of correction and behavior problem emerged in the focus group interviews, paralleling survey items 15 and 18.

Interview participants addressed correction both in terms of discipline as well as in terms of grammatical errors. On the survey participants expressed disagreement with the statement that "ELLs have behavior problems in the classroom" and disagreed much more strongly after coursework (item 18; pre $M=4.00$; post $M=4.76$ ). In the interviews, participants indicated a belief that ELLs are no more prone to be behavior problems than native English speakers. They believed that behavior problems in ELLs could often stem from a lack of understanding based on cultural differences. As Sarah reported:

I think the behavioral issues would most likely come from not understanding what the rules are and not understanding why that's the rule. Because...when you're coming from another country there's a different culture and there's a different view on how a classroom goes and how things are handled....And so there could be problems with that, just not understanding the culture and not understanding how the teacher runs the classroom, just because in America we might do things differently than them.

In terms of language learning, before coursework participants slightly agreed that "grammatical errors always require correction," yet after coursework they disagreed (item 15; pre $M=3.47$; post $M=4.36$ ). On this survey item the outgoing belief contradicted the incoming belief. Interview participants indicated that it is primarily errors inhibiting communication that require correction. As Kara explained, "what we’ve learned is if it hinders communication then that's what needs to be corrected. But if you can understand them and obviously they're learning, then that's what's most important."

## Research Question 3: What Variables Influence These Pre-service Teachers' Beliefs about English Language Learning?

The third objective in this research was to identify variables that influence preservice teachers' beliefs about English language learning. Multiple regression was used to analyze scores in relationship to a variety of variables. Among factors explored as possible predictors were courses, instructors, experience in living abroad, experience in international travel, experience teaching ELLs, previous language learning experience,
and relationships with NNES, persons living internationally, and being multilingual . The multiple regression analysis did not show significant effect for any of these variables.

Whereas quantitative data shed little light on the variables influencing preservice teachers' beliefs, several variables became apparent in the focus group interviews. Themes that emerged regarding variables include family, friends, ESL course experiences, instructors of ESL courses, and hands-on experience in working with ELLs.

## Instructors

Many interview participants addressed the powerful role of their instructors in affecting their beliefs. As Jessica explained "Professors have a whole lot to do with it. Especially in something so vital as this. This is important stuff." Some interviewees were very pleased with their instructors while others were negative.

Students such as Angela, Janet, and John, who had negative experiences with their instructor, encouraged organization, consistency, accessibility, using class notes that coordinate with the text book, using technology such as PowerPoint and Web CT, and activities such as group presentations.

Throughout the various interviews, direct instruction was voiced to be typical of both ineffective and effective instructors. Interviewees described professors who were effective in using direct instruction as covering the ESL material and include relevant personal anecdotes. As Jessica elaborated about her 'Second Language Instruction and Assessment' class "because of my professor I did not learn anything....In 334 [Assessment of ELLs] I have learned a lot because my professor does go through and actually presents material." At the same time, Margaret emphasized that a good
professor does more than lecture. She and Jessica explained that effective instructors used the textbooks and prescribed students assignments that foster learning.

Two of the interview groups volunteered that having a non-native English speaker teacher (NNEST) enhanced their ESL class experience. "It was like an added bonus," Patricia commented. Heather voiced that by having a NNEST she gained insight into a different perspective that she wasn't previously aware. Jana also added, "She [the instructor] knows the perspective of learning English. It really helps us who don't have that knowledge of acquiring another language fluently, but she tells us her experiences in it, when she'd try to learn English." Eleanor and Patricia also volunteered how much they liked that the professor was an ELL. "It was nice to actually hear firsthand accounts of the experience," Patricia explained.

Natalie described some further characteristics that made her ESL professors effective: They share stories and personal experiences. She also underscored the importance of teacher educators sharing a variety of viewpoints. She explained, "They didn't have that bias that inflected the whole class....They taught everything, not just what they thought. That was very important."

## Course Experiences

Throughout the interviews, participants addressed the variety of course experiences that affected their beliefs about English language learning and teaching. As Kayla explained "I've never even really thought about that [ELLs] as being just something I'd need to know about teaching until I took this class, and I'm going, 'Oh, my gosh'....It's opened my eyes to the reality that there are so many students and so many needs and languages." Interview participants reported that the ESL courses themselves,
including videos, texts, group work, guest speakers, presentations, and other assignments influenced their beliefs about English language learning and teaching.

Group projects were reported to be effective in student learning. As Karen reported, "One of the things we did was...a group project where we had to make a whole lesson plan and teach a core subject....That was really beneficial because you have to use the strategies that we learned... and then...watch other groups go. So I really learned a lot through the class." Along the same lines, another focus group emphasized the value of group presentations. John explained, "I learned more from the presentations. Like on presentation day I was like, 'I'll go because I'll get something out of it.' On presentation days you just showed up and everybody was there. It just worked out so well. I felt like I learned so much more that way instead of sitting there, just listening to her...."

One focus group emphasized what a contribution ELL guest speakers had brought to their ESL class. Members found guest speakers who gave firsthand accounts of their experiences to be beneficial. Patricia explained that her classmates are "kinda oblivious to cultural differences." Natalie admitted such when she explained, "I think mine [beliefs about teaching ELLs] changed drastically because the high school that I went to, we had a few ELL, but not many. It wasn't a very diverse school." The homogeneity of the student population participating in the present study was evident with 89\% AngloAmericans.

Several of the interviewees reiterated the value of one of the textbooks that taught strategies for teaching ELLs. Especially when used in conjunction with the instructor's teaching, they found it to be a good resource that they planned to keep and return to in the future. Furthermore, videos that instructors incorporated into their courses increased
understanding. As Eleanor said, the videos "struck your heart, and you would understand their situation." Martha emphasized two dimensions of her ESL coursework that impacted her:

I think I changed a whole lot. One, from the class and realizing that they are trying to learn and a lot of times they are here just trying to better their lives. And a video that we watched was really kinda powerful. But I think two, in the classroom partners and watching how they react and, ya know, how they really use their culture to relate to us or to explain themselves better. I really think that a lot of it came from a combination of the two.

## Experience Working With ELLs

One of the other assignments Martha mentioned that were often a part of the ESL courses was field experience. Pervasive among the interviewees was the discussion that hands-on experience was irreplaceable in its impact on their beliefs about English language learning and teaching. As Jana explained:

I feel like I'm more prepared to go into the world and teach because I've had all of that field experience....You're able to apply the strategies that you learn in class and it just helps to concrete them in your mind because you are applying yourself rather than just reading and taking a test about all those strategies. So it helps to go to the field experiences.

Such experiences allowed the preservice teachers to work with ELLS in a variety of different forms. Some participated in HOSTS (Help One Student To Succeed). This program employs volunteers for thirty minute tutoring sessions with all ages of local public school students. HOSTS is "recognized by the United States Department of

Education as a national model for successful mentoring programs, is a nationwide language arts improvement program which combines one-on-one instruction from volunteers with lessons tailored specifically for each child." (Bryan ISD) Many of the participants were required to tutor a student through the HOSTS program for 30 minutes weekly.

Another means of experience with ELLs was through the university's English Language Institute (ELI). This institute is designed to assist international students in strengthening their English skills so they can succeed in the university classroom. Some participants were paired with conversation partners from the ELI during their ESL methods courses. Others met with conversation groups.

Interview participants often cited their experiences with ELLs as the most pivotal element to their personal growth in the INST courses. Patricia explained,

More than anything the observing in a classroom setting and actually talking to the ELL students, firsthand experience helped me the most. I feel like I took what I learned in the class and kind of applied it and that just helped a lot more to actually get to practice what we’ve been taught....Before I'd just been like 'Oh my gosh, they don't speak English. Oh my gosh, I can't deal with that.' But now... I've seen that and they are helpable.... I'm a lot more at ease with helping an ELL student now.

Many like Patricia felt it gave them the opportunity to apply what they were learning in class. Though some participants initially begrudged the course requirement to work with an ELL, in the end they typically reported satisfaction with the experience. An example is Jennifer:

I did the classroom partners. I'll have to admit, whenever we got the assignment I was pretty ticked. I just thought it was just going to be another wasted hour um, 'cause I don't, a lot of times, do well with determining what they're saying around their accents. And so I was just like, I thought I was just going to be miserable just trying to figure out what they were saying, or whatever but I loved it! I had so much fun!....but we'd just get to talking and I loved being in there. Like, listening about the different cultures and I was just upset that I didn't have more time to talk and to learn about them.

Repeatedly in the various focus group interviews, experiences working with ELLs were cited as a critical force in the learning that transpired throughout the semester. Interviewees were highly positive about such opportunities.

## Family and Friends

Instructors, the ESL courses, and field experiences were the three most mentioned factors interviewees reported as impacting their beliefs about ELLs and language learning. One further factor that surfaced to a lesser degree was that of family members of the preservice teachers. A few interview participants had siblings or parents who are inservice teachers. These relatives' experiences teaching or not teaching ELLs seemed to influence their incoming beliefs and their experience with the ESL courses.

Conspicuously absent as a factor influencing preservice teachers was personal relationships with ELLs. Just one of the interview participants reported a personal friendship with an ELL and her family to be a strong influencer of her beliefs about ELLS. Friends who are ELLs seem to be an uncommon but powerful shaper of beliefs about English language learning and teaching among preservice teachers.

Conclusion: Change
Just as survey scores indicate difference between pre and post scores, analysis of focus group interviews found indications of belief change. Interview participants repeatedly reported an initial lack of awareness of the value of ELLs and their native languages. Many indicated their prior belief was that ELLs and their native languages were a deficit in the mainstream classroom and a hindrance to English language learning. These participants, however, voiced a change of view where they came to recognize the asset of ELLs and languages other than English. They emphasized the importance of ELLs' native languages to identity, culture, and language development. At the end of ESL coursework, interviewees voiced increased compassion for the challenge of English language learning. In the words of Martha, Jennifer, and Eleanor respectively, "I think I learned so much", "I just totally changed", "I changed a lot."

## CHAPTER V

## SUMMARIES, CONCLUSIONS, AND RECOMMENDATIONS

Increasingly, mainstream educators have the responsibility to teach English language learners (ELLs). What mainstream teachers believe about English language learning and teaching is a powerful force in the education of children across the United States. For this reason, research exploring the beliefs of preservice teacher is timely and valuable. The present study seeks to fill a void in empirical research regarding preservice teachers’ beliefs about English language learning and teaching.

This chapter provides a summary of the present study beginning with the purpose and objectives of the study. A summary of the methodology includes the type of research, population, instrumentation, data collection, and data analysis. Next are conclusions and discussion, followed by implications. The chapter concludes with limitations and recommendations for future research.

## Purpose of the Study

The purpose of this study was to discover preservice teachers' beliefs about language learning in order to better inform future teacher preparation programs and better equip future teachers. The following research questions were used to accomplish the purpose of this study:

1. What beliefs do preservice teachers at Texas A\&M University hold regarding second language learning and teaching before ESL coursework?
2. Do preservice teachers' pre-existing beliefs about second language learning and teaching change after ESL coursework?
3. What variables influence these preservice teachers' beliefs about English language learning and teaching?

## Summary of the Methodology

Mixed methodology was used for this study. Taking advantage of both ranges of methodological tools allowed for triangulation, complementarity, and expansion, thus creating a more complete approach to dealing with the complex issue of preservice teacher beliefs. Focus group interviews were the basis for the qualitative methodology while a close-ended category-scale questionnaire was the basis for the quantitative methodology.

## Population

This study involved preservice teachers in the teacher education program at Texas A\&M University. A total of 354 students participated in the quantitative portion of the study at the beginning and end of ESL Methods courses. The semi-structured focus group interviews included six groups of three or four for a total of 22 survey participants.

## Instrument Development

The research instruments were designed based on a review of the literature as well as interviews with ESL teacher educators and a review of documents from an ESL course. Horwitz's (1985) Beliefs About Language Learning Inventory (BALLI), Savignon’s (1976) Foreign Language Attitude Survey (FLAS), and Lightbown and

Spada's (1999) survey of popular ideas about language learning proved to be valuable resources in instrument development.

On the survey questionnaire participants were asked to indicate their (dis)agreement with 20 statements. Their responses were based on a six-point Likert questionnaire in order to assess magnitude of change. The points on the scale were: 1= Strongly Disagree, 2= Disagree, 3= Slightly Disagree, 4= Slightly Agree, 5= Agree, 6= Strongly Agree. Responses were coded (and reverse coded for items exhibiting negative agreement) so that consistency with research and current practice would reflect in higher scores. Participants' overall mean scores represented the degree to which participants "agreed" with current research and practice. Scores of 0-3.49 generally indicated disagreement with current research and practice whereas scores of 3.5-6.0 suggested agreement.

Factor analysis revealed a three-factor solution and fourteen statements were retained. Items loading on the first factor centered on beliefs about language and language learning. Items loading on the second factor dealt with beliefs regarding the locus of responsibility for language learning and teaching. The third set of items loading together dealt with beliefs about ELLS. Survey and interview questions dealt with the same concepts. The internal consistency of the Language Learning Survey was evaluated by means of Cronbach's alpha coefficient. The scale had an alpha coefficient of . 742 indicating optimal internal consistency.

## Data Collection

The survey was administered at the beginning and end of the fall 2006 semester and again at the beginning and end of the spring 2007 semester. Due to the pre/post
nature of the survey it was necessary to require the names of all participants. Participants were assured of confidentiality by the survey administrator. In an effort to maintain confidentiality, the researcher coded all names on surveys with numbers during data entry. Surveys were administered primarily by the researcher and also by two other Ph.D. candidates. ESL course instructors had no access to the surveys.

Focus group interviews were conducted after the post-survey was administered at the end of each semester. Each interview lasted approximately one hour. Interviewees names were ascribed a pseudonym during the transcription of data. The researcher conducted and transcribed all interviews. Survey participants and interviewees signed a consent form.

## Data Analysis

The design of the study parallels Creswell and colleagues’ concurrent nested design which simultaneously implements quantitative and qualitative measures (Creswell, et al., 2003). The nested design has a primary method directing the study with a secondary method embedded in it. Data are mixed in the analysis phase.

This study was driven by the quantitative measures. For the survey questionnaire response, descriptive statistics including means and standard deviations as well as a paired $t$-test were used to analyze the data. Data gathered in focus group interviews gave great insight into survey responses. Qualitative responses were analyzed according to the constant comparative method. Interview data was compiled into thematic groupings. Themes that gave insight into the research questions were incorporated into the study.

## Conclusions and Discussion of Research Question 1: Pre-existing Beliefs

The first goal of the present study was to explore the pre-existing beliefs with which preservice teachers entered ESL coursework. As far as beliefs about language and language learning were concerned scores indicated incoming beliefs that were misaligned with research. Preservice teachers underestimated the value of a child's native language in the home as well as the classroom which contradicts research that has emphasized the importance of the native language in second language learning (Cummins, 1981; WongFillmore, 1991; Krashen, 2003).

Incoming scores showed higher means on the second component indicating that preservice teachers came to ESL coursework surprisingly aware of the current situation in the United States where mainstream teachers are largely responsible for teaching ELLs. The preservice teachers generally agreed that they expect to have ELLs in their classes, that it is important for mainstream teachers to learn how to teach ELLs, that it is their responsibility to teach ELLs, and that they can effectively do so. They slightly disagreed with the idea that teaching ELLs is the ESL teacher's job rather than that of the mainstream teacher.

Component 3 addressed participants’ beliefs about English language learners. The component mean showed slightly positive beliefs about ELLs. Participants "slightly disagreed" with beliefs that ELLs have behavior problems and that their accents impede academic development. They also "slightly agreed" that their grammatical errors always require correction.

On research question 1 which explored the pre-existing beliefs of preservice teachers, the overall survey mean showed a mid-range indicator of belief of "slight"
agreement. Though these beliefs are not strong, it is notable that overall incoming beliefs were found to be positive. This finding is surprising in light of the largely homogenous population included in the present study. Participants were generally around 20 years old. They were predominantly Anglo-American (89\%) and female (95\%). Less than 6\% had ever lived abroad. Considering such little variation among the research participants, their survey scores demonstrate a body of preservice teachers that is fairly informed. Even still, the pre-survey that was administered before coursework did not reflect a strong degree of alignment with research in the field. Therefore, the need for teacher education dealing with ESL education concepts is evident.

These mixed findings are consistent with those of Karabenick and Noda (2004). Their study of inservice teachers found generally favorable attitudes toward ELLs with a substantial body of negative attitudes as well. Just as Karabenick and Noda found the need for education among inservice teachers regarding second language learning, the present study found the same need among preservice teachers.

## Conclusions and Discussion of Research Question 2: Belief Change

The second goal of the present study was to explore if beliefs can change through related coursework. Both qualitative and quantitative post-course findings indicated a positive overall change in the alignment of preservice teacher beliefs with research and course instruction. All three components and every item within those components reflected shifts in beliefs towards greater agreement with research and accepted practice. There was a clear overall increase in survey scores at the end of the semester and a large effect size.

Focus group interviews were valuable to answering the second research question of whether beliefs change. Multiple interviewees described the shift in beliefs when they reported that their ESL courses "opened [their] eyes", developing in them increased awareness about teaching ELLs. Another summarized the experience of many classmates in her comment, "this semester is the first time we ever talked about focusing on ELL students." This eye-opening experience resulted in belief change regarding three components of beliefs that comprised this study including beliefs about language and language learning, beliefs about the locus of responsibility for teaching ELLs, and beliefs about English language learners (ELLs).

Paired-samples t-tests that were conducted to evaluate the impact of ESL courses on students' beliefs showed a notable increase in survey scores on the Beliefs about Language and Language Learning component of the survey from the pre-course to the post-course administration as well as a large effect size. Post-survey findings shifted toward greater alignment in preservice teachers' beliefs about the native languages of children with principles of ESL education. Researchers such as Wong-Fillmore (1991) have emphasized the value of native language proficiency to second language learning and therefore urge the use of native languages in home environment. The present study found that after coursework preservice teachers showed greater acceptance of parents’ and children's use of native languages in the home. Preservice teachers indicated more positive beliefs about native languages and the role of those languages in English language learning.

Interviewees indicated that their beliefs about language and language learning evolved over the course of the semester. They came out of the course with a stronger
belief that parents should encourage first language usage in the home, asserting that the strengthening of the first language is helpful to second language learning. One interviewee vocalized her recognition of the value of first language usage when she said, "It's not like they come in trying to learn a language and they don't know anything. They have this whole entire resource of this language and all the things that they've learned from that." Interviewees were less inclined toward a previous belief that ELLs should assimilate at the cost of their home language or culture.

With regard to the second research question, participants entered the ESL coursework with positive beliefs about the responsibility of mainstream teachers for teaching ELLs. They expected ELLs in mainstream classrooms, and were positive about mainstream teachers learning to teach ELLs and their personal ability to do so. The paired-samples t-test that was conducted to evaluate the impact of ESL courses on these beliefs about the locus of responsibility for teaching ELLs also showed a significant increase in survey scores on this second component and a large effect size. Post-survey findings demonstrated a shift in their belief toward even greater acceptance of responsibility for teaching ELLs.

Even though the preservice teachers' beliefs were positive before ESL coursework, the post-survey results showed an increase in acceptance of responsibility for teaching ELLs. Overall, participants came to believe even more strongly that ELLs are in mainstream classrooms and that they, as mainstream teachers, will be the ones who are responsible for teaching ELLs. They reported increased confidence in their abilities to teach ELLs and in the ELLs' abilities to learn. This finding is consistent with the
conclusion of Darling-Hammond (2000) and Gandara (2005) who underscored the value of teacher education in their findings that teacher preparation increases confidence.

At the same time, this heightened awareness of responsibility also created a sense of concern about a reality they had not fully considered prior to ESL coursework. Some interviewees worried that they were capable of adequately meeting the needs of ELLs. Findings show a simultaneous increase in concern and confidence after a semester of ESL coursework.

Findings for the third component regarding beliefs about ELLs demonstrated the most dramatic increase in survey scores as well as the greatest magnitude of effect in the survey. This indicates a strong, positive shift in their acceptance of ELLs. Post-survey scores show much more positive beliefs about ELLs' accents and behavior. They also indicated a change in previous beliefs that grammar errors always require correction, indicating a new belief that aligns with ESL research.

Discovering preservice teachers' beliefs about ELLs is critical in light of the impact of those beliefs on expectation and practice.

A variety of scholars have addressed the issue of preservice teachers who "often develop deficit thoughts and beliefs about diverse learners" (Milner, 2005, p.771). This worldview which sees linguistic and cultural differences as a deficit rather than asset is called "deficit thinking" or "deficit perspective" (Milner, 771; Weisman \& Garza, 2002, p.28). In practice this can translate to teachers having lower academic expectations for ELLs. Surveys and interviews indicated that after coursework preservice teachers saw ELLs and their linguistic differences as more of an asset than as a deficit. This finding
supports the value of teacher preparation in moving preservice teachers beyond the societal myths embraced by the "deficit camp" (Meskill \& Chen, 2002, p.9)

Interviewees described ELLs as an asset rather than a deficit to the larger classroom population. Various interviewees detailed how they entered the course with negative beliefs about ELLs, and how they came to see ELLs and their first languages more positively throughout the semester. As one interviewee explained,

I think that they [ELLs] could really be a real asset. And learning to incorporate their cultures would help them, but I think it would be very beneficial to the rest of my class too. So I've really learned to have a new appreciation for that and realize that just because they're over here doesn't mean that they should necessarily have to assimilate to everything that we do.

Beliefs are often noted for their tenacity (Abelson, 1979; Nespor, 1988; Nisbett \& Ross, 1980; Rokeach, 1968). This is especially true for preservice teachers who are insiders in an old, familiar environment and have many established expectations and entrenched beliefs (Pajares, 1993). Thus, by nature, preservice teachers' beliefs are highly tenacious and resistant to change (Brousseau, et al., 1988; Kagan, 1992; McDiarmid, 1990; Tabachnick \& Zeichner, 1984). Within the arena of beliefs research and teacher education, there are several studies that found tenacity of beliefs in the face of teacher education (Doolittle, et al., 1993; Holt-Reynolds, 1992; McDiarmid, 1990; Peacock, 2001). However, there is also a substantial collection of research that contrasts with these studies' findings of inflexibility.

Among the broader body of beliefs research, the present study joins the growing collection of empirical studies that evidences the influence of teacher education. This
study is consistent with the general body of educational research that demonstrates belief change including Cabaroglu and Roberts (2000), Doyle (1997), Nettle (1998), and Tillema (1998). Results of the present study are specifically consistent with the findings related to ELL issues including Hadaway (1993), and, Badger, and White (2001), Meskill \& Chen (2002) and Smith, Moallem and Sherrill (1997) who found educational influences to be instigators of belief change. Like Hadaway (1993), the present study found preservice teachers to show "a positive attitude shift toward working with second language learners" in a post-survey following exposure to ELLs during a teacher preparation course.

The findings of the present study underscore the value of teacher preparation. Whether teacher education instigates belief change is essential to the very premise of teacher education and influential in teacher education policy (Tatto, 1998). The present study also fills the gap in research regarding preservice teacher belief change related to English language learning and teaching.

## Conclusions and Discussion of Research Question 3: Variables Influencing Beliefs

The third goal of the present study was to explore what variable contributed to belief change in preservice teachers during ESL coursework. Interview participants included 22 students in ESL courses who participated in the survey portion of the study and also agreed to participate in focus group interviews.

The mixed method design of the present study simultaneously implemented quantitative and qualitative research. Multiple regression was used to analyze scores in relationship to a variety of variables. Among factors explored as possible predictors were
courses, instructors, experience in living abroad, experience in international travel, experience teaching ELLs, previous language learning experience, and relationships with NNES, persons living internationally, and being multilingual. The multiple regression analysis did not show significant effect for any of these variables.

The secondary method, which in this case was qualitative, was used to add a broader perspective than quantitative alone could offer. Qualitative data is valuable to enlighten a dimension of study that is not explainable by the predominant approach, which in this case is the variables influencing preservice teacher beliefs. Several variables emerged from analysis of focus group interviews including family, friends, ESL course experiences, instructors of ESL courses, and hands-on experience in working with ELLs.

Field experience was a primary factor that interviewees believed to generate their belief change. Most of the survey participants were involved in working with one or more ELLs throughout the semester. This came in a variety of forms. Some went to elementary schools, middle schools, and high schools to tutor. Others had ELL university student conversation partners from the English Language Institute on campus and experienced a change of perspective based on that experience.

Whether preservice teachers were required to work as tutors or conversation partners or both depended on their instructors. The survey participants varied in their opinions of which was more valuable and how much time with ELLs was needed for the greatest effect. What they did generally agree on was the value of these field experiences. The significance of such experience was emphasized repeatedly throughout focus group
interviews. Several reported feeling more confident and comfortable teaching after having spent time in the classrooms with ELLs.

Preservice teachers cited their teacher educators as playing a predominant role in influencing their pre-existing beliefs. Interviewees described instructors who were effective as organized, consistent, accessible, and technology-literate. They appreciated professors who shared stories and personal experiences that were relevant to the subject of study. They valued having instructors who have had experience teaching ELLs. They also appreciated having a non-native English speaker as an instructor in ESL courses since as one interviewee explained, she "knows the perspective of learning English. It really helps us who don't have that knowledge of acquiring another language fluently, but she tells us her experiences in it when she tried to learn English." Interviewees appreciated instructors who used the textbooks and prescribed assignments that fostered learning. Preservice teachers were also very positive about instructors who taught a range of viewpoints rather than an indoctrination of their own opinion.

Whereas many of these characteristics are general characteristics of effective teaching, one dimension is particularly significant for teacher educators who teach ESL coursework. Interviewees repeatedly mentioned the value of course instructors who had firsthand knowledge of ESL. For some participants, that meant having an instructor with previous experience teaching ELLs. For other participants that involved having an instructor who was an ELL herself.

Preservice teachers reported that their participation in the ESL courses had been very eye-opening. Due to their experiences in these courses, participants gained exposure to ELLs, a dimension of teaching that was largely outside the "apprenticeship of
observation" that they experienced in their largely monocultural school backgrounds (Lortie, 1975).

Interviewees mentioned a variety of course experiences that enhanced their learning such as videos, texts, group presentations, and non-native English speaking guest speakers. The videos incorporated into the coursework were effective in helping preservice teachers identify with an ELLs' perspective. The text that interviewees repeatedly mentioned taught specific strategies for teaching ELLs. Exposure to such practical material increased their confidence. Several expressed their intentions of retaining the text for future reference. Many of the interviewees had the experience of applying the strategies taught in the text to a lesson plan and presented it before their peers. They repeatedly voiced the value of this experience. One of the focus groups was able to listen to multiple ELL guest speakers throughout the semester. They felt that listening to firsthand accounts of the speakers' experiences influenced their beliefs about English language learning and teaching.

Two things are common to the course experiences that interviewees found influential to their belief. First, experiences exposed them to the perspective of an ELL. Second, course experiences also gave them access to practical tools they could use in instructing ELLs.

Two other factors that emerged, and failed to emerge, as influencing interviewees' beliefs were relationships including family and friends. Parents or sibling in the teaching profession seemed to shape their pre-existing beliefs and their experience within the ESL course. Glaringly absent was the variable of close friendships with ELLs. Only one interviewee reported such a variable to be influential to her beliefs.

The findings of this study collaborate two of the four experiential factors found by Smith, Moallem and Sherrill's (1997) study to instigate belief change in preservice teachers. These include direct experiences with persons from diverse cultures as well as educational influences. It also underscores Merryfield’s (2000) assertion that personal encounters with diverse individuals helped to prepare teachers for diversity. The findings of the value of field experience to belief change are also consistent with the research of Doyle (1997) who found field experience to be highly valuable to the change process, herein specifically influencing student teachers’ beliefs about teaching and learning. Much like Hadaway (1993), the present study involved a population that lacked exposure to diversity. In both cases, exposure to diverse populations elicited a positive shift of beliefs. The present study echoes Waxman and Padron's (2002) recommendation that teacher education programs increase their relevance by offering field experiences in diverse contexts. As the aforementioned studies evidence, teacher preparation courses as well as field experiences are integral to teacher education programs that are influential in belief formation for preservice teachers.

## Implications and Recommendations for Theory and Practice

The findings of the first research question addressing pre-existing beliefs are important for four reasons. As Florio-Ruane and Lensmire (1990), Posner, et al.,(1982) and Scheurman (1996) emphasize, pre-existing beliefs are consequential in that they act as filters to learning. What students learn in teacher education is largely influenced by their pre-existing beliefs.

Secondly, incoming beliefs are consequential to teacher educators. This is due to the fact that in order for teacher educators to be effective, they must understand and target beliefs preservice teachers bring to their classes (Nespor, 1987; Pajares, 1993; Smith, Moallem \& Sherrill, 1997; Weinstein, 1989). As Anderson and colleagues advised, in order for teacher educators to be effective they "must understand the knowledge and beliefs that their students bring and how that knowledge will likely influence what is learned." (Anderson, et al. 1995, p. 150)

Additionally, pre-existing beliefs of preservice teachers are highly important because of the relationship between belief and practice. Beliefs are highly consequential in that they are the most reliable predictors of behaviors (Bandura, 1986; Clark \& Peterson, 1986; Nisbett \& Ross, 1980; Rokeach, 1968). In the words of Rokeach, "All beliefs are predispositions to action." (p. 113) More specifically to teachers, these beliefs influence perceptions and judgments, thus determining classroom practices (Clark, 1988). What these preservice teachers believe about ELLs and language learning and teaching will determine their instructional practice when they enter the teaching workforce (Johnson, 1992).

Moreover, beliefs influence teachers’ expectations of students, and subsequently impact student achievement (Crano \& Mellon, 1978; Cooper, 1979; Good, 1981; Smith, 1980; Waxman \& Padron, 2002). Teachers with a deficit mentality will have lowexpectations for ELLs. Teachers behave differently toward low-expectation students than they do to high-expectation students. These differences in behavior, rooted in beliefs by way of expectations, can lead to significant disadvantage for low-expectation
students such as less interaction with them and calling on them less often (Terrill \& Mark, 2000; Winfield, 1986).

Finally, while many scholars call for the exploration of pre-existing beliefs about language learning and teaching, there is a dearth of research that focuses on preservice teachers' pre-existing beliefs. The present study offers a meaningful step toward addressing this critical issue in teacher preparation.

A recommendation for future classroom practice is small group discussion in ESL coursework. The focus group interviews in this study were conducted with small groups of three to five. These proved to be valuable to the researcher, but also seemed to be valuable to the interviewees. Small group discussion is recommended for two reasons.

First, small group discussions can allow teacher educators become aware of their students' beliefs. By discovering these beliefs teacher educators can target them. As Joram and Gabrielle (1998) have suggested, targeting beliefs is critical to impacting them. These recommendations for future practice also support Kagan’s (1992) assertion that making beliefs explicit is a necessary step in order to impact change.

A second benefit is that preservice teachers themselves gain an understanding of their own beliefs. This recommendation of small group discussions builds on Nespor's (1987) recommendation of helping preservice teachers become aware of their beliefs. Minor, Onwuegbuzie, Witcher and James (2002) also emphasize the need among preservice teachers to identify their beliefs and look at them as they align to the pedagogical and curricular dimensions of the disciplines in which they intend to work. Such discussion can encourage reflection and allow students to better digest concepts taught in class and think about course material from various perspectives.

Furthermore, the findings of this study strongly underscore the value of field experiences with ELLs. Based on this study, it is strongly recommended that future ESL coursework include a field experience dimension as part of the course design. A second recommendation is that non-native English speaking teachers (NNEST) and those with knowledge and teaching experience of ESL be tapped for instruction of ESL teacher preparation coursework. Furthermore, it is suggested that these instructors incorporate personal stories of language learning into their teaching to help presevice teachers identify with what is often an unfamiliar perspective. In the present study, NNESTs' personal insights were valuable for emitting a perspective with which a largely monolingual and monocultural preservice teacher body was unfamiliar.

Based on these findings regarding variables impacting beliefs, it is recommended that ESL teacher educators invoke a variety of approaches to increase preservice teacher awareness and confidence by exposing them to ELLs’ perspectives and equipping them to instruct ELLs.

## Limitations and Recommendations for Future Research

One limitation of this study is the use of a self-report survey. Overall, preexisting belief scores were higher than expected. This may be attributed to the desirability effect that is often encountered in research based on surveys. This effect results in means that may show a more positive perspective than the reality as it would be translated into practice.

Another limitation is that the findings herein may have direct relevance only to the teacher education program at Texas A\&M. It may not possible to generalize the results to other teacher education programs. This study was limited to one university.

It would be beneficial for future research to explore field experiences to determine the most effective type and frequency of field experience. An exploration of the value of working with school-aged students as opposed to ELLs from a university setting would provide more insights into the most effective field experiences. Furthermore, it would be beneficial to explore the amount of time spent with ELLs that is necessary for the utmost impact on preservice teachers. Both would inform and strengthen teacher preparation programs.

Future research would benefit from an examination of classroom practices in teacher preparation coursework that lead to change. The present study found instructors and course experiences, including field experiences, to be highly valuable in instigating belief change in preservice teachers. An in-depth exploration of the practices of those instructors and course components would be a valuable study for informing teacher education programs.

By gaining an understanding of what mainstream pre-service teachers believe and what variables influence those beliefs, teacher education will be better informed as to its audience and their needs. This study is valuable for informing the field of teacher education because it will allow educators of teachers to be better prepared as they instruct education classes with insight into possible preservice teacher beliefs. Ultimately, further research such as this study can pave the way for better prepared preservice teachers who
will promote educational success for the increasing numbers of English language learners in the United States.

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## APPENDIX 1

## CONSENT FORM

## Preservice Teacher Beliefs about English Language Learning

You have been asked to participate in a research study regarding preservice teacher beliefs about second language acquisition. You were selected to be a possible participant because you are enrolled in INST 332 or 334. A total of 500 people have been asked to participate in this study. The purpose of this study is to explore pre-service teacher beliefs about language and the variables influencing those beliefs.

If you agree to participate in this study, you will be asked to complete a background questionnaire as well as a survey that is based on the Beliefs About Language Learning Inventory (BALLI), and the Foreign Language Attitude Survey (FLAS). These instruments will be administered at the beginning and end of the semester. Also, you may be invited to participate in individual and/or group interviews. If you participate in the interviews, this will include no more than two individual and one group interview. A personal benefit to the study is that it may help you increase your awareness of your beliefs about language learning, thereby making you a more effective teacher of nonnative English speaking students. This research study poses no threat to you.

You will not receive any financial compensation for participation in the survey portion of this study, nor will your participation better or worsen your grades in INST 332 or 334. A small group of students will be asked to participate in the aforementioned interviews. Each person who participates in the interviews will receive a gift card to a local restaurant in the amount of $\$ 20.00$. The researcher will provide this payment at the conclusion of the group interview. You may refuse to participate in the study. If you choose to take part in the study, you may refuse to answer any questions.

Your participation and beliefs are highly valued and will be kept confidential. In any discussion or publication of the findings of the study, you will in no way be linked to your verbal or written responses. The records of this study will be kept private. Research records will be stored securely and only Kylah Clark-Goff will have access to the records. Audio tapes may be made of interviews. These are strictly for education purposes and they will be erased after transcription. Your decision whether or not to participate will not affect your current or future relations with Texas A\&M University. You can withdraw at any time without your relations with the University or INST 332 or 334 instructors being affected. You can contact Kylah Clark-Goff, (979) 694-8525, or Dr. Zoreh Eslami, (979) 845-0560, or Dr. Blanca Quiroz, (979) 845-7952, with any questions about this study.

This research study has been reviewed by the Institutional Review Board - Human Subjects in Research, Texas A\&M University. For research-related problems or questions regarding subjects' rights, you can contact the Institutional Review Board through Ms. Melissa McIlhaney, IRB Program Coordinator, Office of Research Compliance, (979) 458-4067, mcilhaney@tamu.edu

Please be sure you have read the above information, asked questions and received answers to your satisfaction. You will be given a copy of the consent form for your records. By signing this document, you consent to participate in the study.

Signature of the Participant: $\qquad$ Date: $\qquad$

## APPENDIX 2

## SECOND LANGUAGE LEARNING SURVEY

Name $\qquad$ Instructor's Name $\qquad$
Date $\qquad$ Course $\qquad$

## Second Language Learning Survey

Below are statements relating to beliefs about learning languages. Circle the number corresponding to the degree that you agree or disagree with the statement. There are no right or wrong answers. We are simply interested in your honest opinions.

|  |  | - |  |  | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Students should be proficient in English before being integrated into the general education classroom. | 1 | 2 | 3 | 4 | 5 | 6 |
| Teaching English Language Learners is the job of the English as a Second Language (ESL) teacher, not the general education teacher. | 1 | 2 | 3 | 4 | 5 | 6 |
| Speaking a first language other than English interferes with learning English. | 1 | 2 | 3 | 4 | 5 | 6 |
| When I have my own class, I expect that some of my students will be English Language Learners. | 1 | 2 | 3 | 4 | 5 | 6 |
| Parents of English Language Learners should have their children speak English at home. | 1 | 2 | 3 | 4 | 5 | 6 |
| Parents of English Language Learners should speak English to their children at home. | 1 | 2 | 3 | 4 | 5 | 6 |
| It is not my responsibility to teach English to students who come to the United States and do not speak English. | 1 | 2 | 3 | 4 | 5 | 6 |
| English Language Learners' grammatical errors always require correction. | 1 | 2 | 3 | 4 | 5 | 6 |
| It is important for general education teachers to learn how to teach English Language Learners. | 1 | 2 | 3 | 4 | 5 | 6 |
| An English Language Learner's accent is a detriment to his/her educational development. | 1 | 2 | 3 | 4 | 5 | 6 |
| English Language Learners have behavior problems in the classroom. | 1 | 2 | 3 | 4 | 5 | 6 |
| Language learning requires a special aptitude. | 1 | 2 | 3 | 4 | 5 | 6 |
| I can effectively instruct English Language Learners in the content area(s) I will teach. | 1 | 2 | 3 | 4 | 5 | 6 |

## APPENDIX 3

## BACKGROUND QUESTIONNAIRE

## Background Questionnaire

Based on your previous experiences, please CIRCLE the appropriate responses and fill in the blanks.

| 1. ESL instruction courses I have completed: |  |  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| INST 322 Foundations of Education in a Multicultural Society | YES | NO |  |  |  |  |
| INST 332 Second Language Instruction and Assessment | YES | NO |  |  |  |  |
| INST 334 Assessment of English Language Learners | YES | NO |  |  |  |  |

2. ESL instruction courses in which I am currently enrolled:

| INST 322 Foundations of Education in a Multicultural Society | YES | NO |
| :--- | :--- | :--- |
| INST 332 Second Language Instruction and Assessment | YES | NO |
| INST 334 Assessment of English Language Learners | YES | NO |


| 3. I have traveled internationally. | YES | NO |
| :--- | :--- | :--- |

If yes, where and for how long? $\qquad$
$\qquad$

| 4. I have lived internationally. | YES | NO |
| :--- | :--- | :--- |

If yes, where and for how long? $\qquad$

| 5. I took a foreign language course(s) at the high school level. | YES | NO |
| :--- | :--- | :--- |

If yes, what languages? How many semesters?
$\qquad$ Number of semesters $\qquad$ Language $\qquad$ Number of semesters $\qquad$
Language $\qquad$ Number of semesters $\qquad$

| 6. I have taken foreign language course(s) at the college level. | YES | NO |
| :--- | :--- | :--- |

If yes, what languages? How many semesters?
Language $\qquad$ Number of semesters $\qquad$
Language $\qquad$ Number of semesters $\qquad$
Language $\qquad$ Number of semesters $\qquad$

| 7. I have had opportunities to teach English Language Learners in the U.S. | YES | NO |
| :--- | :--- | :--- |

If yes, in what context? $\qquad$

For how long? $\qquad$

| 8. I plan to obtain the certification to teach English as a Second Language (ESL). | YES | NO |
| :--- | :--- | :--- |


| 9. I would take an ESL class even if it were not required by Texas A\&M University. | YES | NO |
| :--- | :--- | :--- |


| 10. The languages I use are: | My language proficiency level is: |  |  |
| :---: | :---: | :---: | :---: |
| $1^{\text {st }}$ Language: |  |  |  |
| $2^{\text {nd }}$ Language: | Beginner | Intermediate | Advanced |
| $3^{\text {rd }}$ Language: | Beginner | Intermediate | Advanced |
| $4^{\text {th }}$ Language: | Beginner | Intermediate | Advanced |


| 11. I have family members and/or close friends <br> who | Speak <br>  <br>  <br>  <br> No <br> English | Speak | Some | Are |
| :--- | :--- | :--- | :--- | :--- |
| English | Proficient | Proficient |  |  |
| Bilingual | Multilingual |  |  |  |

(Circle all that apply.)

| 12. I have | - | family members and/or close friends in/from countries outside the United <br> States. |
| :---: | :---: | :--- |
|  | 0 |  |
|  | $1-3$ |  |
|  | $4-6$ |  |
|  | $7-10$ |  |
|  | $11+$ |  |

(Circle one.)
What countries are they in/from?


| U If yes, who? |  |  |  |
| :--- | :--- | :--- | :--- |
| What language(s)? | How well? |  |  |
| 1. | Beginner | Intermediate | Advanced |
| 2. | Beginner | Intermediate | Advanced |
| 3. | Beginner | Intermediate | Advanced |
| How well do they speak English? | No English | Some English | Proficient in <br> English |


| ~-Who else? | How well? |  |  |
| :---: | :---: | :---: | :---: |
| What language(s)? |  |  |  |
| 1. | Beginner | Intermediate | Advanced |
| 2. | Beginner | Intermediate | Advanced |
| 3. | Beginner | Intermediate | Advanced |
|  |  |  |  |
| How well do they speak English? | No English | Some English | Proficient in English |

## APPENDIX 4

## FOLLOW-UP QUESTIONNAIRE

## Follow-up Questionnaire

Please select the appropriate multiple choice answer for each multiple choice question and fill in the blanks accordingly.

4. What subject/grade do you plan to teach? $\qquad$
5. Ideally, where would you choose to teach upon graduation? (ex. rural, urban, sub-urban, low income, middle income, high income...)
6. In this class, part of my coursework this semester has included working with an English Language Learner (ELL).
7. If yes, how was your experience working with the
ELL(s)? $\qquad$
8. Expected final grade in the class
a. A
b. B
c. C

d. D
e. F
9. The class was
a. A more positive experience than I expected
b. A more negative experience than I expected
c. Met my expectations

## VITA

| Name: | Kylah Clark-Goff |
| :--- | :--- |
| Address: | Texas A\&M University <br> Department of Teaching, Learning, and Culture <br> Mail Stop 4232 <br> College Station, TX 77843 |
| Email Address: | samandkylah@yahoo.com |
| Education: | B.S., Education, Baylor University, 1995 <br> M.Div., Theology, Southwestern Seminary, 2001 |


[^0]:    This dissertation follows the style of Teaching and Teacher Education.

