

EXAMINATION OF TEACHER EFFICACY AND CULTURALLY RESPONSIVE  
BELIEFS OF ALTERNATIVE CERTIFIED AND TRADITIONALLY CERTIFIED  
HISPANIC TEACHERS SERVING HISPANIC STUDENTS IN HIGH PRIORITY  
SCHOOLS

A Dissertation

by

WOOD SIGHTS COSTON

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2010

Major Subject: Curriculum and Instruction

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Approved by:

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## ABSTRACT

Examination of Teacher Efficacy and Culturally Responsive Beliefs of Alternative Certified and Traditionally Certified Hispanic Teachers Serving Hispanic Students in High Priority Schools. (May 2010)

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The purpose of this mixed method study was to examine teacher self efficacy and culturally responsive self efficacy of in-service Hispanic teachers teaching in high priority schools which serve large percentages of students of color with respect to the teachers' route to certification (alternative or traditional). This study also personal narratives to explore highly effective both alternatively and traditionally certified in-service teachers.

The three guiding research questions for this mixed method study were:

1. What are teacher efficacy beliefs of alternatively certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?
2. What are culturally responsive beliefs of alternative certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?

3. What are the voices of highly effective alternative certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?

Participants in the quantitative portion of the study were 90 middle and high school in-service teachers teaching in high priority schools in the Texas/Mexico borderlands of South Texas. The participants (N=4) in the qualitative portion of the study were purposively drawn from the quantitative participants. Findings of the study were derived from the use of two questionnaires (Teacher Self Efficacy Scale & Culturally Responsive Teacher Self Efficacy Scale) and an in-depth semi-structured interview with four participant in-service teachers.

The major findings in this study were:

1. There are no significant differences in teacher self efficacy between alternatively certified teachers and traditionally certified teachers.
2. There are no significant differences in culturally responsive teacher self efficacy between alternatively certified teachers and traditionally certified teachers.
3. Sample population of Hispanic teachers scored themselves as having high teacher self efficacy and culturally responsive self efficacy.
4. The themes from teachers participating in the narrative portion of the study were: (a) high levels of teacher expectations, (b) effective school/parent relationships, (c) effective use of previous work experience,

(d) utilization of the funds of knowledge of the students, (e) effective teacher/student connection, and (f) consistent use of self reflection.

## DEDICATION

This study is dedicated to my wife of thirty-five years, Elizabeth R. Coston, for never giving up on my dream. She has followed me in my pursuit through good times and bad, from one side of Texas to the other and always with loyalty and dedication.

This study is also dedicated to my daughter, Anita Netanya Coston, who had to sacrifice during her teen years so I could finish what I had started.

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## CHAPTER I

### INTRODUCTION

Concerns over teacher quality and quantity have become perennial issues in the United States (Birkland, 2003; Hardy, 2009; Kappan & Owings, 2003; Kennedy, 2008). Common concerns of school districts nationwide are recruiting and retaining quality teachers especially in the traditionally hard to staff areas such as special programs, math and science (Angrist & Guryan, 2004; Baldacci, 2006; Corcoran, Evans & Schwab, 2004; Johnson, 2006a; Sindelar, Daunic & Rennells, 2004). One of the new recruitment strategies individual states are implementing is recruiting teachers from the professional workplace and credentialing those same individuals to teach if they meet certain criteria. The criteria for successful recruitment includes specific grade point averages on upper level courses, passing scores on basic skills tests, previous work experience and a degree from an accredited university (Birkland, 2003; Darling-Hammond & Sykes, 2003; Flores, Desjean-Perrota & Steinmetz, 2004; Miller, McKenna & McKenna, 1998). Teachers who do not follow the traditional path to teacher certification are commonly referred to as having alternative certification (Darling-Hammond, Chung & Frelow, 2002; Haberman, 2003).

Demographic studies indicate that increases in student enrollment leads to demand for more teachers (Johnson, Berg & Donaldson, 2005; Justice, Greiner & Anderson 2003). According to the National Digest of Educational Statistics (NCES), the enrollment figures for elementary and secondary school children are at record levels and are projected to continue to rise through 2014 (Snyder, Tan & Hoffman, 2005). The blend of attrition and demographic demand combined with higher accountability has exerted a powerful pull for quality, effective individuals to enter the teaching profession (Birkeland, 2003; Johnson, 2006). States and local education agencies across the United States are recruiting individuals through alternative teaching programs.

Early research into effective schools demonstrated that effective schools had certain characteristics that filtered into teacher attributes. High expectations, good classroom management and an emphasis on mastery learning of essential reading skills were some of the critical elements found in early research on effective schools (Edmonds, 1979). Martin Haberman (1991) further defined what activities an effective school would be doing in his treatise on "*The Pedagogy of Poverty vs. Good Teaching*" by listing a number of teaching practices that together comprise good teaching. An inclusive school that values experiences, higher order thinking skills and caring, trustworthy teachers who value meaningful activities are some of the characteristics Haberman elucidated. Other studies have demonstrated qualities of teacher effectiveness that include concepts such as modifying the instructional setting, teaching to student strengths and learning styles, accepting the concept of accountability and teaching to mastery (Banks, 2001; Larke, 1992; Soodak & Podell, 1994; Tucker & Stronge, 2005).

These attributes of teachers combine to produce teacher efficacy and culturally responsive efficacy beliefs.

Research indicates that teachers with high self-efficacy are more apt to assume greater responsibility for teaching the most difficult students (Flores, Desjean-Perrotta & Steinmetz, 2004; Saklofske, Michayluk & Randhawa, 1988; Tucker, Porter, Reinke, Herman, Ivery, Mack & Jackson, 2005). Teacher self efficacy is “intimately tied to the curriculum for students of such diverse groups as learning disabled and English Language Learners” (Sleeter, 2005, p.14). Studies indicate that many teachers feel unprepared to teach groups of students from culturally different backgrounds (Tucker et.al. 2005). Goddard and Skrla (2006) found indications that teacher’s social class and ethnicity have a role in teacher efficacy and called for more research into these factors. Teacher efficacy, along with culturally responsive efficacy, are uniquely intertwined in individual teachers. Many of the points made above culminate in an individual situation where the teacher finds “themselves in high-risk situations and barely coping” (Henderson & Milstein, 2003, p. 34) with the demands of the profession. A foundational belief system based in part on high expectations, seeking and communicating caring, and meaningful participation in life’s activities is essential for a world view of high self efficacy.

Siwatu (2005) researched and created a culturally responsive teaching self-efficacy instrument that measures the “teacher’s belief in their confidence to execute specific teaching practices and tasks that are associated with teachers who are believed to be culturally responsive.” (p. 49). This instrument was used as a measure in this research project. The present research project consisted of a study of current Hispanic



teachers and their teacher and culturally responsive efficacy beliefs while actively teaching children from high risk environments.

Teacher efficacy also has been shown to link to attainment levels of students from low socio-economic status (SES) families (Goddard & Skrla, 2006; Parker, Hannah & Topping, 2006). Problems with student attainment surface in schools that are collectively categorized as low SES schools (Bandura, 1993; Goddard & Goddard, 2001; Goddard, LoGerfo & Hoy, 2004). Schools categorized as low SES have high numbers of students that qualify for free or reduced meals (Tschannen-Moran & Barr, 2004).

Teacher efficacy has also been reported to influence how teachers feel, think, act, and motivate themselves (Tschannen-Moran & Barr, 2004). Thus, teacher efficacy is directly connected to a teacher's capability to manage and implement a course of action to generate higher levels of attainment (Parker, Hannah & Topping, 2006). This research project investigated the culturally responsive and teacher efficacy of Hispanic teachers working in high priority schools serving high numbers of culturally and linguistically diverse (CLD) students to ascertain if significant differences exist when comparing the teachers route to certification.

### **Statement of the Problem**

A beginning classroom teacher on average will face a classroom of students where “25% will live in poverty, 10% to 20% have identified learning differences; 15% speak a language other than English as their primary language and about 40% are [students of color]” (Darling-Hammond, 2006, p. 301). Research indicates that the teaching profession will lose more than 30% of teachers within their first two years of

teaching (Justice, Griener & Anderson, 2003). The literature also indicates that student achievement may be hindered when students do not receive the benefits of teacher experience, especially teachers with more than two years of experience (Hanushek, Rivlin, & Kain, 1998; Rockoff, 2004; Walsh & Tracy, 2004). It is therefore imperative that teacher preparation programs, as well as local education agencies, understand and implement measures to achieve maximum potential of their constituents by preparing, educating and keeping an experienced teacher element (Darling-Hammond, 2006; Ingersoll, 2001; Torff & Sessions, 2005). The challenge cannot be ignored, yet very little, if any research has been done that addresses the combination of teacher and culturally responsive self efficacy combined with route to certification, whether alternative or traditional route to certification.

At present, there is some debate over the manner in which teachers are credentialed (Darling-Hammond & Sykes, 1993; Johnson, Berg & Donaldson, 2005; Miller, McKenna & McKenna, 1998; Torff & Sessions, 2005). Some researchers emphatically contend that for teachers to be effective they must partake of a four-year educational university program that prepares them for teaching (Darling-Hammond, 2006). Other researchers have proposed an alternative type of credentialing program where prospective teachers with college degrees and work experience outside education become teachers with a minimal amount of educational pedagogy classes (Grant & Gillette, 2006; Haberman, 2003; Torff & Sessions, 2005).

In addition, culturally responsive teaching issues become paramount when teachers work in schools with high numbers of English Language Learner (ELL) students, students of color or low socioeconomic status (SES) students (Gay, 2000;

Ladson-Billings, 1994; Nieto, 2000; Nieto, 1999). Teacher efficacy is related to racial attitudes and perceived ability of teachers to effect attainment in cultural and linguistically diverse (CLD) students (Tucker, et.al, 2005). A linkage to higher referrals to special education has also been shown by teachers exhibiting lower levels of teacher efficacy (Allinder, 1994; Cummins, 1991; Soodak & Podell, 1994). Research has shown that high teacher self-efficacy beliefs exert beneficial effects on students' academic performance and persistence (Bembenuddy, 2006; Caprara, Barbaranelli, Borgogni, & Steca, 2003; Chambers, Henson & Sienty, 2001; Morrison & Cosden, 1997; Multon, Brown & Lent, 1991).

With the advent of large groups of alternatively certified teachers in the work force, evidence points to surprisingly little research combining teacher and culturally responsive self-efficacy. A strong research base needs to be established regarding alternatively certified teachers, intrinsic and extrinsic motivation, culturally responsive self-efficacy and how to maximize educational goals. At present, there are very few studies addressing these issues and even fewer studies that examine Hispanic teachers who teach students from high risk environments.

Teachers face a myriad of classroom challenges that have resulted in a high rate of teacher attrition (Darling-Hammond & Sykes, 2003; Johnson, 2006; Johnson, Berg & Donaldson, 2005). Teacher shortage is a critical issue in the United States. Alternative certification programs designed to meet this challenge have been criticized for lacking in educational pedagogy and rigor compared to traditionally prepared teachers (Birkeland, 2003; Corcoran, Evans & Schwab, 2004; Miller, McKenna & McKenna, 1998).

Clarification was needed for teachers, school districts and policy makers in

understanding the influence of alternative certification programs compared to traditional certification programs on teacher and culturally responsive efficacy beliefs of in-service teachers.

### **Purpose of the Study**

The purpose of this study was to examine the teacher self efficacy and the culturally responsive self efficacy of Hispanic in-service teachers. The study group participants included teachers credentialed by alternative and traditional methods who teach in high risk educational environments. Additionally, this study examined the qualities of selected high efficacy Hispanic teachers certified by alternative and traditional means through open ended interviews.

### **Research Questions**

The following research questions were examined in this study.

1. What are teacher efficacy beliefs of alternative certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?
2. What are culturally responsive beliefs of alternative certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanics?
3. What are the voices of highly effective alternative certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?

### **Significance of the Study**

This study elucidated the teacher and culturally responsive efficacy of Hispanic teachers teaching in high risk environments. A thorough examination of the literature on teacher self efficacy and culturally responsive efficacy found a profound lack of rigorous studies of Hispanic teachers teaching in low performing, high risk educational environments. One study by Goddard and Skrla (2006) compared the collective efficacy of Hispanic, African American and White teachers along with the SES of represented schools. This research indicates that Hispanic teachers have high efficacy beliefs. Goddard and Skrla indicate that more research into efficacy of Hispanic teachers should be done. Another study by Siwatu (2005) looked at pre-service teacher's culturally responsive teaching self-efficacy and outcome beliefs. The study by Siwatu found that outcome expectancies can be changed through selective academic programs. Yet there were no studies that combined teacher self efficacy and culturally responsive efficacy for Hispanic in-service teachers regardless of the teaching environment.

### **Definition of Terms**

In order to fully understand and actualize the information contained in this study the researcher has defined the following terms:

- Alternatively certified program: Programs that provide alternative paths to the traditional university programs for teacher certification, usually candidates already have a bachelor's degree but not in the field of education. Preparation

varies but can be from a few months to a year in length (Flores, Desjean-Perrotta & Steinmetz, 2004; Darling-Hammond, Chung & Frelow, 2002).

- **At-risk:** A euphemism for students who exhibit a wide range of educational problems, including the failure to respond positively to the instruction offered in basic academic skills, manifestation of unacceptable social behavior at school, the inability to keep up with their classmates in academic subjects, and a limited repertoire of experiences that provide background for formal education, (i.e. low socioeconomic status) (Pierce, 1994). At-risk is defined by Slavin and Madden (1989) simply as a student who is in danger of failing to complete his or her education with an adequate level of skill.
- **Borderland:** The 2,000 mile long by 400 mile wide political belt between six Mexican states and four U.S. states comprising 52 million people and the unique bi-nationalization and biculturalization of its population (Cline & Necochea, 2007; Velez-Ibanez & Greenberg, 2005; Weber, 2005).
- **Culturally and Linguistically Diverse (CLD):** Students who are of a different culture or ethnicity and/or have a home language different than the dominant language of instruction (Brisk, Barnhardt, Herrera & Rochon, 2002; Cummins, 1991).
- **Culturally responsive teaching efficacy:** A teachers belief in their confidence to execute specific teaching practices and tasks that include utilizing the cultural knowledge, prior experiences, cultural frames of reference, and diverse performance styles of CLD students in order to create a higher positive impact on the learning encounter (Gay, 2000; Siwatu, 2005).

- Funds of knowledge: A term that encompasses the knowledge and skills acquired through historical and cultural interactions of the individual in their community and their home (Moll & Greenberg, 1990). Knowledge the child has acquired experientially in their home culture and environment from everyday living (Gonzalez, Moll & Amanti, 2005).
- Highly effective teaching: Is comprised of elements that includes teachers understanding the larger social context in which they are working, that teachers act and achieve pedagogical understanding of cultural responsibility, understand how one's human agency and social characteristics affect teaching, and understand that knowledge is socially constructed and must be pedagogically rich and deep in order to give understanding, interest and comprehension to others (Grant & Gillette, 2006).
- High priority school: Schools that serve large concentrations of low-income and students of color and have a history of, or high possibility of failing to meet state or federal standards of performance (Darling-Hammond, 2006).
- High risk environments: A construct characterized by depicting students that live and go to school in environments where one or more of the following characteristics are present: demographics indicate high numbers of people of color, high numbers of culturally and linguistically diverse populations, where medium incomes are at or below the poverty line as defined by the United States Department of Agriculture for free or reduced fees for the school lunch program, and where the educational attainment of the parents are minimal (Osborn, 1990).

- Human agency: That capacity of humans to exercise control over the total sum of our thoughts, intents and actions (Bandura, 1989). Silva and Radigan, (2004) explained further that “one always has agency, and this means one always has the ability to act in one way as opposed to another way” (p.119).
- Master teacher/Lead teacher: A teacher that “engages in essentially the same activities as another but is judged to be better at accomplishing those activities” (Good & Brophy, 2000, p. 502).
- Multicultural education: A philosophy, process and educational reform that emphasizes acceptance, respect, and appreciation for human diversity (Banks, 2001; Grant & Gillette, 2006; Larke, 1992).
- Self-efficacy: Described as how one believes about their capability to exercise control over their own level of functioning and over events that affect their lives. Self-efficacy produces beliefs on how one feels, thinks, motivates themselves and behaves (Bandura, 1993; Flores, Desjean-Perrota & Steinmaz, 2004).
- Socio-Economic Status (SES): The socio-economic status is characterized by the economic, social and physical environments in which individuals live and work, as well as demographic and genetic factors. Measures for SES may include: income or income adequacy, education, occupation, or employment. In schools SES is normally measured by the number of student receiving reduced or free meals (Tschannen-Moran & Barr, 2004).
- Teacher self-efficacy: Broadly defined as a situation-specific expectation that



teachers can help students learn and that teachers will use their abilities or willingness to address students' difficulties in the content areas. (Cantrell & Hughes, 2008; Guskey & Passaro, 1994).

- Traditionally certified programs: A four or five year program that results in an individual being credentialed to become a teacher, usually in their major field of study. The program includes field based experiences, content and pedagogical instruction (Miller, McKenna & McKenna, 1998; Justice, Greiner & Anderson, 2003).

### **Assumptions**

The present study assumes that:

1. Participants were honest in their assessment of self-efficacy.
2. The instrumentation used in this study to measure teacher and culturally responsive self-efficacy are true and indeed measure what they purported to measure.
3. Participants selected for the interview process were truthful and honest in their responses to interview probes.
4. The data collected in the study accurately portrays the participants' worldview.

### **Limitations**

1. The participants were limited to three middle schools and one high school.

2. The findings from this study may not be generalizable to any group other than an exact replica of the group of participants taking part in the study.
3. The geographic and ethnological parameters of this study encompassed only United States/Mexico borderlands.
4. Teachers may not respond to the questionnaire in an honest and forthright manner.
5. The number of participants may be below the minimum preferred standard quantitative sample size for some applications.

### **Organization of the Study**

Chapter I comprised a brief overview of the study including the statement of the problem, research questions, purpose of the study, significance of the study, definitions as used in the study along with assumptions and limitations.

Chapter II contained a review of the literature. The literature review includes the theoretical basis of the study, an overview of teacher efficacy, history of research in the teacher and culturally responsive self-efficacy fields, a discussion of high priority schools and Hispanics and includes funds of knowledge and teaching in the borderland. The literature review also discussed alternative and traditional certification of teachers and gave a succinct history of certification and the trend toward alternatives to traditional certification.

Chapter III explained the methodology used in the study. The chapter begins with an introduction followed by the purpose of the study and the research design. The method used to select the participants, the instruments used, and collection and entry of

the data are discussed. An explanation of the research procedures and research questions was also included.

Chapter IV included the findings of the quantitative portion of the study. The chapter opened with question one of the quantitative portion of the research and the findings. The chapter continued with question two and the findings and concluded with an aggregate of the findings of both quantitative questions.

Chapter V concluded the findings with an explanation of the findings of the qualitative portion of the study. Themes voiced by the participants were delineated and discussed. Chapter VI concluded the study and contained a summary of the study, conclusions reached and recommendations for further study.

## CHAPTER II

### REVIEW OF LITERATURE

This review of literature is divided into the following sections. The conceptual framework of the study is discussed first followed by specific areas including teacher efficacy, culturally responsive teaching and need for Hispanic teachers. Route to certification is reviewed including traditional certification and alternative certification. The final areas examined in this chapter are funds of knowledge and implication of borderland teaching.

#### **Conceptual Framework**

Social cognitive theory, conceptualized by Albert Bandura is the basis for this research. Social cognitive theory stresses that cognitive functioning is best addressed when framed in a conceptual framework that exercises human agency, and is a model of emergent interactive agency (Bandura, 1989, 1993). Social cognitive theory, as asserted by Bandura (1994), refers to the beliefs that individuals hold about their capability to attain desired goals and to influence and control events in their lives. Teachers are fully engaged in these activities.

Social cognitive theory emphasizes that individuals learn by cognitively encountering information through social experiences, such as exposure to models, discipline and verbal discussions, resulting in response patterns that are then refined through self-corrected adjustments (Bandura, 1977, Goddard & Skrla, 2006). Social

cognitive theory encompasses the manner in which the learner processes information such as memory, descriptions, problem solving, concepts of goals, outcome expectations and self-efficacy (Billek-Sawhney & Reicherter, 2004). Highly effective and efficacious teachers use these concepts to effectively teach hard to teach students.

Self-efficacy has been defined as the belief to teach and motivate students (Ashton & Webb, 1986; Bandura, 1993; Flores, Desjean-Perrotta & Steinmetz, 2004) Self-efficacy is a learned concept and is a forward looking expectation of a behavior. The concept can be best explained by understanding that it is a belief that is followed by an action. Social cognitive theory states that “cognition involves knowledge and the skills for acting on that knowledge...that it is best regarded as guided by specialized cognitive capacities that change over time as a function of maturation and experience” (Grusec, 1992, p.777). Social cognitive theory contends a view of human agency that encompasses the primary thought that individuals are proactively engaged in their own development and by the action of cognition can create increasingly complex environmental innovations (Pajares, 2002). Social cognitive theory according to Bandura, is connected to one’s self-efficacy (Bandura, 1989). Social cognitive theory allows human agency to formulate thought processes, or the intention to act, based on previously learned knowledge.

Social cognitive theory does not predict the action; rather it only indicates that action is preceded by a cognitive thought process. Teacher efficacy is directly related to a thought process connected to how one believes about their capability to exercise control over their own level of functioning and over events that affect their lives. Funds of knowledge (Moll & Greenberg, 1990) or the knowledge one has attained through

cultural interaction in one's life experience, may predict how human agency makes critical decisions. Social cognitive theory explains the basis for how teachers make decisions.

This research study has as foundation, a context of educational equity and excellence that has been voiced by Christine Bennett (2001) as one of the conceptual framework legs of multicultural research. All students are valued and should be given the opportunity to reach their potential to society. Each student's fund of knowledge should be strategically amplified to scaffold and layer critical information to magnify individual success in the school and community setting. Traditionally, schools and academic skills have been the conduit to acceptable citizenship (Noddings, 1988a). This research builds on that conduit to explore the beliefs and voices of school teachers in their quest for educational equity and excellence for their students.

### **Teacher Efficacy**

Teacher efficacy has been defined as an individual's belief that he or she can produce an effective outcome by successfully performing necessary behaviors (Bandura, 1977; Corcoran, et al., 2003). Based on Bandura's original theory, other researchers have conceptualized teacher efficacy as the beliefs that teachers have about their skills and abilities to create desirable outcomes for students (Ashton & Webb, 1986; Gibson & Dembo, 1984; Tucker et al., 2005). This research study used teacher efficacy as a measuring instrument to ascertain teachers perception of their ability to effect change with their students.

Recent studies by the National Center for Education Statistics (NCES, 2006) indicate that effective teachers are well versed in their respective teaching areas, especially in mathematics. A synthesis of research study by the National Council on Teacher Quality found that the effective teacher has personal attributes that include a history of being a high achiever, taking responsibility for achieving positive outcomes, is a critical thinker that understands cause and effect, is organized, is able to influence and motivate others, is respectful and shares the organizations goals and objectives (Walsh & Tracy, 2004; Wenglinsky, 2000).

These personal attributes are encompassed in the concept of self efficacy and culminates a long history of research that identifies teacher's sense of efficacy as an important variable in student achievement (Allinder, 1994; Bandura, 1977; Gibson & Dembo, 1984; Multon, Brown & Lent, 1991; Pajares, 1992; Woolfolk & Hoy, 1990). Teachers' sense of efficacy is positively related to well thought-out and effective teaching (Allinder, 1994), hands-on learning (Enochs, Scharmann, & Riggs, 1995), student-centered learning (Czerniak & Schriver, 1994) as well as the use of selective queries (Gibson & Dembo, 1984). In one longitudinal study of Hispanic students in Colorado (Franquiz & Salazar, 2004), results showed that there should be more "teachers in schools practicing a humanizing pedagogy that values each student's background knowledge, culture and life experiences" (p. 51). The qualitative portion of this research study addressed this particular concern identified in the research literature.

*History of Teacher Efficacy.* High teacher expectations were brought to light in an early study by Rosenthal and Jacobsen (1968) when they uncovered the link between high teacher expectations and achievement. The study investigated two groups of

students with comparable characteristics. These authors contended that low or high expectations of teachers were highly correlated to achievement. Results of the study indicated that students performed to the expectation level of the teachers. The Rosenthal and Jacobsen (1968) study asserted the importance of the component of teacher efficacy that entails teacher expectations.

The idea that teachers perceptions of their ability to effectively teach was also studied by the Rand Corporation researchers. Rand researchers discovered in a general survey of teachers two components that became the basis of further teacher efficacy study. The components narrowed down to an external locus of control and an internal locus of control. Teachers either felt they could not teach a student because of outside factors (external locus of control) or felt they could teach student regardless of the motivation or environment of the student (Armor et al., 1976; Tschannen-Moran, Hoy & Hoy, 1998).

Other early research into teachers perceptions of effectiveness included a questionnaire that measured the amount that teachers felt toward their responsibility for their students achievement (Guskey, 1981, 1988). The findings of the extensive research by Guskey and his associates on teacher perceptions was that efficacy was related to a high level of confidence in the individual teachers ability as measured by teaching self-concept (Guskey1981,1988; Guskey & Passarro, 1992). Albert Bandura (1977) described self-efficacy based on his Social Cognitive Theory and created a research instrument that attempted to measure teacher self-efficacy. In many research studies over time Bandura (1997) refined self efficacy as “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p.3).



Other researchers in addition to Bandura created instruments to measure the construct of teacher self efficacy. Research teams such as Gibson and Dembo (1984) created an instrument that had as a foundation the Rand study of the mid seventies called the Teacher Efficacy Scale. The instrument showed some weakness because of inconsistent factor loadings (Henson, 2001; Henson, Kogan & Vacha-Haase, 2001; Tschannen-Moran & Hoy, 2001). The Gibson and Dembo instrument has been widely used even though it has some statistical and conceptual problems. Another instrument was created by Tschannen-Moran and Hoy (2001) that dealt with the statistical inconsistencies and conceptual problems of the Teacher Efficacy Scale. This instrument is sometimes called the Ohio State Teacher Self Efficacy Scale although the authors prefer it to be called the Teacher Self Efficacy Scale.

In addition, early research into effective schools demonstrated that effective schools had certain characteristics that filtered into teacher attributes. High expectations, good classroom management in conjunction with an emphasis on mastery learning of essential reading skills, were some of the critical elements found in early research on effective schools (Edmonds, 1979). Martin Haberman (1991) further defined what activities an effective school would be doing in his treatise on “The Pedagogy of Poverty” by listing a number of teaching practices that together comprise good teaching. An inclusive school that values experiences, higher order thinking skills and caring, trustworthy teachers who value meaningful activities are some of the characteristics Haberman elucidated. Freire (1998) in his book, *Teachers as Cultural Workers*, asserted “the teaching task is above all a professional task that requires constant intellectual rigor

and the stimulation of epistemological curiosity, of the capacity to love, of creativity, of scientific competence and the rejection of scientific reductionism (p. 4).

Other studies have demonstrated qualities of teacher effectiveness that include concepts such as modifying the instructional setting, teaching to student strengths and learning styles, accepting the concept of accountability and teaching to mastery (Banks, 2001; Gay, 2000; Larke, 1992; Soodak & Podell, 1994; Tucker & Stronge, 2005; VanDeWeghe, 2005). In addition, Kincheloe, Slattery and Steinberg (2000) reasoned “the best teachers are comfortable with the variety of literary interpretations, mathematical proofs and historical analysis in every subject area” (p. 62). These attributes of teachers are connected to teacher efficacy which can be defined as what one believes about their capability to exercise control over their own level of functioning and over events that affect their lives (Bandura, 1993; Flores, Desjean-Perrota & Steinmaz, 2004).

In addition to the link that teacher efficacy has on student attainment in the area of cultural diversity, teacher efficacy also has been shown to link to attainment levels of students from low SES families (Goddard & Skrla, 2006; Parker, Hannah & Topping, 2006). Problems with student attainment surface in schools that are collectively categorized as low SES schools (Bandura, 1993; Goddard & Goddard, 2001; Goddard et al., 2004). Schools categorized as low SES have high numbers of students that qualify for free or reduced meals (Tschannen-Moran & Barr, 2004).

*Beliefs of Teacher Efficacy.* The construct of teacher self efficacy and culturally responsive self efficacy is the basis for this research. Social cognitive theory and within this construct, self efficacy and culturally responsive efficacy, is an outgrowth of human

agency (Bandura, 2000). Self-efficacy is an important component of human motivation, affect, and action. The meaning of self efficacy has been broadened to include having an expectation in the individuals capacity to teach and motivate students regardless of the students' abilities, ethnicity, cultural or familial background (Flores, Desjean-Perrotta & Steinmetz, 2004). Within this basic theory the research study investigated the relationship between alternatively certified program (ACP) teachers and traditionally certified Hispanic teachers using teacher self efficacy and culturally responsive efficacy as the measuring construct.

A number of variables have been identified in teacher self efficacy. These variables include the construct that teachers with high self-efficacy are more apt to assume greater responsibility for teaching the most difficult students (Flores, Desjean-Perrotta & Steinmetz, 2004; Saklofske, Michayluk & Randhawa, 1988; Tucker et al., 2005). Teacher self efficacy, according to Sleeter (2005) is "intimately tied to the curriculum for students of such diverse groups as learning disabled and English Language Learners" (p.14). Studies indicate that many teachers feel unprepared to teach groups of students from culturally different backgrounds (Tucker et.al. 2005). Goddard and Skrla (2006) found indications that teacher's social class and ethnicity have a role in teacher efficacy and called for more research into these factors.

Teacher efficacy is reported to influence how teachers feel, think, act, and motivate themselves (Tschannen-Moran & Barr, 2004). In one study by Howard and Johnson (2000) in Australia the authors concluded that the teachers' ability to provide special help, individual attention to help students overcome learning problems and patient teacher assistance with the learning tasks were the most important traits in

helping students succeed. These traits are reflected in a teacher with high levels of teacher efficacy. Teacher efficacy is directly connected to a teacher's capability to manage and implement a course of action to generate higher levels of attainment (Parker, Hannah & Topping, 2006). Geneva Gay (2000) stated that "teachers' expectations and sense of professional efficacy are interrelated" (p. 60). The current research project investigated the culturally responsive and teacher efficacy of teachers working in low SES schools with high numbers of culturally and linguistically diverse (CLD) students.

Teacher efficacy has been construed as an individual's belief that he or she can produce an outcome by successfully performing necessary behaviors (Bandura, 1977). Based on Bandura's original theory, other researchers have conceptualized teacher efficacy as the beliefs that teachers have about their skills and abilities to create desirable outcomes for students (Ashton & Webb, 1986; Gibson & Dembo, 1984; Tucker et.al., 2005). This research project included the use of teacher self efficacy as one of the measuring constructs to ascertain teachers perception of their ability to effect change with their students.

### **Culturally Responsive Teaching**

Geneva Gay (2000) has defined culturally responsive teaching "as using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them"(p. 29). Understanding and teaching to a students' learning style is a foundation in culturally responsive teaching.

*History of Culturally Responsive Teaching.* Multicultural education has been defined as a philosophy, a process and an educational reform that emphasizes acceptance, respect, and appreciation for human diversity (Banks, 2001; Grant & Tate, 2001; Larke, 1992; Sleeter, 2005). The emphasis for multicultural education began in the national civil rights movement of the mid to late 60's and early 70's (Grant & Tate, 2001). A number of concepts were researched and discussed in the literature including such terms as culturally relevant, culturally focused (Ladson-Billings, 1995), culturally appropriate (Au & Jordan, 1981), culturally congruent (Mohatt & Erickson, 1981) and culturally compatible (Jordan, 1985). From this beginning researchers such as Ladson-Billings (1995) expressed a need for curriculum that connected culturally relevant pedagogy with the experiential knowledge of the students in order for teachers to build on cultural frames of reference and improve learning for students from high risk environments. Culturally relevant teachers build on the strengths of students of color helping them acquire cultural capital, new knowledge and connecting the students to the political nature of schooling, their community and their place in the world (Lipman, 1995). The combination of culturally relevant teaching and good teaching practice evolved into culturally responsive teaching. Culturally responsive teaching “builds on multicultural education and culturally relevant pedagogy where teachers use the cultural knowledge, prior experiences, frames of reference, and performance styles of cultural and linguistically diverse (CLD) students to better scaffold learning concepts” (Gay, 2000, p. 29).

*Beliefs of Culturally Responsive Teaching.* Gay (2000) summarized culturally responsive teaching (CRT) by enunciating six areas that are specifically addressed by the

effective culturally responsive teacher. The first area addressed by Gay is that CRT is validating. Everything a student is should be given credence by the teacher. The second area is that CRT is comprehensive. The effective CRT teacher teaches the complete child. A third area is that an effective CRT teacher is multidimensional. Teaching in the moment, utilizing prior knowledge and experiences, looking and understanding from more than one perspective are all part of being multidimensional. Gay also included that the effective CRT teacher is transformative and emancipatory. The effective CRT teacher respects the culture and experiences of their students by using that fund of knowledge to build the student rather than tear down or demean the student. When effective CRT teachers use these standards, it essentially frees or emancipates the student to be whatever and whoever they want to be.

Specific teaching practices included in culturally responsive teaching allows for automatically providing limits for students, as well as teachers, for socially appropriate and inappropriate language and behavior (Monroe & Obidah, 2004). Well defined limits allow for more time on task, create a well managed classroom and increase student achievements which are all products of culturally responsive teaching and high teacher efficacy (Allinder, 1994; DiBell McCarthy, McDaniel & Miller, 1995).

A study into inclusive classrooms found that teachers who practice nontraditional, interactive teaching practices make more academic progress with their students (Lage, Platt & Treglia, 2000). When teachers concentrate on what students can do and accomplish through a linguistic and cultural lens, Franquiz and Salazar (2004) found that the teacher can transform Hispanic students into high achievers. According to these authors, students who are high achievers succeed in moving uninhibitedly between

the culture of the barrio and the culture of academia. In *Affirming Diversity*, Sonia Nieto (2000) stated “Children who are not in the dominant group have a hard time finding themselves or their communities in the curriculum” (p. 97).

Cultural and linguistically diverse students and especially students of color have been marginalized in the process of fragmented local education agencies that results in funding discrepancies along with discrepancies in building social capital for our most fragile students (Muller, 2001). Culturally responsive efficacy beliefs are linked to racial attitudes and the perceived ability to work with students of color (Gay, 2000). It is essential for students to either assimilate the predominate school culture or for the teachers to include the culture of the students in order to improve student academic success (Riojas-Cortez & Flores, 2009; Ware, 2006). Teacher efficacy unites the attributes of effective multicultural teaching, appreciation for diversity and culturally relevant pedagogy under the umbrella of a highly efficacious teacher.

Winfield (1991) reiterated in a conceptual study on resilience, schooling and development in African-American students that teacher self-efficacy, for a student in high-risk environments, is a protective factor and can be a springboard for social success. Protective factors according to Henderson and Milstein (2003) include “relationships [that] begin with educators who have a resiliency-building attitude, and approach that conveys hope and optimism (no matter what a students’ challenges or past behavior)” (p. 17-18). Protective factors as espoused by Rutter (1985) refers “to influences that modify, ameliorate, or alter a person’s response to some environmental hazard’ (p. 600). In respect to teacher efficacy, a teacher with a high level of efficacy leads to becoming a protective factor for the students with whom they come into contact,

more so for students that are in high risk environments (Arnold & Doctoroff, 2003; Garmezy, 1991; Garmezy & Nuechterlein, 1972; Rockoff, 2004).

The necessity for culturally responsive teaching is compounded by a lack of ethnic diversity in the teaching force of American schools. Many African American teachers historically were effective teachers and practiced culturally responsive teaching. Some of these successful African-American teachers are profiled in the work of Ladson-Billings (1994). This historic study was published in the book, *The Dream Keepers: Successful Teachers of African American Children (1994)*. In this study, Ladson-Billings chronicled a cultural difference between African American children and White children as seen through the eyes and voices of the teachers she journaled. The study found that teachers must teach in a culturally relevant manner to be effective. Ladson-Billings concluded that “culturally relevant teaching practices would be an integral part of these [effective] schools” (p.137). Jacqueline Jordan in an interview concerning teacher education and schools with high populations of African American children declared “how are [teachers] going to teach them if you don’t know anything about what they know, then how are you going to teach them about making linkages” (Irvine, 1999, p.30). Irvine believes that culture can be learned and must be taught to prospective teachers.

Measurement of the culturally responsive teaching efficacy of teachers has been tenuous at best. Siwatu (2005) researched and created a culturally responsive teaching self-efficacy instrument that measures the “teacher’s belief in their confidence to execute specific teaching practices and tasks that are associated with teachers who are believed to be culturally responsive.” (p. 49). The instrument was created on teaching standards



that included curriculum and instruction, classroom management, student assessment and cultural enrichment.

### **Need for Hispanic Teachers**

The No Child Left Behind Act (NCLB) along with the reauthorization of the Individuals With Disabilities Education Act (IDEA) have put teacher accountability at the forefront of policy initiatives (Chen, 2004; Olson, 2004). The combination of continued upward demographic growth of school age children and national trends toward accountability standards have resulted in critical examinations of teacher quality. Linda Darling-Hammond (2006) stated “The importance of powerful teaching is increasingly important in contemporary society.” (p. 300).

The influence of Hispanic teachers in schools was noted in a study by Goddard and Skrla (2006) who found that “the proportion of Hispanic teachers in schools was positively and significantly related to schools’ levels of perceived collective efficacy” (p.228). The researchers in this study concluded that in districts where Hispanic students are represented more than any other ethnic group, the inclusion of Hispanic teachers on the faculty will lift the efficacy of all teachers in that school due to the ability of Hispanic teachers to relate culturally to the students and their families. This theme is also repeated in the borderlands literature (Weisman, Flores & Valencia, 2007).

One theme in exemplary schools research is the educational difficulties for Hispanic students concerning the gap that exists between the racial and ethnic makeup of students and teachers. Hispanic students compose nearly 17% of the nation’s K-12 student population. Projections include that by 2025 Hispanic students will be 25% of

the school age population. In contrast, more than 88% of the nation's teachers are European American and middle class (Weisman, Flores & Valenciana, 2007). Data collected by the latest United States Census and the Schools and Staffing Survey (SASS) indicate the Hispanic population is 12.54% of the total United States population. The SASS data indicate a Hispanic population of teachers at only 6.2% of the total teachers compared to 16.7% total population of Hispanic students in the United States (NCES, 2004; U. S. Census, 2002). Texas data indicate a lack of Hispanic teachers with only 21.4 % Hispanic teachers and a Hispanic population of students at 47.2 % (AEIS, 2008).

Demographic studies indicate that increases in student enrollment lead to demand for more teachers (Johnson, Berg & Donaldson, 2005; Justice, Greiner & Anderson, 2003). According to the National Center for Educational Statistics (NCES), the enrollment figures for elementary and secondary school children are at record levels and are projected to continue to rise through 2014 (NCES, 2006; Snyder, Tan & Hoffman, 2005). The projected need is for an increase of 17% in the number of teachers from present levels by the year 2015 (NCES, 2006).

Research done by Johnson et al., (2005) found that teachers of color left the teaching profession at a percentage rate of 7.4 for Black non-Hispanic and 7.5 for Hispanics and for White at a percentage rate of 7.5 percent. This study does not indicate a higher leaver rate for teachers of color than for white teachers generally. There is some indication that as the percentage of students of color increase, the leaver rate increases. A study done by Fuller and Alexander (2002) in the State of Texas indicates that as the percentage of Hispanic students increase, the percent of teachers leaving decreases. Research concerning testing of teachers found that when examining average

SAT scores, testing had an adverse effect on Hispanic teacher applicants (Angrist & Guryan, 2004).

Some controversy exists over the issue of leavers. A study done in Connecticut by Fisk, Prowda and Beaudin (2001) found that teachers of color credentialed by either the traditional or alternative method left the teaching profession after two years at a rate 2.5 times higher than for non teachers of color. It is reported in one study, the attrition rates for teachers teaching in urban, inner city schools with large numbers of culturally and linguistically diverse students and high numbers of low socio-economic status students ranged from 21% to a high of 27% (Metropolitan Life Insurance Company, 1995).

Table 2.1 delineates how teachers leave the profession. This report (Johnson, Berg & Donaldson, 2005) analyzes the 1999-2000 Schools and Staffing Survey and the 2000-2001 Teacher Follow-up Survey to “describe who is most likely to leave teaching, why they leave and where they go” (p. 120).

Table 2.1

## Public School Stayers, Movers, and Leavers by Selected School and Teacher Characteristics, 1999-2000 to 2000-2001

School or Teacher Characteristic	Total Number	Percentage of Stayers	Percentage of Movers	Percentage of Leavers
Total	2,994,600	84.9	7.7	7.4
Age				
Under 30	494,400	74.7	15.7	9.6
30-39	708,300	84.9	8.6	6.5
40-49	913,600	88.7	6.7	4.6
50 or more	880,400	86.8	3.6	9.8
Gender				
Male	731,300	86.7	6.0	7.4
Female	2,263,300	84.3	8.3	7.4
Race/Ethnicity				
White, non-Hispanic	2,540,400	85.0	7.6	7.5
American Indian or Alaska Native	22,700	87.9	4.7	7.5
Asian or Pacific Islander	52,800	81.7	16.2	2.1
Black, non-Hispanic	217,900	84.3	8.3	7.4
Hispanic	160,900	85.4	7.1	7.5
Main Assignment Field				
Arts and music	192,900	80.6	11.4	8.1
English/language arts	304,700	86.3	7.4	6.3
General elementary	1,015,800	84.5	8.3	7.2
Mathematics	211,400	84.6	6.4	9.0
Science	184,200	85.9	6.7	7.3
Social studies	155,000	86.5	4.7	8.8
Special education	324,800	81.1	10.2	8.7
Other	605,800	87.6	6.0	6.4
Community Type				
Central city	806,300	84.8	8.1	7.1
Urban fringe/large town	1,511,900	84.5	7.8	7.8
Rural/small town	676,400	86.0	7.2	6.8
Minority Enrollment				
Less than 10 percent	1,010,300	86.5	6.6	6.9
10-34 percent	838,100	85.3	7.7	7.0
35 percent or more	1,146,300	83.2	8.7	8.1

In addition to the demographic demands for teachers, other reports claim the attrition rate of teachers with one year of experience is 14%, 30% after 3 years and 40%-50% after 5 years (Fuller & Alexander, 2002; Johnson, 2006b). The blend of attrition and demographic demand combined with higher accountability has created a powerful pull for quality, effective individuals to enter the teaching profession. Due in part to attrition rates and demographic evolution, states and local education agencies across the United States are recruiting individuals through alternative teaching programs (Darling-Hammond, 2006; Rosenberg & Sindelar, 2005; Torff & Session, 2005).

### **Traditional Certification**

Traditionally certified teachers are generally defined as teachers that complete a four or five year program that results in individuals being credentialed, usually in their major field of study. The program includes field based experiences, content and pedagogical instruction (Justice, Greiner & Anderson, 2003; Miller, McKenna & McKenna, 1998). A traditional program, by utilizing specialized programs in the last two academic years of the credentialing program, usually emphasizes pedagogy, subject matter and some type of field based teaching experience (Darling-Hammond, 2006; Darling-Hammond & Sykes, 2003). A study in the New York public schools found that “certified teachers felt better prepared than noncertified teachers on every factor except preparation to use technology (Darling-Hammond, Chung & Frelow, 2002, p. 288).

The consensus of the extant research focusing on the impact of credentials and pre-service training on the quality of instruction has generally found inconsistent results regarding the impact of the route to certification and small positive effects regarding

subject matter preparation except in mathematics and science (Allen, 2003; Guarino, Santibanez & Daley, 2006; Walsh & Tracy, 2004). Other researchers have theorized that teacher ineffectiveness may be due to deficiencies in content knowledge or lack of pedagogical understanding rather than route of certification (Darling-Hammond, 2006; Darling-Hammond & Snyder, 2000; Justice, Griener & Anderson, 2003; Torff & Sessions, 2005). Questions remain about the best route to certification and are inconclusive as of this writing. “The academic research attempting to link teacher certification with student achievement is astonishingly deficient” (Walsh & Tracy, 2004, p.iii). The National Center of Education Evaluation and Regional Assistance in an in-depth study of routes to certification found that students of teachers who entered teaching through an alternative route did not perform statistically different from students of teachers who chose a traditional route to certification (Constantine, et al., 2009).

### **Alternative Certification**

The history of alternative certification began in the years of the Civil Rights movement of the 1960’s. Demand for teachers who were credentialed through a formal process accelerated with the passage of federal legislation to educate all students equally. Passage of Individuals with Disabilities Act in 1975 culminated a lengthy process that accelerated with the Civil Rights Act passed in 1964 and the corresponding Coleman Report (Feistritz & Haar, 2005). During this time frame, states began testing teachers in an effort to ensure teachers met minimum standards (Angrist & Guryan, 2004). The decade of the 1980’s saw alternative certification programs proliferate and by 2003 at least forty-four states had some type of program (Birkeland, 2003). The year 2007 was

significant in that all 50 states plus the District of Columbia had a mechanism for alternative routes to teacher certification (Feistritzer, 2008).

Teachers who do not follow the traditional path to teacher certification are commonly referred to as having alternative certification (Darling-Hammond, Chung & Frelow, 2002; Haberman, 2003). Some researchers have discovered a trend where alternatively credentialed and newly credentialed teachers have been assigned to high risk, inner city schools (Darling-Hammond & Sykes, 1993; Johnson, Berg & Donaldson, 2005; Torff & Sessions, 2005). Research shows that the majority of teachers credentialed under an alternative method are placed in middle and high schools (Justice, Griener & Anderson, 2003; Olsen & Anderson, 2007). Alternatively credentialed teachers traditionally have been assigned to high risk, inner city schools (Darling-Hammond & Sykes, 1993; Johnson, Berg & Donaldson, 2005). These hard to staff schools are being called high priority schools (Darling-Hammond, 2006).

Some researchers contend teachers credentialed through alternative certification may be to some extent lacking in the knowledge and skills that teachers need to possess to be effective because most alternative certification programs do not incorporate field experience (Darling-Hammond, 1996; Goldhaber & Brewer, 2000). Content knowledge and experience in teaching specific populations of students is emphasized in the American Association of Colleges for Teacher Education (AACTE) position paper (Brisk, Barnhardt, Hererra & Rochon, 2002). The AACTE considers field experiences by pre-service teachers to be highly beneficial, specifically when teaching Culturally and Linguistically Diverse (CLD) students (Brisk, et al., 2002).

### **Funds of Knowledge**

Meaning of knowledge is a function of relating new experiences to previously learned concepts (Ausubel, 1977). Educational researchers have created many terms to explain this concept, for example, layered instruction, scaffolded instruction, and differentiated learning to name a few of the most common. The phrase funds of knowledge, has been presented by Moll and Greenberg (1990) as a term that encompasses the knowledge and skills acquired through historical and cultural interactions of the individual in their community and their home. Examples of activities that create funds of knowledge could include farming, cooking, construction, cultural practices or finances (Upadhyay, 2005).

Other closely related theories include a cultural-ecological theory espoused by Ogbu and Simons (1998). This theory considers the broad societal and school factors as well as the dynamics within the minority communities. Ecology referenced by Ogbu and Simmons is the situation, surroundings, and community of people of color. Cultural, defined by Ogbu and Simons broadly, “refers to the way people [in this case people of color] see their world and behave in it” (p. 156). Students bring their experiences from their communities and their families to school. Children commonly considered ‘disadvantaged’ or ‘at-risk’ have knowledge learned from their environment that can be utilized to bridge the home-school gap.

Moll and his colleagues studied Hispanic children in Tucson, Arizona and contended that “these historically accumulated and culturally developed bodies of knowledge and skill [are] essential for household or individual functioning and wellbeing” (Moll, Amanti, Neff & Gonzalez, 1992, p. 133). These funds of knowledge



are abundant in Hispanic children and the children and their teachers are active participants in utilizing these funds of knowledge (Upadhyay, 2005).

The possibility that Hispanic teachers utilize funds of knowledge when teaching Hispanic children has been addressed by Velez-Ibanez and Greenberg (2005) in a study of children of Hispanic descent living along the Mexican border (borderland) with the United States. Velez-Ibanez and Greenberg emphasized that a need exists for “greater attention to providing teachers with opportunities to learn how to incorporate the funds of knowledge from their students’ households into learning modules that approximate the total reality of the population” (p. 67). In addition, “Teachers who are able to bridge students’ funds of knowledge with classroom instructions provide the most meaningful learning experiences to their students” (Upadhyay, 2005, p.97).

Such findings suggest that teachers’ sense of efficacy exerts significant influence on student achievement by promoting teaching that enhances learning (Goddard and Skrla, 2006). In the current study, all active participants were Hispanic. Data from Goddard and Skrla, (2006) indicate that the funds of knowledge carried into the classroom by Hispanic teachers, may be very significant in the attitude and teaching efficacy of Hispanic teachers.

### **Implication of Borderland Teaching**

The borderlands are unique in cultural and ethnic history. Anglo-Americans and their Anglo-centric view of history have never had the prominence in the borderlands that it has in other parts of the nation. Spanish and First Peoples and the combination of cultures, language and ethnicities have been dominant (Weber, 2005). Chicano

researcher Alejandra Elenes (1997) has stated that the “borderlands is the discourse of people who live between different worlds. It is...a language that explains the social conditions of subjects with hybrid identities” (p. 359). The borderlands physically is a 2,000 mile long by 400 mile wide political belt between six Mexican states and four U.S. states comprising 52 million people and the unique bi-nationalization and bi-culturalization of its population (Cline & Necochea, 2007; Velez-Ibanez & Greenberg, 2005; Weber, 2005).

According to the U. S. Census (2002) one of the fastest growing groups in the nation is the Hispanic population. Data indicates that the Hispanic population remains the nation’s most undereducated, with almost 30% of Hispanic students dropping out of high school and only 10% completing a 4-year college degree (Llagas & Synder, 2003). The borderlands share similarities from South Texas to California, including populations of students that live below the government poverty line, parents with little or limited levels of education, and students who are surrounded by adults with a limited knowledge of English language (Simonsson, 2004).

Teachers who come “from the same cultural and linguistic backgrounds, are more likely to understand the special needs of this student population” (Weisman, Flores & Valencia, 2007, p.192). According to Rueda and Monzo (2002) the experience of Hispanic teachers teaching within the Hispanic population allows “familiarity with the realities that students face living in subordinated communities can give them crucial insight into many issues related to class, race, culture, and discrimination that affect these students and their communities” p. 505).

Recently, a strategy to increase the numbers Hispanic teachers has been evident in the teacher training institutions and is especially true of educational institutions in the borderlands (Weisman, Flores & Valencia, 2007).

## CHAPTER III

### METHODOLOGY

This mixed method research study of Hispanic teachers along the U.S./Mexico borderlands utilized both quantitative and qualitative methodology (Morse, 2003; Teddlie & Tashakkori, 2003). Quantitative research is generally used to determine aggregate differences between groups or classes of subjects (Rudestam & Newton, 1992). On the other hand qualitative research investigates on a more personal level and allows the researcher to be in tune with the natural phenomena by being more spontaneous and flexible (Berg, 2001; Lincoln & Guba, 1985; Rudestam & Newton, 1992). A mixed method study was employed to allow the voices of the participants to support the findings of the survey questionnaires. Triangulation was achieved by employing mixed method research by utilizing both quantitative and qualitative methodology to give “a more comprehensive picture of the results” (Morse, 2003, p. 190). The study investigated how teachers upheld the standards of efficacious and culturally responsive teaching by responding to quantitative surveys and by verbalizing efficacious and culturally responsive teaching standards in a semi-structured interview.

Three research questions guided this study. The research questions were:

1. What are teacher efficacy beliefs of alternatively certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?

2. What are culturally responsive beliefs of alternative certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?
3. What are the voices of highly effective alternative certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?

To address these research questions the research methodology is presented in the following detailed research design with the quantitative methodology delineated first followed by an explanation of the qualitative portion. Population and sampling method, instrumentation (including data collection and data entry), statistical methodology for analysis of the quantitative response and a detailed explanation of the instrumentation in conjunction with the qualitative analysis of interviews are detailed.

### **Quantitative Methodology**

*Research Design.* The quantitative research design of this study is defined as an “ex post facto” research. Ex post facto research design is described by Kerlinger (1973), as a “systematic empirical enquiry in which the... [researcher] does not have direct control of the independent variables because their manifestations have already occurred” (p.379). The design of ex post facto research is further described as a design that relies “on observation of relationships between naturally occurring variations in the presumed independent and dependent variables” (Gall, Gall & Borg, 2007, p. 306). In ex post facto research studies, no experiment is required. The independent variable or variables are identified and tests are conducted to see what relationship they have on the

dependent variable (McMillan, 2000). In this study, the independent variable is route to certification and the dependent variables are teacher self-efficacy and culturally responsive teacher self-efficacy. A graphic depiction of the independent and dependent variables can be found in Figure 3.1.

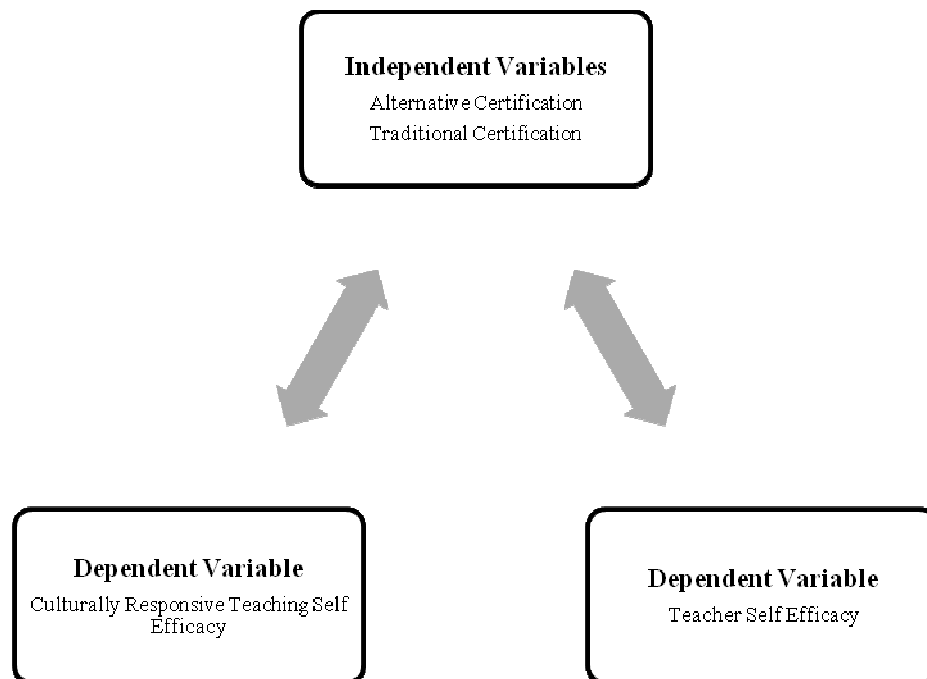


Figure 3.1

Relationship of Variables

The survey responses and the personal interviews were systematically gathered in two stages with the quantitative stage first followed by the qualitative stage in proximate time sequence. The quantitative stage consisted of the statistical inquiry where two instruments and a demographic page in the form of a single packet were given to participants. This type of survey research is identified as being cross-sectional as compared to longitudinal. Cross-sectional research collects data for a short time from

a sample that includes all subsets of the sample intended for study (Gall, Gall & Borg, 2007). Subsets for the targeted study were teachers credentialed traditionally and teachers credentialed in an alternative method.

Lincoln and Guba (1985) state that quantitative instruments used in conjunction with qualitative and naturalistic inquiry must be grounded in the naturalistic data gathered. The instruments may have an advantage “to make possible a transformation of data from qualitative to quantitative formats” (p. 240). The reverse is also applicable. Qualitative studies many times validate quantitative data (M. Landeck, personal conversation, June 25, 2009). Mixed methods research according to Teddlie and Tashakkori (2003) is beneficial in that this type of research can answer confirmatory and exploratory questions with the same research project.

*Instrumentation.* The study examined Hispanic teachers teaching in high risk environments at high priority schools. Two questionnaires were combined into a single survey instrument. The Teachers Sense of Efficacy Scale (TSES) long form developed at Ohio State University (See Appendix A) and the Culturally Responsive Teaching Self-Efficacy Scale (CRTSES) (See Appendix B) developed at the University of Nebraska was administered to all middle and high school teachers at three middle and one high school within the boundaries of a south Texas borderland school district (Siwatu, 2005; Tschannen-Moran & Hoy, 2001). A demographic cover page was administered to the participants (See Appendix C) as a part of the complete questionnaire package. Permission was obtained from the south Texas borderland school district to administer the two surveys along with the demographic questionnaire.

*Teacher Sense of Efficacy Scale (TSES)*. Permission to use the TSES was obtained from one of the principal creators through the use of an email request. The Teacher Sense of Efficacy (TSE) long form, developed by Tschannen-Moran and Hoy (2001), consists of 24 individual query's that are ranked individually by the participants in a Likert type scale ranging from 1=Nothing, 3= Very little, up to 9= A great deal (e.g. How much can you do to get through to the most difficult students?). The creators of the TSES have consistently found three moderately correlated factors: efficacy in student engagement, efficacy in instructional practices and efficacy in classroom management. These three factors accounted for 54% of the variance on the 24 item TSES. The Cronbach alpha reliability of the three correlated factors as well as the complete instrument is reported in table 3.1.

Table 3.1

Means for TSES Subscales and Total Score

	Mean	SD	Alpha $\alpha$
TSES	7.1	0.94	0.94
Instruction	7.3	1.1	0.91
Management	6.7	1.1	0.90
Engagement	7.3	1.1	0.87

A detailed explanation of testing and creation of the TSES including a more detailed explanation of standard deviations and alpha scores can be found in research presented by the creators of the TSES (Tschannen-Moran & Woolfolk Hoy, 2001). Cronbach's  $\alpha$  measures how well a set of variables or items measures a single, unidimensional latent construct which is interpreted as a reliability score. Generally researchers require a reliability test score of 0.70 or higher (obtained on a substantial



sample) before an instrument is considered reliable enough to use (Henson, Kogan & Vacha-Haase, 2001; Nunnally, 1978). The Cronbach alpha score of 0.94 was sufficient to indicate good reliability of the TSES.

Validity refers to the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure. A method of assessing validity is to consider the standard deviation (SD). Gall, et al., (2007) stated “Approximately 95 percent of such samples will have scores within the range of plus or minus two standard deviations from the mean” (p. 136). The TSES data indicate sufficiently narrow SD and was considered to be a valid instrument and was selected for use.

*Culturally Responsive Teaching Self-Efficacy Scale (CRTSES)*. Permission to use the Culturally Responsive Teaching Self-Efficacy Scale (CRTSES) was solicited from the creator of the instrument through an email request. The author responded and formally gave permission to use the instrument. The author requested that I share the findings with him at the conclusion of the study.

The CRTSES consists of 40 Likert-type statements in which the subjects were asked to rate how confident they are in engaging in specific culturally responsive teaching practices (e.g. I am able to use my students’ cultural background to help make learning meaningful). The original scale asked pre-service teachers to rate themselves on a scale of 0-100. The scale was modified by the researcher to appear similar to the TSES scale where 1=Nothing to 9=A great deal. The author of the CRTSES scale was able to obtain a Cronbach alpha score of 0.96 which is considered a reliable test score. The author of the CRTSES was unable to extract more than one statistically relevant

factor. “The one-factor solution accounted for 44% of the total variance” (Siwatu, 2005, p. 69). The validity of the CRTSES has some slight problems in that at least three of the individual query’s had a SD over 2.0 and only one factor was able to be extracted. The higher the participant marked the score on the CRTSE the higher culturally responsive teacher efficacy the teacher exhibits according to the creator of the scale.

The three different segments of the completed survey instrument were combined, keeping intact the protocol sequence as provided in the original separate instruments. The combined instrument contained a demographic page, the TSES and the CRTSE in that sequence.

*Population and Sampling.* The population of the qualitative portion of the study consisted of teachers in three middle and one high school in a single independent school district located in a south Texas borderland urban area. This sample group was selected because it met the criteria established by the researcher which included a substantial number of alternatively certified Hispanic teachers teaching students from high risk environments in high priority schools.

Two types of sampling were used in this study. The quantitative portion of the study used convenience sampling. Convenience sampling is described by Borg, Borg and Gall (2007) as “a sample that suits the purpose of the study and is convenient” (p. 175). In addition a convenience sample is where “a group of subjects [is] selected because of availability” (McMillan, 2000, p.108). Four school campuses with their faculties were selected because the teachers are predominately Hispanic, the schools generally serve students from high risk environments, the schools are classified by the

district as high priority schools, and research indicated the possibility of a high population of alternatively certified teachers in the selected schools.

An analysis of the demographic information representing the sampled schools and the district along with data from Texas Education Agency (2008) is presented in Table 3.1. Ethnicity of the students and teachers at the representative schools compared to the district and the state is presented. Population theory indicates that generally a population is represented throughout the strata being studied (Ehrenberg, Goldhaber & Brewer, 1995). As indicated from the following tables, ethnicity is skewed heavily in the direction of Hispanic teachers and students. The actual data of the selected school population of teachers and students are “convenient” for this research study.

Table 3.2

Comparison of Student Ethnicity by Total State Population, Selected School Population and District Population by Percentage\*

	State	Population	
		District	School
African American	9.6	.2	0
Hispanic	47.2	97.9	99.7
White	34.8	1.5	.02

\*Note: The Percentages may not add up to 100% due to other ethnicities not noted in the table.

The ethnic student population of the schools participating in the study is 99.7% Hispanic as noted in Table 3.2. The four schools selected are slightly weighted toward Hispanic student populations than the district as a whole. The relevant student data indicate a singular lack of a multiethnic school community.

Table 3.3 is a synopsis in table form of the relevant ethnographical data regarding teaching professionals reported by the Academic Excellence Indicator System (AEIS) found online at the Texas Education Agency (2008) for the selected schools, the district and the State of Texas. The district and individual schools participating in the study are noteworthy for high percentages of Hispanic in-service teaching professionals.

Table 3.3

Ethnic Comparison of Teaching Professionals by Total State Population, Selected School Population and District Population by Percentage\*

	State	Population	
		District	School
African American	9.6	.04	.03
Hispanic	21.4	92.1	91.1
White	67.5	6.0	5.4

\*Note: The Percentages may not add up to 100% due to other ethnicities not noted in the table.

The purpose of this study was to investigate Hispanic teachers serving students in high priority schools. The selected schools represent a sample population of Hispanic teachers. In addition to ethnicity, another parameter for the sample population was to serve students from high risk environments and that the schools were classified by the district as high priority schools. High risk environments is a construct characterized by depicting students that live and go to school in environments where demographics indicate high numbers of people of color, high numbers of culturally and linguistically diverse populations, where medium incomes are at or below the poverty line as delineated by the government, and where the educational attainment of the parents is minimal (Osborn, 1990).

The schools served by the participants are populated by elevated numbers of students of color, a culturally and linguistically diverse population, and high numbers of students economically disadvantaged. Table 3.4 indicates the percentage of students economically disadvantaged, limited English proficient (LEP) and at-risk at the four selected schools in addition to school district and the State of Texas (Texas Education Agency, 2008).

Table 3.4

Percent Comparison of Participating Schools, District and State for Economically Disadvantaged, LEP and At-Risk Categories of Students

	Economically Disadvantaged	Limited English Proficient	At-Risk
School A	87.1	41.2	72.7
School B	94.0	41.2	70.3
School C	94.7	45.3	67.9
School D	96.5	44.9	69.8
District (complete student body)	71.4	48.0	68.0
State of Texas	55.3	16.7	48.4

*Sample Collection.* A formal request to conduct research was submitted to the selected independent school district. Permission was granted by the district to conduct research in the schools. Request for consent to use the two survey questionnaires was sent to the copyright holders of the two instruments and permission was granted by the authors of the instruments. Permission to conduct research was requested and received from the Institutional Review Board at Texas A&M (Appendix D). The instruments were combined into a single document and uniquely numbered. A list of all professional teachers at three middle schools and one high school was obtained from each school's chief administrator.

An announcement about the research project was made to potential participant teachers at faculty meetings by the researcher. The uniquely numbered survey instruments were placed in the respective teachers mailboxes to allow for private responses at the teachers' convenience. A time line was announced during the faculty meetings at each school for returning the instruments to the central locked survey box located near the daily sign in sheet. After two weeks an electronic mail notice with the instrument attached was sent to all participants with the instructions to electronically submit if they had not already turned in the paper survey. Returned surveys were checked against the master list of returns to insure no duplicates were counted. The response rate was very low at 6% of the total population sampled.

The researcher received permission to hand out hard copies of the survey during a district wide campus in-service day six weeks after the first surveys were put in the teachers mailboxes. The researcher announced if the participants had previously filled out a research instrument, they were to not turn in another instrument. The researcher instructed participants to turn in the completed surveys to the librarian at each campus. The anonymous surveys were collected from the respective librarians. The numbers of respondents at each campus were crosschecked against the total participants available at each campus to ensure participants did not turn in more than one survey. No discrepancies were discovered.

*Response Rate.* The overall response rate was 112 respondents out of a sample of 319 teaching professionals. Twelve responses were rejected due to incomplete data or overt refusal to participate. The completed and usable responses represented a response rate of 31.3% of the total number of surveys that were given to potential participants. The

response rate was above the long term average of 10% to 25% s for questionnaires and surveys as reported by Phillips and Phillips (2004). These survey professionals state “based on input from hundreds of participants in our work shops, as well as the experience of our consulting clients ... if they achieve a 30% response rate, they would consider the project successful” (p.40). According to these professional consultants in market research a thirty percent response rate or above is appropriate.

An effect size in the medium range was hypothesized. Considering the alpha at the .05 level of significance a sample size of minimum 64 respondents was the minimum needed (Gall, Gall & Borg, 2007, p. 145). Thus, a response rate of 100 completed surveys was considerable more than the minimum and produced a statistically more relevant study sample. The higher the sample size the smaller the difference needed between variables to be statistically significant.

*Data Collection.* All hard copies of the individually numbered surveys were collected and given a unique numerical value. The survey responses from the online electronic mailing were downloaded and hard copies created and given a unique numerical value. One blank survey was labeled numerically for preparation to enter data into a statistical data program. The researcher selected SPSS as an analytical tool for its ease of use and the high quality of end result statistical analysis. The Statistical Package for Social Science (SPSS) was used to perform statistical analysis from the collected data (Pallant, 2005). This statistical program permits a large amount of flexibility to analyze the data collected (Rudestam & Newton, 1992).

*Data Entry.* Each response was given a unique numerical notation. Each survey response was prepared for statistical analysis by examining each response field and

assigning an alphabetical or numeric code for each individual field. Incomplete questionnaires were eliminated and ranged from blank questionnaires to responses with incomplete demographics and/or survey responses. Responses were deleted from the data subset if they did not meet qualifications of being of Hispanic ethnicity. The remaining complete responses were then entered into a Microsoft Excel spreadsheet with columns labeled for each survey question and rows labeled for each unique survey response. The Microsoft Excel spreadsheet was then imported into the Statistical Program for Social Sciences (SPSS) version 11.5 for statistical analysis.

*Analysis of Data.* The responses to the TSES and the CRTSE questionnaire were entered into the SPSS database and analyzed at the univariate and bivariate level by using quantitative statistical methods. Using the route to certification as the independent variable and the results of the surveys as the dependent variable the data were analyzed by using factor analysis and analysis of variance. The findings are presented in the results chapter as a series of charts and analysis that includes a correlational matrix with a protocol that includes rows and columns to facilitate understanding of the results (Gall, et al., 2007). Quantitative data from the questionnaire were analyzed using correlational statistics.



## Qualitative Methodology

*Research Design.* The research design of the qualitative portion of the study consisted of semi-structured, open ended question interviews of selected teachers. Lincoln and Guba (1985) indicate the type of interview conducted by the researcher could be called a “depth interview” (p. 269). The semi-structured questions used in the interview did not have a predetermined answer although they were specific in the intent to obtain an answer (McMillan, 2000).

The researcher interviewed four Hispanic teachers to further clarify the findings of the quantitative portion of the research study. Specifically the researcher investigated the qualities of effective teachers in light of culturally responsive teaching practices.

*Instrumentation.* The interview protocol was based on the teacher as a person and included five areas; personality traits of the effective teacher; the function of respect and fairness in teaching; teacher interaction with students; the teachers’ attitude toward students; and the role of reflective practice in effective teaching (Tucker & Stronge, 2005, p. 104-105). The adapted interview protocol is reproduced in Appendix E.

The open ended interview may be interpretive at times although it is very nearly always personal and to some extent partial and dynamic (Lieblcih, Tuval-Mashiach & Zilber, 1998). The open ended interview questions were formulated from a synopsis of the qualities of effective teachers based on positive statements in reference to the personality traits of an effective teacher; the function of fairness and respect in effective teaching; how effective teachers interact with students; effective teachers attitude toward the profession of teaching and the role of reflective practice in effective teaching (Tucker & Stronge, 2005, p. 104-105). The protocol was a guide for formulating the open

ended questions. An example of an open ended question was: “We know that it is important to have a sense of caring to be an effective teacher. Tell me how you demonstrate caring to your students.”

*Population and Sampling.* After all quantitative survey instruments were collected, in conjunction with the administration and master teachers assigned to each campus including limited personal knowledge by the researcher, the participants in the qualitative portion of the study were selected. The researcher selected an equal number of teachers who had participated in the quantitative portion of the study and were credentialed through ACP and traditional methods to interview. The participants interviewed were drawn from respondents who had high peer and administrative recommendations such as peer awards, nominations for teacher of the year, golden apple awards, and/or master teacher status. A list of prospective interview participants was formulated. The researcher contacted two potential participants from each participating school. Four teachers agreed to be interviewed from a total of eight prospective candidates. One middle school (School D) was not represented in the qualitative portion of the study. The primary researcher contacted each selected candidate for the interview and gained their cooperation and permission to have a personal interview session.

The second type of sampling used in the study was purposive sampling. Teachers in the qualitative portion of the study were selected using purposive sampling (Lincoln & Guba, 1985). Purposive sampling advocates that all sampling is accomplished with some end objective or focal point. The purposive sampling in this study was not statistical in nature but informational in nature in order to maximize the information sharing of the informants. When using this type of sampling, the knowledge of the

sample group is critical for their knowledge, expertise and attributes (Berg, 2001; McMillan, 2000). The purposive sampling method used in this research was further designed as a sampling of “critical cases, when the purpose is to permit maximum application of information to other cases because, if it’s true of critical cases, it is also likely to be true of all other cases” (Lincoln & Guba, 1985, p.102).

*Interviews.* Qualitative, semi-standardized interviews of four teachers identified by peer nominations and administrative recommendation as highly efficacious were conducted. Two teachers traditionally certified and two teachers alternatively certified were selected. Semi-standardized interviews were conducted with open ended questions to identify personal teaching qualities and further expound on teacher and culturally responsive efficacy (Berg, 2001; Tucker & Stronge, 2005). Before the interview began each participant was told their participation was voluntary. Each interviewed participant was asked to sign a consent form for the interview. Interviews lasted an average of 25 minutes. Interviews were conducted at the convenience of the selected participant.

*Analysis of Narratives.* Transcriptions of the recorded interviews were produced. The voices of the teachers produced thematic units that were investigated and discovered. Each transcript of the interviews was thematically partitioned and grouped into similar topics. The results of these thematic units were cross-referenced into the quantitative queries to triangulate the overall results of the study.

Content analysis of the narratives obtained through the interview process was performed using a thematic typology. “Content analysis is the classical method for doing research with narrative materials in psychology, sociology, and education” (Lieblich, Tuval-Mashiach & Zilber, 1998, p. 112). Contents of the interviews were grouped into

thematic subjects and analyzed according to the parameters of teacher efficacy and culturally responsive efficacy belief principles. Contents of the narratives were edited for clarity and grammatical agreement. The names of the participants and the names of the schools where they teach were changed to ensure anonymity. Findings from the analysis of quantitative data are presented in Chapter IV and qualitative findings are presented in Chapter V.

## CHAPTER IV

### QUANTITATIVE FINDINGS OF THE STUDY

In Chapter III, the data analysis related tasks were outlined. In this chapter, the description regarding the implementation and results of the study will be presented, including the analytical findings of the quantitative portion of the study. The research questions pertaining to this chapter are:

1. What are teacher efficacy beliefs of alternatively certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?
2. What are culturally responsive beliefs of alternative certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?

The purpose of this study was to ascertain the teacher efficacy beliefs and culturally responsive efficacy beliefs between alternatively certified teachers and regularly certified teachers. In addition, the study also looked at culturally responsive teaching characteristics of high efficacy Hispanic teachers. This chapter is organized into three sections. The first section reports the demographic characteristics of the participants. The second reports the quantitative results of research question one. The third section reports the quantitative findings of research question two.

### Demographic Findings

The target participants were the complete professional teaching staff at three middle schools and one high school. The participants returned 100 completed surveys out of a total of 319 surveys sent to possible respondents. A total of 10 surveys were rejected due to ethnicity other than Hispanic. The 90 resulting surveys were subjected to analysis by the SPSS. Gender, years of experience, age, route to certification, tenure at participating campus, primary teaching assignment, college degree and teaching in major field were all reported.

Research into teaching assignments at the targeted school district indicated many of the teachers hired at the four participating campuses were alternatively certified. The four campuses are classified as high priority campuses by the school district. Data gathered by the survey indicated that 51.1% of the participants were traditionally certified and 48.9% were alternatively certified. Specific data are summarized in table 4.1 concerning numbers of participants and their route to certification.

Table 4.1

Certification Program	Number	Percent
Traditional Certification Program	46	51.1
Alternative Certification Program	44	48.9
Total	90	100.0

According to the AEIS (2008) data from the State of Texas there are more female teachers than male. The data also show a higher number of female teachers nationally than male (Snyder, Tan & Hoffman, 2006). “Women are more likely than men to enter teaching” (Guarino, Santibanez & Daley, 2000, p.179). This trend also applied to this study where there were 36.7 % male teachers and 63.3 % female teachers. The percent of male respondents indicates a higher percent male teachers than the district or state average. Gender numbers and comparisons of gender differences are summarized in table 4.2.

Table 4.2

## Teachers by Gender

	Number	Percent		
		Respondents	District-Wide	Texas
Male	33	36.7	21.8	22.8
Female	57	63.3	78.2	77.2
Total	90	100	100	100

The category of highest degree held by the respondents indicated that the combined total of the respondents had a slightly higher percentage of masters’ degrees (16.7%) than the average in the district (14.3%) but less than the average of the State of Texas (21.0%) and significantly less percentage than nationally (45.4%) (AEIS, 2008; Snyder, Tan & Hoffman, 2006). Specific data are summarized in table 4.3 concerning college degrees held by the participants in the study.

Table 4.3

Participant College Degree	ACP		Traditional	
	Number of Teachers	Percent Study	Number of Teachers	Percent Study
	Masters	8	8.89	8
Bachelor	36	40.00	38	42.22

Data gathered on teaching in the major teaching field indicate that a majority of the participants are teaching in their major field although the participants report a significant portion of the alternatively certified teachers are teaching out of their major fields. Questions arise concerning filling vacancies in relation to alternative certified teachers and traditionally certified teachers and their major educational field.. Table 4.4 recaps the data reported by the participants concerning teaching in their major field.

Table 4.4

Teaching in Major Field	ACP*		Traditional	
	Number of Teachers	Percent	Number of Teachers	Percent
	Yes	20	22.22	36
No	24	26.67	8	8.89

\*Two ACP respondents did not indicate major field

The demographic data indicate an even spread of the teacher assignments in the major subject areas. When the total group is examined the percentage of participants in



the content areas is relatively even which indicates an even response across the teaching professionals at the participating campuses. The data for each selected group are uneven with alternatively certified teachers predominately teaching language arts while traditionally certified participants are primarily teaching electives. Specific teaching assignments are summarized in table 4.5.

Table 4.5

Primary Teaching Assignments

	ACP		Traditional	
	Number of Teachers	Percent	Number of Teachers	Percent
Special Education	7	7.78	3	3.33
Reading	6	6.67	3	3.33
Language Arts	9	10.00	6	6.67
Mathematics	7	7.78	5	5.56
Fine Arts	0	0.00	2	2.22
Coach	1	1.11	0	0.00
Science	4	4.44	8	8.89
Social Studies	4	4.44	6	6.67
Elective	6	6.67	11	12.22
Undeclared	2	2.22	0	0.00
Total	46	51.11	44	48.89

The years of teaching experience of the respondents indicates a noticeable lack of experience compared to the district and state levels. A significant percent of teachers are new teachers. The percent of new teachers compared to the district is significant. New teachers at the reporting campuses are at 11.1% compared to the district as a whole at 6.1%. The data are in line with other data that indicate hard to staff schools generally containing a less experienced staff (Walsh & Tracy, 2005). Significantly, this data can also be identified as a long term trend in the reporting campuses. The percent of

teachers with 1 to 5 years of experience for the reporting campuses is 48.9%, while the district is 36.1% and the State of Texas is even less at 29.8%. The cumulative percent of teachers with five years or less experience is 60.0% at the participating campuses which compares to the district at 42.2% and the State of Texas at 37.7 %.

The data found in table 4.6 is a summary of years of experience by the participants comparing participating schools, the district and State of Texas (AEIS, 2008). The data is tabulated in a cumulative percentage for the years five, nine and 26+ for comparison and clarity purposes.

Table 4.6

Years of Experience*				
Years Experience	Number of Teachers	School Percent (cumulative)	District Percent (cumulative)	State of Texas Percent (cumulative)
0	10	11.1	6.1	7.9
1	8	8.9	+	+
2	6	6.7	+	+
3	12	13.3	+	+
4	10	11.1	+	+
5	8	8.9 (60.0)	42.2	37.3
6	6	6.7	+	+
7	5	5.6	+	+
8	1	1.1	+	+
9	5	5.6 (79.0)	65.3	57.0
11-24	13	14.4	+	+
26+	6	6.7 (100.0)	100.0	99.6

\*numbers may not add to 100 due to rounding

An early study by Fuller of the Texas Education Agency (2002) indicated a very high attrition rate for ACP teachers compared to traditionally certified teachers in the State of Texas. The attrition rate for ACP teachers was 40.7% compared with teachers traditionally credentialed at 33.8% when measured over the first six years of teaching

experience. The Texas Education Agency (TEA) study may be slightly misleading. Current studies of the Baltimore School District refute the findings of the TEA and indicate that alternatively certified teachers are more likely to stay beyond the three-year experience level than traditionally certified teachers (MacIver & Vaughn, 2007). Furthermore, states with the highest percentage of alternatively certified teachers report that 87 % of them are still teaching after five years (Feistritz & Haar, 2008). In the present study, a comparison of years teaching experience and years of tenure indicates a sharp drop in tenure after five years. This may be indicative of a high turnover for these particular high priority campuses. Tenure of the participants is summarized in table 4.7.

Table 4.7

Years Tenure at Surveyed Schools					
Number of Years Tenure	ACP		Traditional		Cumulative Percent*
	Number of Teachers	Percent*	Number of Teachers	Percent*	
0	8	8.89	6	6.67	16.1
1	11	12.22	1	1.11	29.9
2	4	4.44	14	15.56	50.6
3	8	8.89	4	4.44	64.4
4	6	6.67	1	1.11	72.4
5	1	1.11	4	4.44	78.2
6	1	1.11	1	1.11	80.5
7	0	0	3	3.33	83.9
8	0	0	2	2.22	86.2
9	1	1.11	3	3.33	90.8
12	1	1.11	2	2.22	94.3
13	1	1.11	1	1.11	96.6
14	0	0	1	1.11	97.7

\*Number does not add to 100 percent due to missing data on 5 participants

In conclusion the demographic data denote that there are more female than male teachers. The teachers have relatively short tenure at the participating campuses. Data show the campuses staffed with large numbers of teachers with five or less years of

experience. There are nearly equal numbers of alternatively certified teachers and traditionally certified teachers at the participating campuses. The participants spread of teaching assignments is relatively even over all the content areas realizing no skewing toward any one teaching content area.

### **Research Question One**

1. What are teacher efficacy beliefs of alternatively certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?

The TSES instrument has gone through many internal validity studies and has been tested in many field tests and was accepted intact (Henson, Kogan & Vach-Hasse, 2001; Woolfolk-Hoy & Burke-Spero, 2005). The data collected from the TSES instrument were analytically studied and based on the recommendations of the authors of the instrument, were forced into three moderately correlated factors based on unweighted means using confirmatory factor analysis. The data revealed with some minor variations that three correlated factors were appropriate. There were some values that deviated from the general suggestions by the authors of the TSES. Each group that scores the TSES is considered an individual group therefore some variation is to be expected (Tschannen-Moran & Hoy, 2001).

The loadings of the data in the current study were generally consistent with the theoretical concepts of student engagement, classroom management and instructional strategies published by the authors of the TSES instrument. Factor analysis with varimax

rotation produced by the SPSS program was used to identify the highest loading factors within the three components. The item specific queries in the three groups were discovered through a varimax rotation factor analysis which resulted in a component score coefficient matrix. The dimension groupings as professed by the authors and duplicated by the current study indicate a high degree of validity of the TSES. The three dimensions identified by the authors of the TSES questionnaire and the individual factors that loaded on those dimensions are noted in table 4.8.

Table 4.8

Unweighted Means of All Item Factor Loadings on the TSES	
Concept Group Name	Item Number on the TSES
Efficacy in Student Engagement	1, 2, 3, 4, 6, 11, 12, 14, 22
Efficacy in Classroom Management	15, 17, 18, 19, 20, 21, 23
Efficacy in Instructional Strategies	5, 7, 8, 9, 10, 13, 16, 24

In order to test the data and to check for any significant differences unweighted means and standard deviation were calculated for the three component factors identified in the TSES. Comparisons were made across all combinations of dependent variables which are student engagement, instructional strategies, and classroom management regressed against the independent variable which is the route to certification, either alternative or traditional. This information is summarized in table 4.9.

Table 4.9

Comparison of Standard Deviation and Mean for Three Component Factors of the TSES												
	ACP				Traditional				Total			
	N	M	SD	V	N	M	SD	V	N	M	SD	V
Student Engagement	44	6.8561	1.07608	1.158	46	6.9324	1.00492	1.010	90	6.8951	1.03515	1.072
Instructional Strategies	44	7.2468	.92035	.847	46	7.3106	1.03337	1.068	90	7.2794	.97478	.950
Classroom Management	44	7.3295	.90344	.816	46	7.4321	.86310	.745	90	7.3819	.87957	.774

The data represented in the above standard deviation chart indicates a normal probability of distribution. According to Gall, et al., (2007) “If the score distribution is normally distributed, approximately 68 percent of a sample will have scores within the range of plus or minus one standard deviation from the mean” (p. 136). The mean scores were very similar across all groups. The data confirm that the condition of normality has been analyzed and verified for the TSES. Results of the analysis for mean and standard deviation of the completed instruments indicate a relatively high level of teacher self efficacy. Standard deviation was sufficiently narrow to indicate the TSES is a reliable instrument. The Cronbach alpha score of .9404 indicates a high degree of validity for the instrument.

Table 4.10

Mean and Standard Deviation of TSES												
	ACP				Traditional				Total			
	N	M	SD	V	N	M	SD	V	N	M	SD	V
E1	44	6.30	1.773	3.143	46	6.61	1.570	2.466	90	6.46	1.670	2.790
E2	44	6.61	1.513	2.289	46	6.89	1.197	1.432	90	6.76	1.360	1.625
E3	44	7.73	1.227	1.505	46	7.57	1.328	1.762	90	7.64	1.469	2.158
E4	44	6.55	1.591	2.533	46	6.33	1.351	1.825	90	6.43	1.469	2.158
E5	44	7.86	1.286	1.609	46	7.61	1.273	1.621	90	7.73	1.270	1.613
E6	44	7.30	1.304	1.701	46	7.22	1.381	1.907	90	7.26	1.337	1.788
E7	44	7.48	1.045	1.092	46	7.72	1.026	1.052	90	7.60	1.036	1.074
E8	44	7.30	1.340	1.794	46	7.61	1.064	1.132	90	7.46	1.210	1.464
E9	44	7.09	1.273	1.619	46	6.98	1.341	1.800	90	7.03	1.302	1.696
E10	44	6.98	1.131	1.279	46	6.87	1.360	1.849	90	6.92	1.247	1.556
E11	44	7.02	1.248	1.558	46	7.22	1.365	1.863	90	7.12	1.305	1.704
E12	44	7.09	1.235	1.526	46	7.13	1.455	2.116	90	7.11	1.345	1.808
E13	44	7.43	1.228	1.507	46	7.65	1.159	1.343	90	7.54	1.191	1.419
E14	44	6.66	1.478	2.183	46	7.04	1.299	1.687	90	6.86	1.395	1.945
E15	44	7.30	1.304	1.701	46	7.28	1.471	2.163	90	7.29	1.384	1.916
E16	44	7.23	1.362	1.854	46	7.50	1.225	1.500	90	7.37	1.293	1.673
E17	44	6.95	1.311	1.719	46	7.37	1.289	1.660	90	7.17	1.309	1.713
E18	44	7.14	1.305	1.702	46	7.26	1.405	1.975	90	7.20	1.351	1.825
E19	44	7.05	1.380	1.905	46	7.30	1.364	1.861	90	7.18	1.370	1.878
E20	44	7.75	1.123	1.262	46	7.61	1.145	1.310	90	7.68	1.130	1.277
E21	44	7.45	1.150	1.323	46	7.41	1.127	1.270	90	7.43	1.132	1.282
E22	44	6.45	1.635	2.672	46	6.39	1.844	3.399	90	6.42	1.735	3.011
E23	44	7.09	1.137	1.294	46	6.93	1.705	2.907	90	7.01	1.449	2.101
E24	44	7.27	1.149	1.319	46	7.52	1.169	1.366	90	7.40	1.159	1.344

The respondents were generally confident in their abilities to effect change with their students. The respondents, as noted in table 4.10, scored the instrument on a scale of one to nine, with one being no confidence in their ability to exert change, three meaning very little, five meaning some influence, seven meaning quite a bit and nine meaning a great deal of ability to exert change. In general respondents scored the instrument seven or over. Seven on the scoring guide indicates a level of quite a bit and is above the mean of possible responses which is five. The accumulated data on the TSES indicate three areas of a slight lack of confidence. The queries; how much can you do to get through to the most difficult students (E1), how much can you do to motivate students who show low interest in school work (E4) and how much can you

assist families in helping their children to do well in school (E22) had the highest standard deviation. All queries that indicated a slight lack of confidence fit into the component factor, student engagement. These results are discussed fully in Chapter VI. The result of these statistical tests illustrate from a quantitative theoretical base, that there were no significant differences in route to certification measured by the TSES in the sample population.

### **Research Question Two**

1. What are culturally responsive beliefs of alternative certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?

The CRTSES instrument was amended in the statistical portion of this study. The author of the CRTSES indicated only one moderately correlated dimension in the 40 item instrument. In order to increase validity and internal consistency a confirmatory factor analysis was performed in order to test the underlying theoretical concepts and discover possible theoretical constructs in the CRTSES. Relationships were examined between criterion variables and a combination of variables in the study. Cronbach's alpha coefficient was conducted for the 40 item CRTSES to determine the internal consistency of the instrument and resulted in a score of .9581 which compares favorably with the Cronbach alpha score reported by the author of the CRTSES of .96.

An inspection of the item-total correlation was performed to examine which items may have failed to correlate well with the other items in the instrument. For the



purposes of this research study, a number of individual queries in the CRTSES were discounted and not used based on individual factorial loading during iterations of exploratory factor analysis. An exploratory factor analysis (EFA) based on principal component analysis (PCA) was conducted to investigate the internal structure of the CRTSES and determine the “smallest number of factors used to best represent the interrelations among a set of variables” (Pallant, 2007, p.172).

Exploratory factor analysis is used to “explore the data and provides the researcher with information about how many factors are needed to best represent the data” (Hair, et al., 2006, p. 773). Exploratory factor loadings and theoretical foundations of culturally responsive teaching were applied to the CRTSES to determine the number of factor dimensions considered to “best describe the underlying relationships among variables” (Pallant, 2007, p. 172). Factor analysis allows a combination of variables into groups that are “moderately to highly correlated with each other” (Gall, et al., 2007, p. 369). The original CRTSES as indicated by the author, did not allow for internal statistical grouping into theoretical dimensions commensurate with culturally responsive teacher efficacy. The author indicated only one dimension was used. This inability indicated a weakness in the 40 item CRTSES instrument that the present study attempted to amend.

After theoretical internal structure analyses of the CRTSES, seven iterations of factor analysis were conducted. Individual queries that did not have sufficient discriminatory power when the factor loading was examined at the .5 load factor were discounted and dropped from the CRTSES research protocol with each iteration. The first iteration did not have any limits but loaded on nine component factors. All queries

that loaded below .5 were dropped. Iterations were run five more times with individual queries loading under the .5 level dropped. The seventh iteration was forced into five component factors and rotated using Varimax with Kaiser Normalization.

The results show five component factors grouped into thematic component dimensions. Individual queries that met all statistical parameters were grouped into the component dimensions resulting in 22 queries used for further statistical analysis. Thematic dimensions were identified from the original 40 item CRTSES by grouping all queries into topical subsets of culturally responsive teaching. Internal validity and reliability of the CRTSES was enhanced by this statistical methodology (Gall, et al., 2007; Hair, et al., 2006). Cronbach alpha of the amended 22 item CRTSES questionnaire is .9314. Table 4.11 shows the rotated component matrix and where the individual queries fall in relationship to the dimensions. The bold faced numbers indicate what dimension was selected.

Table 4.11

Rotated Component Matrix <sup>a</sup> for CRTSES (Amended)					
Query	Dimensions				
	1	2	3	4	5
C2	.071	.449	.345	<b>.575</b>	-.022
C3	.217	.162	.192	<b>.726</b>	.125
C4	.137	.121	.080	<b>.832</b>	.231
C8	.139	<b>.577</b>	.316	.236	.005
C9	.052	.429	<b>.660</b>	.088	.106
C10	.143	<b>.706</b>	.269	.167	-.134
C13	<b>.652</b>	.131	.258	.464	.072
C16	<b>.635</b>	.419	.139	-.025	.128
C19	<b>.742</b>	.116	.083	.333	.005
C21	.284	.395	.219	<b>.592</b>	.015
C23	.110	.034	.110	.182	<b>.867</b>
C24	.171	<b>.786</b>	-.011	.229	.176
C25	.220	<b>.838</b>	.126	.149	.106
C27	<b>.874</b>	.072	.218	.044	.132
C28	<b>.842</b>	.132	.118	.179	.193
C31	.018	<b>.748</b>	.272	.062	.190
C32	.065	.342	<b>.733</b>	.182	.163
C33	.206	.198	.135	.102	<b>.815</b>
C35	.505	.199	.268	<b>.508</b>	.109
C38	.292	.257	<b>.768</b>	.180	.090
C39	.405	-.026	<b>.653</b>	.293	.224
C40	.512	.133	<b>.673</b>	.218	-.081

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 7 iterations.

Twenty two queries were accepted that consistently loaded at the .5 level or higher. The queries accepted as valid on the CRTSES (amended) were discovered to best fit into five moderately correlated factors based on unweighted means using exploratory factor analysis. The factor loadings consistently loaded at the .5 level or higher. If a factor loaded at .5 or above on more than one dimension, the highest loading factor dimension was selected. The highest loading scores in the matrix were identified and categorized. The original numbers of the twenty-two queries on the CRTSES were left intact to facilitate translation by other interested parties when using the CRTSES. Named dimensions and the item numbers are summarized in table 4.12. Standardized

testing is the only dimension showing weakness as only two factors loaded on this dimension consistently.

Table 4.12

Unweighted Means of All Item Factor Loading on the CRTSES (Amended)	
Concept Group Name	Item Number on the CRTSES
1 Cultural Strengths	13,16,19,27,28,35
2 School/Parent Relationship	8,10,24,25,31
3 Culturally Responsive Instruction	9,32,38,39,40
4 Classroom Management	2,3,4,21
5 Standardized Testing	23,33

After factor analysis and selecting the queries used in this research study, 71.061% of the variance can be explained with five dimensions. The theoretical dimensions are based on effective culturally responsive teaching and include cultural strengths, home/school partnership, understanding culturally responsive instruction, classroom management and standardized testing (Amanti, 2005; Gay, 2000; Larke, 1992, Sleeter, 2005; Wang, Haertel & Walberg, 1994).

The variance is shown in table 4.13. Dimensions were selected based on eigenvalues of one or above as “any individual factor should account for the variance of at least a single variable if it is to be retained” (Hair et al., 2006, p. 120). The data subjected to statistical analysis indicate that five dimensions can be selected. The individual queries that comprise the dimensions were selected by using a cut off factorial loading of .5 or above.

Table 4.13

Total Variance Explained CRTSES (Amended)						
Dimensions	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.296	42.255	42.255	9.296	42.255	42.255
2	2.261	10.277	52.532	2.261	10.277	52.532
3	1.454	6.607	59.139	1.454	6.607	59.139
4	1.325	6.024	65.163	1.325	6.024	65.163
5	1.297	5.898	71.061	1.297	5.898	71.061
6	.963	4.379	75.439			
7	.723	3.288	78.727			
8	.625	2.839	81.566			
9	.573	2.606	84.172			
10	.495	2.248	86.420			
11	.439	1.997	88.417			
12	.393	1.788	90.205			
13	.353	1.605	91.810			
14	.328	1.492	93.302			
15	.284	1.292	94.593			
16	.268	1.219	95.813			
17	.214	.971	96.784			
18	.200	.908	97.692			
19	.154	.701	98.393			
20	.139	.632	99.026			
21	.118	.535	99.561			
22	.097	.439	100.000			

Extraction Method: Principal Component Analysis.

Analysis of the Culturally Responsive Teacher Efficacy Scale, amended, in table 4.14 indicates the smallest standard deviation of 1.071 for query number C9 “I am able to build a sense of trust in my students.” The largest standard deviation was on query C28 “I am able to critically examine the curriculum to determine whether it reinforces negative cultural stereotypes.” The complete CRTSES (amended) is replicated in Appendix F.

Table 4.14

Mean and Standard Deviation of CRTSES (Amended)												
	ACP				Traditional				Combined Total			
	N	M	SD	V	N	M	SD	V	N	M	SD	V
C2	44	7.45	1.284	1.649	46	7.61	1.422	2.021	90	7.53	1.351	1.825
C3	44	7.89	.895	.801	46	7.30	1.443	2.083	90	7.59	1.235	1.526
C4	44	7.64	.990	.981	46	7.15	1.505	2.265	90	7.39	1.296	1.679
C8	44	7.00	1.525	2.326	46	6.96	1.505	2.265	90	6.98	1.506	2.269
C9	44	7.75	1.014	1.029	46	7.70	1.133	1.283	90	7.72	1.071	1.147
C10	44	7.25	1.222	1.494	46	7.07	1.597	2.551	90	7.16	1.421	2.020
C13	44	7.52	1.372	1.883	46	7.17	1.704	2.902	90	7.34	1.552	2.408
C16	44	7.41	1.300	1.689	46	7.00	1.673	2.800	90	7.20	1.508	2.274
C19	44	6.98	1.607	2.581	46	6.78	1.873	3.507	90	6.88	1.741	3.030
C21	44	7.61	1.166	1.359	46	7.48	1.378	1.900	90	7.54	1.273	1.622
C23	44	7.50	1.486	2.209	46	7.26	1.437	2.064	90	7.38	1.458	2.125
C24	44	7.27	1.546	2.389	46	7.50	1.394	1.944	90	7.39	1.466	2.150
C25	44	7.25	1.700	2.890	46	7.35	1.663	2.765	90	7.30	1.672	2.797
C27	44	6.80	1.503	2.260	46	6.78	1.861	3.463	90	6.79	1.686	2.843
C28	44	6.77	1.461	2.133	46	6.74	2.016	4.064	90	6.76	1.757	3.086
C31	44	7.66	1.509	2.276	46	7.76	1.353	1.830	90	7.71	1.424	2.028
C32	44	7.91	1.217	1.480	46	7.83	1.081	1.169	90	7.83	1.144	1.308
C33	44	7.52	1.267	1.604	46	7.04	1.619	2.620	90	7.04	1.469	2.158
C35	44	7.39	1.333	1.777	46	7.52	1.643	2.700	90	7.52	1.493	2.228
C38	44	7.48	1.210	1.465	46	7.70	1.328	1.328	90	7.70	1.179	1.391
C39	44	7.43	1.336	1.786	46	7.37	1.289	1.660	90	7.40	1.305	1.703
C40	44	7.32	1.272	1.617	46	7.39	1.453	2.110	90	7.36	1.360	1.850

The data from the CRTSES indicates that generally the respondents are confident they can effect change for their students. Three queries indicate a slightly wider standard deviation indicating a minimum lack of confidence. The probes are C19, “I am able to design a classroom environment using displays that reflects a variety of cultures”, C27, “I am able to revise instructional material to include a better representation of cultural groups”, and C28 “I am able to critically examine the curriculum to determine

whether it reinforces negative cultural stereotypes.” These three queries grouped into the factor loading component of cultural strengths.

In order to test the data and to check for any significant differences unweighted means and standard deviation were calculated for the five component factors identified in the CRTSES and is summarized in table 4.15. Comparisons were made across all combinations of dependent variables which are identified as cultural strength, school/parent relationship, culturally responsive instruction, classroom management and standardized testing regressed against the independent variable which is the route to certification, either ACP or traditional.

Table 4.15

Comparison of Standard Deviation and Mean for Five Component Factors of the CRTSES (Amended)

	ACP				Traditional				Combined Total			
	N	M	SD	V	N	M	SD	V	N	M	SD	V
Cultural Strength	44	7.14	1.148	1.317	46	7.00	1.461	2.136	90	7.07	1.312	1.72
School/ Parent Relationships	44	7.29	1.153	1.329	46	7.33	1.255	1.574	90	7.31	1.199	1.438
Culturally Responsive Instruction	44	7.58	1.000	.999	46	7.60	.988	.997	90	7.59	.988	.977
Classroom Management	44	7.65	.893	.797	46	7.39	1.164	1.355	90	7.51	1.043	1.088
Standardized Testing	44	7.51	1.274	1.622	46	7.15	1.358	1.843	90	7.33	1.322	1.748

The data represented in the above standard deviation table indicate a normal probability of distribution. According to Gall, et al., (2007), “Approximately 95 percent of such samples will have scores within the range of plus or minus two standard deviations from the mean” ( p. 136). The mean scores showed some dissimilarity between some dependent factor groups. Results show that cultural strength has the widest variance although the scores are not significant. The data confirm that the

condition of normality for the data has been analyzed and verified. The results of these statistical tests illustrates from a quantitative theoretical base, that there are no significant differences in route to certification measured by the CRTSES in the sample population.

### Comparison Between Routes to Certification

Statistical tests were applied to check for any significant differences of alternatively certified teachers and traditionally certified teachers concerning route to certification. Unweighted means and standard deviation were calculated for the two independent factors in this study, alternative certification route and traditional certification route and the two dependent variables the CRTSES and TSES. Comparisons were made across all combinations of dependent variables and the independent variable route to certification and are noted in table 4.16.

Table 4.16

Comparison of Mean, Standard Deviation and Variance for the Route to Certification of the TSES and CRTSES (Amended)

	TSES				CRTSE			
	N	M	SD	V	N	M	SD	V
ACP	44	7.1278	.85799	.736	44	7.3998	.88137	.777
Traditional	46	7.2092	.87782	.771	46	7.2935	.96279	.927
Total	90	7.1694	.86426	.747	90	7.3455	.92025	.847

Standard deviation was slightly higher for traditional route to certification compared to alternative certification on each dependent variable. As stated above in this study, standard deviations that are within one standard deviation from the mean indicate the data is within the normal probability curve (Gall, et al., 2007). This assumption of normality is “the most fundamental assumption in multivariate analysis” (Hair, et al.,



2007, p. 79). The standard deviation of ACP and traditionally certified teachers filling out the TSES and the CRTSES is below one. This indicates a very tight grouping of the answers on each of the instruments filled out by the respondents. The response mindset of the participants indicate very similar responses without any observable outliers.

Once the data were found to be within the normal distribution curve, further testing was applied. An analysis of variance was performed based upon route to certification of the respondents to ascertain whether there were significant differences in the subgroups of TSES and CRTSES. Following are the regression results of the TSES in table 4.17.

Table 4.17

ANOVA Table of Possible Significant Differences Between TSES of Traditional and Alternatively Certified Teachers					
	Sum of Squares	df	Mean Square	F	Sig.
Between Traditionally Certified and Alternatively Certified Groups	.149	1	.149	.198	.658
Within Groups	66.329	88	.754		
Total	66.478	89			

For the purposes of this research study the comparison distribution with a probability of 0.05 that a score will be at least that extreme was selected for statistical significance. Generally social and behavioral science researchers “reject the null hypothesis if the probability of getting a result this extreme is less than 5%” (Aron, Aron & Coups, 2005, p. 137). The significance is greater than  $p < .05$  therefore there is no significant difference in teacher efficacy between routes to certification.

Results of this survey for culturally responsive teacher self efficacy indicate no significant difference between teachers certified alternatively and teachers certified by traditional methods when  $p < .05$ . The significance is greater than  $p < .05$  therefore no

significant differences exist in culturally responsive self efficacy in teachers credentialed alternatively or traditionally. Teachers credentialed alternatively or traditionally do not report a significant difference in culturally responsive efficacy. Regression results of the CRTSES instrument in respect to culturally responsive teacher efficacy and route to certification are shown in Table 4.18.

Table 4.18

ANOVA Table of Possible Significant Differences Between CRTSES (Amended) of Traditional and Alternatively Certified Teachers

	Sum of Squares	df	Mean Square	F	Sig.
Between Traditionally Certified and Alternatively Certified Groups	.254	1	.254	.298	.587
Within Groups	75.117	88	.854		
Total	75.371	89			

## CHAPTER V

### QUALITATIVE FINDINGS

#### **Research Question Three**

2. What characteristics of quality teachers do high efficacy Hispanic teachers teaching in high risk environments exhibit?

The researcher interviewed four Hispanic teachers to further clarify the findings of the qualitative portion of the research study. Specifically the researcher investigated the qualities of effective teachers in light of culturally responsive teaching practices. The interview protocol was based on the teacher as a person and included five areas; personality traits of the effective teacher; the function of respect and fairness in teaching; teacher interaction with students; the teachers' attitude toward students; and the role of reflective practice in effective teaching (Tucker & Stronge, 2005). The interview protocol is reproduced in Appendix E. The demographics of the interview participants are delineated in table 5.1.

Table 5.1

Demographics of Interview Participants					
Participant	Years of Experience	Route to Certification	Prior Experience	Gender	Teaching Assignment
1	9	Traditional	Yes	Male	Math
2	5	ACP	Yes	Female	Self Contained Special Education
3	7	Traditional	Yes	Male	Self Contained Special Education
4	5	ACP	Yes	Female	Self Contained Special Education

The teachers selected by the researcher for the interview are highly effective teachers according to their respective administrators and peer group. The results indicate the participants all made a special effort to understand and learn their students. The participants discussed the importance of having a relationship with their students. All stressed the importance of using the strengths of their students and emphasizing positive rather than negative life experiences. It became apparent that the participants stressed unconventional teaching methods including dance, classroom rituals such as hand clapping, group projects for real world experience and building strong relationships with students' parents. All the participants deemphasized rote learning for higher order thinking skills through interactive group discussion and high frequency questioning.

Three of the participants voiced concern about scripted scope and sequence curriculum as a sole source for curriculum. The participants indicated the scripted curriculum was very constricting and did not allow for teaching in the moment or using events brought to the classroom by the students. Another concern was that the school district scope and sequence was problematic because pacing of curriculum did not allow for individualized curriculum.

The idea that narrative material is static and can only be interpreted in one single manner is a faulty illusion (Lieblich, Tuval-Mashiach & Zilber, 1998). Guba and Lincoln (1985) emphatically state that naturalistic inquiry “must unfold, cascade, roll, emerge” because of the “existence of multiple realities” (p. 208, 209). The fact that the researcher went through a process to discover highly effective teachers automatically shines an interpretive light on the participant narratives. The reader may interpret the words in a manner not discovered by the author.

Themes emerged after grouping all responses into broad similar ideas voiced by the participants. The researcher allowed the themes to reveal themselves after sorting and meshing similar responses and carefully reading all groupings individually. A professional librarian read all transcribed topical groupings. The researcher and librarian were in agreement after some manipulation of individual sentence groupings. The themes that surfaced were based on principles of high self efficacy and culturally responsive teaching. A flow chart indicating the themes is shown in Figure 5. 1 with a discussion of each theme following.

### Narrative Themes

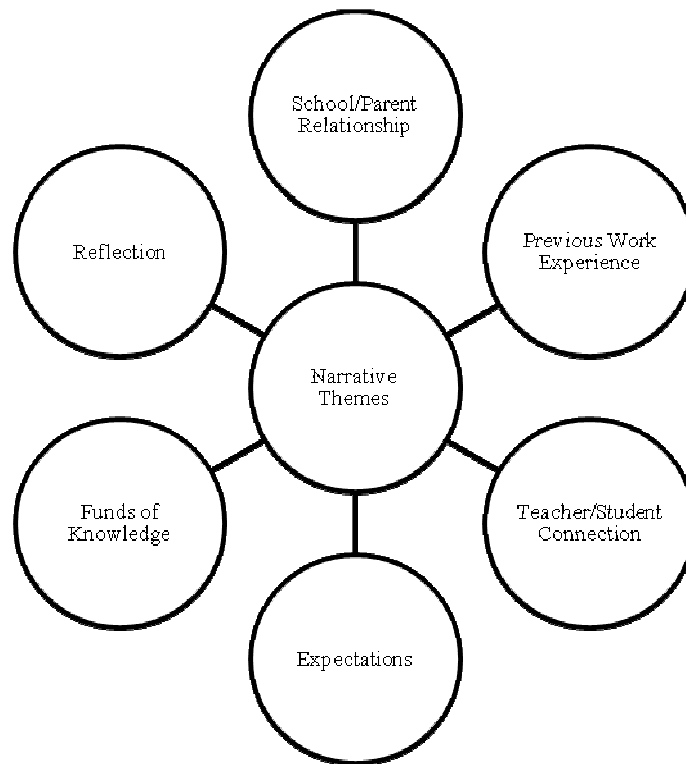


Figure 5.1

Narrative Themes

*Theme I—Teacher Expectations.* High teacher expectations have long been linked to student achievement (Rosenthal & Jacobsen, 1968). These authors discovered that low or high expectations of teachers were highly correlated to achievement. Guidance was given by Henderson and Milstein (2003) when they cautioned “It is important that expectations be both high and realistic in order to be effective motivators” (p 13). Gay (2000) wrote extensively about expectations for children of color and concluded that devaluation of children of color accompanies low or negative expectations.

Teachers with high self efficacy also have high expectations for their students. Research by Jussim, Eccles and Madon (1996) indicates that teachers with high

expectations will exercise their human agency by trying a variety of teaching methods, will build strong relationships with students, create a learning climate in the classroom and have a propensity to encourage students to excel. The voices of the participants in the present study reinforced these research based qualities of highly effective culturally responsive teachers.

One participant, a certified special education teacher and counselor, teaches students in Middle School identified with autism. When he spoke of his students and his expectations for the students in his class, he phrased expectations by stating “I know they can perform...my expectations are very high.” Another middle school teacher who teaches students identified with emotional disturbance spoke at length about expectations and her classroom. She very loyally recited expectations about a specific student named Mike who had been sent to her self-contained classroom from another school because of maladaptive behavior. This loyal teacher explained that Mike’s behavior was extreme at home and at school. She said:

He goes, you point out things that no one has ever pointed out before. He was like, well, at home, my Mom said she doesn’t know what to do with me anymore. So I started finding with him, was, that all he knew was a lot of negatives. So what I started doing was, I started using a lot of positives with him. I told him you are creating your own story. I told him, look, Mike, you have a lot of people that miss you. And they are going to tell you are you ready to come back. And he was like, no, I am staying at Henry.

When she expressed positives over time, she was able to change his behavior into behavior where Mike understood the consequences of maladaptive behavior. As he was

more able to understand options, he was able to choose to make the correct behavioral decisions. Key to that change was the expectation for Mike's success in regard to behavior at school and home, including academics. This positive growth and learning corresponds to the factor of culturally responsive instruction discovered in the analysis of the CRTSES. An example of a query in the CRTSES questionnaire is: I am able to help students feel like important members of the classroom. The TSES is very similar. A sample of a query in the TSES is: How much can you do to motivate students who show low interest in school work?

The voice of an enthusiastic regular education mathematics teacher in middle school expressed his view of expectations with a narrative that involved his whole class:

I had as a matter of fact, one of the young ladies this past week, said, Hi sir, you remember me? Really smiling and I was like yeah, I remember you. How are you? I was like fine and what grade are you in now. She was a junior. She was in my fourth period class and I remember because Ms. uh, what was her name, I can't remember. She had the Gifted and Talented kids. That's when we had the three T's and we used to score them and then they would post them. The kids would look forward to having those scores come up because they felt like they were the Gifted and Talented, not Ms. what's her names class. And you know, funny enough, they always scored right there with them in the three T's because the expectations were there. They believed they could actually do it and they were [doing it]. The one that would score low, they were like ah come on, you know, pick it up. It was a motivator for them. We would look at them and they would get all 'we're smarter than they are' but the expectations were high.



This enthusiastic teacher was able to utilize the factor of classroom management in addition to standardized testing. For example a query on the CRTSES questionnaire is: I am able to determine whether my students feel comfortable competing with other students. Another query from the CRTSES that applies to this narrative is: I am able to identify ways that standardized tests may be biased towards linguistically diverse students. An example of a query on the TSES is: How much can you do to get students to believe they can do well in school work?

This passionate teacher addressed this issue with his students. “I tell them this, you can learn. Yes, you can. The only difference between them and you is that you’re going to have to work harder but you can accomplish the same things” when addressing students not as proficient in English as the Gifted and Talented students.

*Theme II--School/Parent Relationship.* Another theme that emerged was the participants discussing school/parent relationships. The middle school teacher of autistic students was eloquent about his conscious effort to forge a school/ parent relationship.

Well what I – my first strategy, like, what I try to do [is] to build a good rapport between teacher and parent. Once you have that rapport you can implement what you know and let the parents know what your plans are, your goals are and they – you can talk, you go to their level and explain [to] them. This is our plan. This is what our goals are for your student and they start to see things in a different way. It’s a two way communication, well actually three, because you also need to get involved the community. But it’s very important for you to have good communication with the parents and for the parents to be involved in their child’s education.

This devoted special education teacher was focused on goals for his students and communicating that to the families. School/Parent relationships was addressed on the TSES by the query: How much can you assist families in helping their children to do well in school?

Another calm, dedicated high school, self contained special education teacher of children with emotional disturbance, addressed the school/parent relationship differently. This knowledgeable teacher implied that at the high school level being accepted into the students' circle of life seemed to be more important. In order for this teacher to relate to these difficult to teach students, she knew she had to understand how and where they lived. This teacher of students with emotional disturbance commented on what she felt were some of the stark differences between her views and some of the other teachers, especially teachers who were conscious of geographical and socio-economic differences between them and the students. As a consequence she explained,

I went to the houses and saw how these kids live. I saw what was going on at home; I know what kind of situations they encounter. And I know there are some teachers they don't have a clue where these kids live, where they are coming from so I guess they can't relate to that. Even in the south they are different. And even where they live, say in El Ceniso. Most of them are from El Ceniso, but the parents are different also. Some parents work and some don't. Some maybe have both parents and some don't so they are all different.

A query in the CRTSES addressed this narrative: I am able to obtain information about my students' home life. Several queries on the TSES were addressed in this

narrative. One query that is especially pertinent is: How much can you do to help your students value learning?

The traditionally certified middle school math teacher addressed the home/school relationship in terms of motivating the students and the parents. His concern was personalized into a lament and wistfulness for action. He told the story of one student who was not completing his homework.

Look one of the things that I always run into; that I try-- that really bothers me is when I can't reach a child. Really bothers me too. It gets me frustrated and I just, you know, for the life of me, I just can't figure out where, how I can get this child motivated. That really bothers me. You can see that part of the problem is that it comes from home and unfortunately some of these kids parents just don't fully involve them [selves].

This narrative illustrates the complexities of communication with parents. This math teacher felt he was unsuccessful in communicating the urgency of having the student complete work at home. This theme is addressed in the CRTSES by the probe: I am able to communicate with the parents of English Language Learner's regarding their child's achievement. He continued his narrative:

I can tell you this, when we talk to the mom she even said "do you think he has attention deficit?" I told her ma'am we can't diagnose, OK. We even told her go to the doctor and talk to him about what is going on. Did she do it? No. So in a way, we get tied. [Some kids] for some reason or another something is just not allowing them... whether it be home or the home environment it's not peaceful.

It's not supportive I don't know, but they just can't. So that bothers a teacher.

Some it bothers, [other] teachers, nah, I don't care. Well, to me, it bothers me.

He was successful in communicating his concerns to the parent although this middle school math teacher felt unsuccessful in enabling the parent to act on the information. He expressed frustration at the lack of the parent being proactive about the student. The TSES instrument addressed the idea of motivation of students surrounding by the theme of school/parent by several queries: How much can you do to adjust your lessons to the proper level for individual students; and how much can you do to foster student creativity?

*Theme III – Previous Experience.* Previous experience was also an emerging theme that was important to the participants during the in-depth interviews. When teachers are certified by alternative methods, they generally already have a degree from an accredited university (Flores, Desjean-Perrotta & Steinmetz, 2004; Darling-Hammond, Chung & Frelow, 2002). This requirement implies that the prospective alternative education applicant has some previous work experience. The participants in the interviews all had previous work experience after their bachelor's degree. The two participants who graduated from college with a teaching degree worked in other jobs before becoming teachers. It is interesting that of the two participants who were traditionally credentialed, one worked in sales, the other in the oil field, two disparate and dissimilar jobs. The two alternatively certified teachers also worked at other jobs before becoming teachers. The participants all put high importance on their previous experience. Concerning previous work experience, an ACP teacher expressed:

I think it really, really helped me out. You learn to use a lot more communication skills; you know you're learning to use your thought process more working with these kids. And it's an eye opener because I used to see in my patients files, when I worked with adults you know, that they were in special education units. They were oppositional defiant, ADHD, and I had a hard time tying it together but now having worked with the kids and the adults I can tie it together.

As a teacher with prior experience this middle school ACP teacher stated that she was "able to tie it all together" when referencing her previous work experience. She was directly referring to all the background information, including any disability of the particular child involved and the communication skills she learned in her previous career. When the CRTSES was examined, a number of queries were identified such as: I am able to obtain information about my students' background to help make learning meaningful; and, I am able to obtain information about my students' cultural background. This same concept was addressed by the TSES by using the query: How well can you implement alternative strategies in your classroom? This experienced middle school teacher was able to go beyond her present existence in the classroom and draw upon knowledge learned in other venues to help her be a highly efficacious teacher.

The former salesman turned math teacher was especially loquacious about his previous career. In his narrative he directly tied his previous experience to his expertise in being a highly effective culturally responsive teacher. This former salesman voiced in his narrative, a direct connection from his sales experience to his teaching experience.

I used to be a salesman for so many years. If you want to make a living you better read between the lines. Somebody's telling you something, you can see if

they mean it or they don't. What is there? What are they thinking because that's going to tell you; am I wasting my time or am I going to really sell something. In a way I was making more money as a sales person but I find this a lot more rewarding. I find this very rewarding but I think that is one thing that has helped me. That you deal with people and you get a feel for people. You get all kinds of people coming in there... I talk to the person, I got the feel about the person. I was asking [if] these people were interested in buying. I think that makes a difference when you get, what I guess you could call, a sixth sense. You get that feel. In a way it is just different in the kind of questions you are asking and why. But if you are going to sell something you have to know the customer. You have to know what he wants.

When voicing his narrative this math teacher concentrated on his learned ability to understand the client. He discovered in his retelling of the narrative that his previous experience was vital to his success as a teacher. He continued the narrative and connected his work experience with being a school teacher. He voiced, "What is going to make this child? I think that is very important. And now, come to think of it, that is probably one of the things that I have never thought of. Yeah, that is the same thing I used to do in sales." When examining the CRTSES a number of queries apply. One query relevant to the narrative is: I am able to use the interests of my students to make learning meaningful for them. Another query tying his narrative to the CRTSES is: I am able to use examples that are familiar to students from diverse cultural backgrounds; and, I am able to determine whether my students like to work alone or in a group. The TSES showed its relevance with queries such as: How much can you do to help your students

think critically; and, how much can you gauge student comprehension of what you have taught.

*Theme IV--Funds of Knowledge.* Funds of knowledge was another theme that emerged in the narrative voices of the participants. Funds of knowledge refers to “historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being” (Moll, Amanti, Neff, & Gonzalez, 1992, p.133). All the participants expressed definite impressions concerning knowledge students bring from the home and community environment. It became apparent in the open ended interviews that the participants could not uniformly categorize the funds of knowledge of their students in the same manner. In fact Gonzalez (2005) has stated that culture emanating from students funds of knowledge was “a way for students to exercise some [human] agency in their encounters with schooling” (p 36). Human agency implies individual execution of independent thought. With this understanding, it was evident that each of the participants used students’ funds of knowledge to their advantage.

The middle school teacher of students diagnosed with emotional disturbance expounded on the funds of knowledge she used by explaining in her narrative:

I talked to him about, like, how things were at home. I said tell me a little bit about yourself. I got to know him, his family, then I talked to some of the other teachers and he comes from a real troublesome family. I usually get their social backgrounds and then go from there. Because it is easier than if I say this is the way it is supposed to be because they don’t know the way it is supposed to be. I was like, you have to understand that these kids come with a totally different social acceptability than what we come from – I try and get to know my kids, I

said, inside out. I spend the first six weeks getting to know them. That comes from them, how many siblings they have, are they from different fathers, and are they from different mothers. I said I get to know all of that about them because to me that is where I build my foundation to understand that student. And when I teach them I try to use a lot of situations from their home environment but in a way that I am not going to offend them. But with me when I understand their social, the academics are just so much easier to put into place.

This thoughtful and empathetic ACP teacher understood that it is easier to make progress behaviorally and academically when the teacher uses funds of knowledge of each individual student. A few of the queries in the CRTSES that address this idea include: I am able to design instruction that matches my students' developmental needs; and, I am able to use my students' cultural background to help make learning meaningful. In the TSES, queries that apply were: To what extent can you craft good questions for your students; and, how well can you provide appropriate challenges for very capable students. This self-contained teacher understood the need for utilizing the funds of knowledge exhibited by her students.

The importance of using the funds of knowledge brought by the students was explained by the traditionally certified middle school math teacher as:

The way I see it is this, you know, these kids, I see these kids, and they all come with this, how can I say it, this something that is imbedded in them for so many years. This is the way they are; this is the way they behave. We have to understand that also. And I try to, I try and learn my students real quick because that's going to help me maintain order in the classroom, help them get in the



right direction. I try to learn about them. I do this from the start of the school year. From the start of the year, I start asking them stuff. You know, where was your school? What did you do? and indirectly the kids don't pick up on really what I'm trying to do. I'm trying to get to know them so that I can more or less get a feel of what I have to do for them. So I'm lucky I get to know them a lot faster. But even when I had the A day, B day, a lot of these kids would tell me "sir, how do you know that". How do I know that? Because I'm asking you stuff and I start getting a feel about what's going on you see, and it's a way I just probe little things at them and get to know them. It's just talking to the child; just probing questions, listening, how they answer, how they react to certain things; you can get a feel of what's going on with this child. So yeah, it's very important and that's where you start. I mean, the way I see it, if you want to be successful you have to start [there]. You've got to know your students.

In this particular narrative this math teacher was looking at the funds of knowledge as a method of classroom management. The more that a teacher knows and understands their students, the easier they are to manage and therefore learning is improved. Queries in the CRTSES that this narrative addressed include: I am able to obtain information about my students' academic weaknesses; I am able to determine whether my students like to work alone or in a group; and, I am able to build a sense of trust in my students. The TSES addresses funds of knowledge in an indirect manner partially through classroom management in queries such as: To what extent can you make your expectations clear about student behavior. The middle school math teacher

wanted to get to know his students in order to make his classroom more routine, even when the school had A day and B day scheduling.

Another teacher looked at the funds of knowledge brought by his students in a more exacting way. As a teacher of students with significant disabilities such as autism, this self-contained teacher felt he was facing a significant learning obstacle since on occasion the fund of knowledge was limited. He stated:

The knowledge they bring from their house is, mmm, sometimes doesn't help with what you know you are supposed to teach them. So that's where you're instructional strategies take into place. Most of the kids come from single parent or they're the first kid, they're the first kid of the first marriage so they have like three or four brothers. So that is already something-- something not normal there. Because they're the first one, probably the oldest child, and then they have like three or four brothers and half brothers that are from one father and other ones from other fathers. So that there, you are already creating a conflict. What I know is that, umm, some of them are very outgoing but you need, like, what I feel that you need, to teach them survival skills. Like hey, how to be polite, how to introduce yourself, how to get around, in other words be polite, how to make new friends, how to meet new people. So probably they have those skills but they are not exposed to... [a] variety of people.

This self-contained teacher of students with autism was reluctant to speak openly about the funds of knowledge his students come to school with. The Hispanic culture along the United States – Mexico border, the borderlands, entails a certain reluctance to deal with any government entity that implies the family is wrong (E. Ruelas, LSW,

personal communication, May 20, 2009). In addition, the psychology of being parents in the Hispanic border culture with a disabled child is especially challenging in regards to cultural roots and mores. Hall and Barongan (2002) in their book, *Multicultural Psychology*, have proposed that motherly love is more important in the borderland Hispanic culture than any other filial responsibility. As a result, many times maternal protectionism interferes with progress as measured by developmental and academic measures.

As Amanti (2005) summarized, the teacher /parent relationship is built upon a continual and open communication that includes valuing the funds of knowledge exhibited by the student. This particular teacher, in his position as a teacher of students diagnosed with autism, was in a unique position to critique the funds of knowledge of his students. As referenced in the section on expectations, this teacher overtly teaches high expectations partly to overcome familial inhibitions. This self-contained autistic teacher's voice in this narrative touched on several queries in the CRTSE among them: I am able to communicate with the parents of English Language Learners regarding their child's achievement; I am able to establish positive home-school relations; and, I am able to structure parent-teacher conferences so that the meeting is not intimidating for parents. The TSES queries that apply to this portion of the narrative included: How much can you assist families in helping their children do well in school.

*Theme V –Teacher-Student Connection.* A large portion of the participants viewed the connection they had with their students as extremely important. Strong caring relationships that teachers create with their students have a positive effect on schools,

classroom and individual students (Henderson & Milstein, 2003; Tschannen-Moran & Hoy, 2001).

A middle school self-contained teacher approached the relationship with her students as absolutely necessary to effect change and progress in her students. She voiced the importance of connections she made with her students. She relates a story of being successful with one of her students. Concerning the teacher-student connection:

I looked at stuff that he was interested in. A lot of real life with him. I just look for a lot of real life situations with him. Like for example, his dad is a mechanic and we focus a lot with him [on] those skills. Like how his dad makes a living off of being a mechanic. He is providing for you so you can get an education. If your parents don't have an education and yet they send you to school they want you to get an education. The teachers from Jay, they saw him... and they were like, He is smiling! He says hello! He is all social! And they are like what did you do to him? I just looked for the positive in him.

Success was never in question. This thoughtful teacher had a plan and very systematically created success by using funds of knowledge to create a relationship for success. An example of triangulating the queries on the CRTSES is: I am able to use examples that are familiar to students from diverse cultural backgrounds. There was only one student in her class whose parent was a mechanic, yet this culturally responsive teacher was able to transfer that curriculum and create success for all her students.

This particular teacher voiced a particular emotional narrative about her first awards day at the end of her first year of teaching. The teacher-student relationship is forefront in her voice:

I remember my first year on the job, I remember our awards day. I remember I had Edward that year. I will never forget that year. Everybody tells me like, what is that one moment in teaching that changed? And I remember that the principal gave roses to the kids to give to their parents. And Edward had gotten a trophy for commended performance. I think it was reading. So he had this medal, and he had a trophy and all this stuff for AB honor roll and he walked off the stage. I am waiting down at the bottom of the stage and in front of everybody he comes and gives me the rose. And I was looking at it “That’s for your Mom sweetie”. And he’s like no, he goes, like, I am going to give it to you because you are better than my Mom. You have guided me more than she has. And I was just like tear jerker right there. And he said it super loud, so the parents that were sitting in the front row, he had them all crying. Then the counselor was like crying, like this was a kid who, when [he] came into the unit, hated your guts. You know, he called you every name in the book. And I still have that rose put away in my closet. I have it dried up in a little zip lock, you know.

This narrative exemplifies the relationships that highly efficacious culturally responsive teachers can build with their students. The narrative touches a number of queries found in the CRTSES instrument. Queries such as: I am able to help students feel like important members of the classroom; and, I am able to critically examine the curriculum to determine whether it reinforces negative cultural stereotypes.

The math teacher participant voiced a narrative about the intricacies of the student –teacher relationship when he spoke about how hard it is to motivate students:

There's this child, "He's passing but he could do a lot better. If he continues like this he is not going to pass TAKS." I can feel it because of the fact that he just doesn't complete the assignments; not that he can't, because he has the mental ability. Unfortunately, when you can have him here in class and you're helping him, he'll do whatever you tell him to do. But when he gets home and brings back homework he doesn't [finish it] because there is no support at home.

The voice of this traditionally certified math teacher is hopeful and expectant but overlaid with a sense of inevitability because the teacher–student relationship is not strong enough to overcome the home environment. In the TSES queries that are relevant include: How much can you do to get through to the most difficult students; and, how well can you establish a classroom management system with each group of students.

*Theme VI – Self Reflection.* Self reflection is a trait of an effective, highly efficacious, culturally responsive teacher (Sleeter, 2005, Tschannen-Moran & Hoy, 2001). The participants in the intensive interviews for this study all practiced self reflection in some manner. The CRTSES and the TSES both of which were used in this mixed method study are based to a large degree on teacher self reflection. The creators of both instruments phrased the individual queries in the first person to indicate a condition of cognitive thought process and an internal locus of control position (Siwatu, 2005; Tschannen-Moran & Hoy, 2001).

Self reflection takes many avenues when applied to culturally responsive teaching. The middle school math teacher responded to criticism that other teachers had expressed to him by referring back to the progress he makes with his students. He

expressed his confidence in his abilities to effect change with his students. In dealing with students he told a fellow teacher:

You need to appreciate the way you are with them. One of the things that I tell them is you have to have a balance. You see just because you are strict that doesn't mean you are going to not be compassionate also. You have to have a certain balance in there. Sometimes you have to be a little bit flexible and you have to have a little bit of flexibility in it. There are certain times where you have to be rigid. And then of course there are the [students] that are going to try you no matter what and see what they're going to get away with. Those you deal with in a different way.

The highly efficacious math teacher was adamant about putting the needs of the students at the forefront of his day. He responded to a critique from a master teacher by utilizing the voice of self reflection when analyzing curriculum, learning styles and teaching methodology:

I'm constantly going back to reteach. As a matter of fact, today one of the teachers told me about an email we received from one of our pathfinders [master teachers]. [It said] you know you're not on the same page as the other teachers. I'm like look, I'm not going to worry about that because if she wants to race by the scope and sequence that's her business but I'm going to target my students. If I feel that my students need me to slow down and do this at a different pace, so be it.

The narrative continued with an explanation of teaching style that was a result of self-reflection and reflects a highly efficacious teacher:

See, I'll do stuff like, I get an assignment back and a lot of the kids just didn't get it. You know what, okay, you know what, let's do this a different way. And then a lot of times, you know, like simply yesterday, I took a little ball away from a kid. He was in the morning and that little ball became a probability experiment just like that. It isn't any subject that you pick. You can use stuff, it doesn't matter. It can be on the spot, it can be a little thing that you go oh, 'let's try this' and you try. I think that that, makes a difference. Changing the tempo of the class makes a difference because you [are] going on and all of a sudden it changes, you know it changes. We're doing something else and that takes away the monotony of just sitting there, you know, listening and listening. So I think that's something that I do that I think helps the kids.

This voice leads toward self reflection which becomes an ongoing part of culturally responsive teaching. Teaching becomes an interactive process that encompasses social cognitive theory. Social cognitive theory, as asserted by Bandura (1994), refers to the beliefs that individuals hold about their capability to attain desired goals and to influence and control events in their lives. The CRTSES addresses self cognition encompassed in self reflection in the query: I am able to use the interests of my students to make learning meaningful for them. Making learning meaningful for students is a product of self reflection. The TSES addresses self reflection through the query: How much can you do to improve the understanding of a student who is failing. The traditionally certified math teacher said, "If I feel that my students need me to slow down and do this at a different pace, so be it." Self reflection by teachers is an integral part of efficacy and culturally responsive teaching (Gay, 2000; Gibson & Dembo, 1984).



Self reflection is reflected by the continuing narrative voiced by the culturally responsive middle school math teacher:

Yes, it doesn't always work, but the times that you can do it the kids are going to... for those instances that you can, the kids are going to look forward to coming to your class. I mean that is the way I see it ... if I can make the class... change the pace of the class where it is not always work, work, work and all of the sudden, you know what, guys let's do this. That changes the pace of the class... I am strict but I am flexible with the kids, I am flexible. Because if, you know, if you are at it constantly, you are going to lose these kids.

This math teacher narrated a strategy he uses which includes self reflection during an actual lesson. The narrative of efficacious teaching touched on several queries in the TSES, for example: To what extent can you provide an alternative explanation or example when students are confused; and, how much can you use a variety of assessment strategies. Self reflection for the participants seemed to be an ingrained part of their teaching skill set as the voices never implied overtly or covertly a sense of frustration or negativism in teaching students.

Self reflection is, in part, dialogue with your peer group. The middle school teacher of students with emotional disturbance reflected on her effectiveness with a fellow teacher in the following narrative:

I was telling Ms Zuazua, we can't save them, but we can try and mold them; fix some of the, you know, fix them up and maybe put a little twinkle somewhere in the line to give them a goal, something they can use in the future. Point out something that maybe their parents haven't taken the time to point out. And also

to point it out to their parents. So if we have made our point, I think we have. I really think we have.

The TSES is directly connected to the voices in this narrative with the query: How much can you do to control disruptive behavior in the classroom; and, how much can you do to get children to follow classroom rules. Beyond making academic progress with her students, this culturally responsive efficacious teacher is concerned for her students' future.

The ACP high school self-contained teacher addressed self reflection in a slightly different manner. She addressed the idea that teachers should be free to think in an open minded, efficacious framework when dealing with students or events that happen during the school day:

I think I am really open minded. I don't get angry. I don't take things personally and I think that [the students] see that at the beginning. At the beginning they think I am strict and really mean and they have that impression, but I am not. ... I am consistent. So I think that has a lot to do with it. I am not afraid of the kids. I don't want to force them to change; I just want what they have and what they are willing to do.

This highly efficacious individual teaches at the high school level and her classroom is comprised of students diagnosed with emotional disturbance. The narrative is powerful knowing the disabilities of the students in her classroom. The TSES addressed her classroom in a query: How well can you respond to difficult questions from your students? The other instrument used in this study, the CRTSES, also

addressed the reflection in a query: I am able to design instruction that matches my students' developmental needs.

## CHAPTER VI

### DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

#### **Purpose and Design**

The purpose of this study was to examine alternatively certified Hispanic in-service teachers and traditionally certified Hispanic in-service teachers and ascertain if there were any significant differences between the route to certification as measured by teacher self efficacy and culturally responsive teacher self efficacy instruments. Two existing instruments measuring teacher self efficacy and culturally responsive self efficacy were administered to 319 middle and high school Hispanic teachers teaching in high risk environments. Additionally, the study examined the qualities of four selected high efficacy Hispanic teachers certified by alternative and traditional means through in-depth interviews.

The study amended the Culturally Responsive Teacher Self Efficacy Scale (CRTSES) questionnaire. The amended CRTSES instrument (Appendix F) used in this study consisted of twenty two queries that were statistically and theoretically selected to represent culturally responsive teacher efficacy. The internal validity and reliability of the original instrument was enhanced by eliminating all individual queries that did not meet the study standards. The resulting amended CRTSE instrument consisted of five dimensions that accounted for 71.061% of the variance.

The research questions for this study examined significant differences between route to certification of Hispanic teachers in teaching self efficacy and culturally responsive teaching self efficacy. Reliability and validity of the study were triangulated

through the use of semi-structured interviews with selected respondents (N=4) who participated in the qualitative portion of the study. Triangulation was achieved by employing mixed method research by utilizing both quantitative and qualitative methodology to give “a more comprehensive picture of the results” (Morse, 2003, p. 190). The instruments validity and the implementation and measurement of the participating teachers’ efficacy intentions were investigated by using as covariates the teachers’ route to certification. Reliability of the instruments used was statistically tested and the instruments were found to be reliable. Cronbach alpha reliability score for the TSES was .9404 and the Cronbach alpha reliability score for the amended CRTSES, was .9314.

A convenience sample was drawn from 319 Texas public school teachers serving full-time on traditional middle and high school instructional campuses during the 2008-2009 school year. From this sample, a total of 100 respondents returned completed and usable instruments. From this respondent group, 90 participant surveys that met all the study criteria were selected for use in the statistical analysis. Ten surveys were discarded due to ethnicity other than Hispanic.

The combined survey instrument was administered via hand delivered questionnaires, the internet, as solicited by an e-mail containing a link to the on-line survey and through a group appeal during campus wide staff development. Returned instruments consisted of 24 viable hand delivered, 16 viable internet responses and 60 viable responses during campus- wide staff development. Results of tests for differences in teacher and culturally responsive teacher efficacy in the sampled population of alternative and traditional certification indicated that there are no

significant differences in respect to teacher efficacy and culturally responsive teacher efficacy between alternatively certified teacher and traditionally certified teachers.

Intensive open-ended interviews with selected (N= 4) respondents provided a valid and reliable measure of the internal validity of the measuring instruments to accurately gauge teacher and culturally responsive efficacy in current in-service certified professional teachers. The interview questions were formulated and designed to seek confirmation of any significant differences in belief patterns apparent between alternatively certified and traditionally certified teaching professionals in the area of teacher self efficacy and culturally responsive teacher self efficacy.

### **Discussion of Results of Research Question One**

What are teacher efficacy beliefs of alternative certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?

Teacher self efficacy is described as how one believes about their capability to exercise control over their own level of functioning in the classroom and over events that affect their lives as a teacher (Bandura, 1977; Tschannen-Moran & Woolfolk-Hoy, 2001). Self-efficacy produces beliefs on how one feels, thinks, motivates themselves and behaves (Bandura, 1993; Flores, Desjean-Perrota & Steinmaz, 2004). Teacher efficacy is the belief system that teachers have about their skills and ability to create a desirable outcome for students (Ashton & Webb, 1986; Gibson & Dembo, 1984; Tucker, et al., 2005).

The differences between ACP teachers and traditionally certified teachers concerning teacher efficacy were tested by having the participants in the study quantify their degree of efficacy on the Teacher Self Efficacy Scale (Tschannen-Moran & Hoy, 2001). Participants scored themselves as relatively confident in teaching self efficacy. Scores of the participants on the TSES show a mean of 7.12 on a scale of one to nine with one being nothing and nine being a great deal. The score of seven denotes a rating of “quite a bit.” In this respect the participants felt overall they could do quite a bit for their students. Standard deviation results show a spread in the deviation of from minimum 1.015 to 1.676 maximum. The data indicate a narrow spread in standard deviation which signifies that the variability of the instrument is low and indicates a normal probability of distribution which allowed further testing of the data.

The finding indicates that teachers rate themselves as fairly efficacious is in line with studies of effective teaching. A synthesis of research study found that efficacious teachers are high achievers, take responsibility for student outcomes and have qualities of critical thinkers with organizational loyalty (Walsh & Tracy, 2004). The quantitative data indicate that not all teachers have high efficacy across each construct. The qualitative narratives of highly effective teachers in this study replicated the findings that effective teachers value each student and that they include the fund of knowledge along with students’ culture and life experiences are important in the curriculum (Allinder, 1994; Franquiz & Salazar, 2004; Pajares, 1992). Furthermore, these same narrative voices shed an interpretive light on why three probes in the quantitative surveys resulted in a relatively wide standard deviation and lower mean scores.

The examination of the three components of the TSES indicates a slight difference in the area of student engagement. The component student engagement involved a total of nine queries on the TSES survey. Three of the queries were indicative of above the mean standard deviation and lower than the mean scores in the component student engagement. The three queries touched upon student motivation (E4), assisting families in helping children to do well (E22), and how to help the most difficult students (E1). The three queries were examined in respect to the qualitative portion of the study. Student motivation, as explained by the middle school math teacher, was a combination of high expectations from the teacher, the student's expectations and the knowledge to fulfill the expectations. According to a middle school math teacher:

The kids would look forward to having those scores come up because they felt like they were the Gifted and Talented, not Ms. what's her name's class. And you know, funny enough, they always scored right there with them in the three T's because the expectations were there. They believed they could actually do it and they were [doing it]. The one that would score low, they were like ah come on, you know, pick it up. It was a motivator for them. We would look at them and they would get all 'we're smarter than they are' but the expectations were high.

Assisting families with helping their children do well in school in the quantitative portion of the study indicated some weakness. The narrative voices explained what one teacher saw as a common problem. One participant in the narratives said: "I went to the houses and saw how these kids live. I know there are some teachers they don't have a clue where these kids live, where they are coming from so I guess they can't relate to



that.” This critique of fellow educators supports one of the principles of multicultural education that states that all students are valued and should be allowed to rise to their potential (Bennet, 2001). Family concepts are important and were stated by one participant:

That is part of what my philosophy is ultimately “I am not only concerned for their education, I am also concerned for what or when they are going to be productive citizens.” In other words that is also important and in the classroom following rules, listening to authority, following [instructions], that is important because teaching these students, future citizens, there is law, there are rules if you go to a job you have to follow rules. If they are growing up in a classroom where they do whatever they want, that is being imbedded in them, and they are getting away with it. That is what parents don’t understand. Later on what are you going to do? You broke the law.

The narrative voices support the quantitative finding that teachers report that some find it difficult to help families to assist their children to do well in school.

The other area identified was how to help the most difficult students. Student attainment, according to Goddard and Goddard (2001), has been identified as an area of concern in high priority schools. The data in the present study may indicate that teachers feel inadequate to teach the most difficult students. The narrative voices amplified this as noted in the statement made by one teacher. “I am not afraid of the kids. It is just me and my opinion, but I think some of the teachers are. I think people make things worse by overreacting.” A middle school teacher said:

“... I later told the administration I was going to take my whole class to the prom. And they got there and the administration freaked out because my whole class started dancing right away.... And the administration was freaking out and like, OK, we rarely see your kids in such a good mood. I said no, this is where the social development comes in, and I said, that is my key target before my academics because, I said, if I can't get them to be in a good mood, I can't teach them.”

Teachers with high levels of efficacy take the most difficult students and teach them, even though as evidenced by this narrative, even some administrations are afraid of their students.

Teacher efficacy is the teacher's belief that he or she can produce an effective outcome with their students (Bandura, 1977). Effective outcomes with students are realized through critical thinking, influencing and motivating students and effective teaching (Allinder, 1994; Walsh & Tracy, 2004). The middle school math teacher personified as an efficacious teacher. Student outcomes are the results of the teachers' work. The words of this middle school math teacher may give a glimpse of the wider standard deviation concerning motivation when he stated “So that bothers a teacher. Some it bothers, [other] teachers, nah, I don't care.”

Upon critical examination, no statistical or ideological conclusion was drawn from the weaker results on these three queries. One observation is that the teachers in this study had a wider range of feelings on student engagement than on the other components of the TSES as supported by the variation in teacher efficacy in the wider standard deviation and confirmed by the voices of the teachers.

The test of the probability of a significant difference in teacher efficacy between routes to certification was performed through a regression analysis. Results from the analysis of variance regression show when  $p < .05$ , there is no significant difference in participants sense of efficacy between teachers who are credentialed through alternative or traditional routes. Therefore, the findings for research question one is that there was no significant difference between ACP teachers and traditionally certified teachers in respect to teacher self efficacy.

### **Discussion of Results of Research Question Two**

What are culturally responsive beliefs of alternative certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanics?

Culturally responsive teacher efficacy is a teacher's belief in their confidence to execute specific teaching practices and tasks that include utilizing cultural knowledge, prior experiences, cultural frames of reference, and diverse performance styles of CLD students in order to create a higher positive impact on the learning experience of their students (Gay, 2000; Siwatu, 2005). The differences between ACP teachers and traditionally certified teachers concerning culturally responsive teacher efficacy was tested by having the participants in the study quantify their degree of culturally responsive teacher efficacy.

The instrument selected to measure the culturally responsive teacher efficacy was amended. The original instrument had 40 items to measure culturally responsive teacher efficacy. The creator of the instrument indicated only one dimension was found and

tested. The one dimension accounted for only 47% of the variance. According to Henson, (2001) a variance accountability of less than 53% indicates a “poor factorial validity” (p. 23). The author of the instrument in his original study found seven factor dimensions that accounted for 67% of the variance although “none of the multiple-factor solutions were interpretable, therefore, a one-factor solution was used in this study” (Siwatu, p. 69). The creator of the CRTSES could not identify or did not make clear in the research the individual groups of factors that consistently loaded on each of the seven dimensions. Therefore, to increase the validity of the questionnaire, the present study amended the CRTSES by reducing the number of individual queries from 40 to 22 through exploratory factorial analysis and identified five theoretical, culturally responsive component dimensions, which consistently factorially loaded at the .5 level or higher. The amended instrument resulted in a questionnaire that contained an increased validity over the original instrument. The original questionnaire was weak in validity due to the inability of the individual factors to be grouped into component dimensions that “correctly represents the concept of the study” (Hair, et al, 2006, p.104).

The participants scored themselves on the CRTSES, amended, on a scale from 1 representing nothing to 9 representing a great deal. The data revealed a mean of 7.39 for ACP route to certification and 7.29 for traditional route to certification with a combined mean of 7.34. This data indicate a teaching force that is confident in their culturally responsive teaching efficacy. Teachers who are high in culturally responsive teaching characteristics respect the culture and experiences of their students and utilize the students’ funds of knowledge to build student success (Gay, 2000; Moll, et al.,

1992). The standard deviation of .92 indicates a normal probability curve and a low variability. The data indicate that the validity of the amended instrument is extremely good and the respondents have a relatively high degree of culturally responsive teaching efficacy.

The difference between routes to certification and the amended CRTSES was tested through a regression analysis in which the independent variables, routes to certification, were regressed against dependent variable, culturally responsive teaching self efficacy. Results from the analysis of variance regression show that when  $p < .05$  there is so significant difference between route to certification concerning culturally responsive teacher efficacy. Therefore, the finding for research question two is that there was no significant difference between alternatively certified teachers and traditionally certified teachers in respect to culturally responsive teacher self efficacy.

### **Discussion of Results of Research Question Three**

What are the voices of highly effective alternative certified teachers and traditionally certified Hispanic teachers who work in high priority schools serving Hispanic students?

The qualitative portion of the study involved four highly qualified teachers who participated in individual open ended interviews. The interview questions revolved around effective teaching practices. Each interview was at the convenience of the participant and lasted from 23 minutes to 37 minutes. The interviews were recorded and later transcribed into narrative documents. The teachers interviewed were middle and

high school teachers at three of the four participating schools. The teachers were purposively selected based on qualities of effective teachers with the recommendations from school administrators and master teachers at the participating campuses. All interview participants had previously responded to the quantitative survey instrument and turned in a completed survey. The interview protocol (see Appendix E) was based on the teacher as a person and included five areas. The five areas were (a) personality traits of the effective teacher, (b) the function of respect and fairness in teaching, (c) teacher interaction with students, (d) the teachers' attitude toward students, and, (e) the role of reflective practice in effective teaching (Tucker & Stronge, 2005).

Six themes emerged from the voices of the teachers and showcased the principles of high self efficacy and culturally responsive teaching. The themes loosely followed Gay's (2000) six areas of culturally responsive teaching including validation, comprehensive, multidimensional, transformative, emancipatory and respects the funds of knowledge. Efficacy and culturally responsive teaching coalesced and emerged into distinct themes in the narratives. Themes that emerged in the narratives included teacher expectations, school/parent relationships, previous work experience, funds of knowledge, teacher /student connections and self reflection.

The themes that surfaced in the narratives also correspond to highly effective teacher characteristics. The literature on effective teaching is replete with numerous characteristics (Good & Brophy, 2000). The literature review for this study identified 26 individual characteristics of highly effective teachers. These teachers collectively exhibit: (a) demonstrate characteristics of high expectations (Rosenthal & Jacobsen, 1968); (b) utilize classroom management and teaching to mastery (Edmonds, 1979); (c)

value experiences, higher order thinking skills, meaningful activities and are trustworthy (Haberman, 1991); (d) are professional, have intellectual rigor, a capacity to love and show competence (Friere, 1998); (e) demonstrate ability to modify the instructional setting, teach to student strengths and learning styles and are accountable (Banks, 2001; Gay, 2000; Larke, 1992; Tucker & Stronge, 2005); (f) provide special help, give individual attention and have patient teacher assistance qualities (Johnson, 2000); (g) show capability to manage and implement a course of action (Parker, Hannah & Topping, 2006); and (h) are well versed in respective teaching area, are high achievers, critical thinkers, organized, respectful and share the organizations goals (Walsh & Tracy, 2004; Wenglinsky, 2000).

The themes that emerged in the narratives were examined and examples of the quantitative queries were cross referenced to the themes. Triangulation of individual queries from the survey instruments were examined in each of the six themes that emerged in the narratives.

An example of the type of triangulation ascertained involved the narrative of an enthusiastic middle school teacher of students identified with emotional disturbance. This teacher was alternatively certified with five years of experience.

I was like... you have to understand that these kids come with a totally different social acceptability than what we come from – I try and get to know my kids, I said, inside out. I spend the first six weeks getting to know them. That comes from them, how many siblings they have, are they from different fathers, and are they from different mothers. I said I get to know all of that about them because to me that is where I build my foundation to understand that student.

This teacher exemplified that characteristic of culturally responsive teaching that involves active participation by the teacher in the students' life both at school and at home. A number of individual queries on the CRTSE and on the TSES dealt with knowing and understanding the cultural and social capital students have acquired experientially in their home culture and environment from daily living. Gonzalez, Moll and Amanti, (2005) call this social and cultural experiential knowledge the students' funds of knowledge. An example from the narrative is when a middle school teacher related "the way I see it is this, you know these kids, I see these kids, and they all come with this, how can I say it, this something that is imbedded in them for so many years. This is the way they are."

The teachers that participated in the interviews exhibited many of the characteristics of highly effective teachers. Teaching to mastery is a teaching methodology that proposes that all children can learn when provided with the appropriate learning conditions in the classroom and may include pacing of instruction, clear objectives, additional tutoring and quality provision of feedback (Good & Brophy, 2000). Mastery teaching was critical to several of the study participants. For example, the middle school math teacher said: "If I feel that my students need me to slow down and do this at a different pace, so be it. See, I'll do stuff like, I get an assignment back and a lot of the kids just didn't get it. You know what, okay, you know what let's do this a different way." It was evident from the narratives that the teacher exemplified characteristics of highly effective teaching which are inclusive of high expectations, classroom management, mastery learning, modifying instruction, patient teacher assistance, individual assistance, organization, taking responsibility, valuing critical



thinking in an attitude of respect and sharing the goals of the school (Banks, 2001; Johnson, 2000; Walsh & Tracy, 2004).

### **Conclusion**

The nation as a whole is changing demographically. The Hispanic student population is increasing at a rapid rate and comprises 20% of the current student population of the United States (Fry, 2009). The constituency of the schools shows a trend toward higher numbers of students of color and students with cultural and linguistic differences (Hussar & Bailey, 2006).

At the same time, the population of teachers, in general, and teachers of color in particular, show disturbing trends of high rates of teachers leaving the schools where there are high numbers of students of color (Johnson, et al., 2005). The study supported the research and found that there is a higher attrition rate of teachers of color for the schools in the study. The percent of teachers participating in the study with five years or less of experience at the participating schools was 60.0% compared with the total district teacher population at 42.2% and the State of Texas at 37.7%. Conversely, high teacher efficacy and high culturally responsive teacher efficacy allows teachers to stay in the profession (Banks, 2001; Gay, 2000; Soodak & Podell, 1994; VanDeWeghe, 2005). One assumption for teachers in this study is that they may have transferred to other schools in the district that are not classified as high priority. Research does indicate that high priority schools have teachers with less experience (Darling-Hammond, 2006; Fisk, Prowda & Beaudin, 2001; Fuller & Alexander, 2002; Guarino, et al, 2006). School

attrition rates for the participant schools are problematic even though the participants rated themselves as being fairly high in efficacy.

To increase the number of teachers and to respond to the number leaving the profession, the national trend is to increase the number of alternative programs to certify teachers quickly rather than allowing more time for a traditional teaching degree certification (Darling-Hammond, 2006). Controversy has surrounded the philosophical idea of alternative certification (Darling-Hammond, Chung & Frelow, 2002).

Alternative certification programs have been criticized for allowing individuals to become teachers solely on the basis of having a degree from an accredited university (Justice, Griener & Anderson, 2003). Criticism includes a lack of training in educational methodology that is not combined with any pedagogical knowledge (Johnson, et al., 2005). Current research indicates these criticisms may have no basis (Constantine, Player, Silva, Hallgren, Grider, & Deke, 2009). The current research study found no significant differences between teachers certified traditionally and teachers certified alternatively when evaluated in the area of teacher efficacy and culturally responsive teacher efficacy.

Alternative certification programs have evolved into programs that better provide quality teachers due to stringent requirements of the No Child Left Behind Legislative Act (Feistritzer & Haar, 2008). Schools systems in the Denver, Colorado area have expressed the need that in order to address challenges of teaching in today's society, new teachers — regardless of their pathway into the classroom — need more pedagogical support and mentoring (Berry, 2009). Two teachers in the qualitative portion of this

study were certified alternatively. Both indicated in their narratives a need for support, and expressed that previous work experience was a great help in their present capacity.

The research is still inconclusive as to whether alternative programs that produce alternatively certified teachers are worse, the same or better than traditional programs (Feistritzer & Haar, 2008; Walsh & Tracy, 2004). Research indicates that high quality alternatively certified teacher programs provide several features that “may be important to a high quality alternative certification program, including: (a) high entrance standards; (b) extensive mentoring and supervision; (c) extensive pedagogical training in instruction, management, curriculum, and working with diverse students; (d) frequent and substantial evaluation; (e) practice in lesson planning and teaching prior to taking on full responsibility as a teacher; and (f) high exit standards” (Feistritzer & Haar, 2008, p. 14). The qualitative portion of this study confirmed several of these recommendations in the voices of the teachers. Extensive mentoring was important to one of the participants:

That is one thing that I remember when I took the A-Step courses with Ms Hays, that was one thing that I remembered... her and my mentor that came in from Monterrey. She was a special education teacher for like 12 years or so in Monterrey and several schools over there in Mexico. And that was like something that I remembered because she kept telling it to me [when] she went to observe me. And the second time she was like OK you know you are getting better at it. You are getting better at it; you are getting better at learning them. The last time that she went, she was like you have learned.

This study found that Hispanic teachers teaching in high priority schools with high numbers of students receiving free or reduced meals rate themselves as relatively

efficacious. Teachers of color tend to stay in teaching longer than White teachers (Guarino, et al, 2006). The results of this research project found that the route to certification did not affect the teacher efficacy or the culturally responsive efficacy of the surveyed teachers. In addition, through in-depth personal interviews with a selection of Hispanic teachers (N=4), who participated in the surveys, selected respondents narrated stories of being highly effective and culturally responsive and effectively triangulated the quantitative data results.

Naturalistic inquiry of which narrative stories is one part is the individuals' world view in the broadest sense of meaning (Lieblich, Tuval-Mashiach & Zilber, 1998). The emergent design of narrative inquiry allows the information to emerge and unfold without the constructs of preconceived ideas (Lincoln & Guba, 1985). In the specific narrative process of this study the qualitative voices allowed and disclosed different world views.

One middle school teacher of students with emotional disturbance emphasized over all other qualities, the necessity of understanding and forming a bond with the students. Certainly this characteristic may have been paramount in her ability to effectively teach her students. It is her strength in her teaching ability. Relationships that students have with teachers are critical for educational resilience (Henderson & Milstein, 2003).

Another high school teacher had the strength of being an anchor point for her students. She understood her students and treated them as individuals and allowed them to utilize their individual talents without her interference. The concepts of prior

knowledge, cooperative learning, and instructional conversations were inherent in this teacher's repertoire of teaching practices (Amanti, 2005; Gay, 2000; Jordan, 1985).

The middle school math teacher voiced a continual theme of responding to the students' styles of learning. This effective math teacher did not think it untoward if he completely went off the district wide scope and sequence to allow his students to learn to mastery. Teaching to mastery has been voiced by many in the educational research field as a foundation for knowledge (Ausubel, 1977; Banks, 2001; Gay, 2000; Ladson-Billings, 1994). Teaching to mastery is an integral part of culturally responsive teaching and is one of many strategies this particular teacher has used to allow his students to be successful year after year.

The voices in this study were a confirmation of the findings of the qualitative portion of the study. The different characteristics of highly efficacious, culturally responsive teachers were allowed to emerge in the narrative in a natural way as their stories progressed. In regards to funds of knowledge, one middle school teacher narrated "I looked at stuff that he was interested in... I just look for a lot of real life situations with him." The quality of high expectations was represented by a high school teacher when she stated "they know what to expect from me and they know what I want. And what I expect from them." A middle school teacher of students with autism explained his philosophy of building parent support by emphasizing "what I try to do [is] to build a good rapport between teacher and parent and once you have that rapport you can implement what you know and let the parents know what your plans are, your goals are." In this manner, the quantitative information was confirmed in the qualitative narratives.

### **Recommendations for Practice**

Results of this study indicate that Hispanic teachers rate themselves as efficacious and culturally responsive. The combination of funds of knowledge of the Hispanic teachers and the funds of knowledge of the Hispanic students allows for a foundation to teach in a culturally responsive and effective manner. Culturally responsive teaching permits individuals to excel each in their own way, utilizing the individuals' funds of knowledge. The connection Hispanic teachers have with their students is extremely positive in nature (Goddard & Skrla, 2006). The results of the present study help confirm this positive relationship.

Federal, state and local education agencies need to maximize this unique relationship by promoting the advantages of Hispanic teachers and professionals in the education systems of the U.S. The nation and state are becoming more diverse with large numbers of Hispanic peoples spreading throughout the population (Weisman, Flores & Valenciana, 2007). The advantages of Hispanic teachers teaching in the local education agencies are evident (Goddard & Skrla (2006). Evidence of research also indicates Hispanic principals are more likely than their colleagues to promote diversity awareness (Landeck, 2006). The present study concludes that Hispanic teacher participants are efficacious and culturally responsive. Having Hispanic professionals in school systems would be advantageous to school organizations.

Modification of hiring practices by local education agencies to take advantage of Hispanic teachers certified traditionally and alternatively should be practiced. As the results of this study indicate, there are no significant differences in route to certification; thus, Hispanic preservice teachers may be recruited to participate in alternative

credentialing programs. Educational institutions must be encouraged to admit Hispanic students into their teacher education programs. Program modifications may be needed to ensure prospective applicants that they can become certified teachers (Angrist & Guryan, 2004).

Staff development must be considered for in-service teachers. Results of the quantitative analysis indicate a weakness in student engagement. Specific areas of staff development based on findings of this study include how to motivate difficult students, how to help families support their children in school and how to help the most difficult students make progress in school. Collaboration among peers and administrators to address this weakness should be addressed. Motivation and how to motivate hard to teach students, classroom management and concrete methods of supporting families with hard to teach children are also potential topics for staff development.

### **Recommendations for Further Research**

The study was completed in a borderland school district with predominantly Hispanic teachers and students. The study needs to be duplicated in another geographic location with high numbers of Hispanic students and teachers and compared to a replicated study with non-Hispanic teachers and students. The central theme for the study is route to certification and any significant differences in efficacy or culturally responsive teaching of the participants.

Further testing on the amended CRTSE needs to be initiated. The reliability and validity of the instrument must be tested in other populations. Comparisons of non-Hispanic groups to other ethnic groups would help create a more effective culturally

responsive testing instrument. A follow up study needs to be considered with a comparison of the same teacher population but adding more non-Hispanic teachers to validate the data found in the original study.

The data of this study and the small amount of research available are very intriguing when viewing the efficacy of Hispanic teachers. Efficacy defined as the intention that one can make a difference may be higher for Hispanic teachers and administrators. This idea needs to be further investigated and defined.

Research on efficacy and teacher retention is warranted from the findings of this study. Teachers of color leave the profession at slightly higher rates than non teachers of color (Johnson, Berg & Donaldson, 2005). The demographic findings of the participants indicate school tenure drops significantly at three years and only 22% of the teachers have tenure longer than five years (Table 4.7). Further study on retention of Hispanic teachers is warranted.



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## APPENDIX A

**Teachers' Sense of Efficacy Scale (long form)**

Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.

**How much Can You Do?**  
**1= Nothing 3= Very Little**  
**5=Some influence**  
**7= Quite a Bit 9= A Great Deal**

**Circle One Answer for  
Each Question**

- |  |                     |
|--|---------------------|
| 1. How much can you do to get through to the most difficult students?              | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 2. How much can you do to help your students think critically?                     | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 3. How much can you do to control disruptive behavior in the classroom?            | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 4. How much can you do to motivate students who show low interest in school work?  | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 5. To what extent can you make your expectations clear about student behavior?     | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 6. How much can you do to get students to believe they can do well in school work? | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 7. How well can you respond to difficult questions from your students?             | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 8. How well can you establish routines to keep activities running smoothly?        | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 9. How much can you do to help your students' value learning?                      | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 10. How much can you gauge student comprehension of what you have taught?          | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 11. To what extent can you craft good questions for your students?                 | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 12. How much can you do to foster student creativity?                              | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 13. How much can you do to get children to follow classroom rules?                 | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 14. How much can you do to improve the understanding of a student who is failing?  | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |
| 15. How much can you do to calm a student who is disruptive or noisy?              | (1) (2) (3) (4) (5) |
|  | (6) (7) (8) (9)     |

16. How well can you establish a classroom management system with each group of students? (1) (2) (3) (4) (5)  
(6) (7) (8) (9)
17. How much can you do to adjust your lessons to the proper level for individual students? (1) (2) (3) (4) (5)  
(6) (7) (8) (9)
18. How much can you use a variety of assessment strategies? (1) (2) (3) (4) (5)  
(6) (7) (8) (9)
19. How well can you keep a few problem students from ruining an entire lesson? (1) (2) (3) (4) (5)  
(6) (7) (8) (9)
20. To what extent can you provide an alternative explanation or example when students are confused? (1) (2) (3) (4) (5)  
(6) (7) (8) (9)
21. How well can you respond to defiant students? (1) (2) (3) (4) (5)  
(6) (7) (8) (9)
22. How much can you assist families in helping their children do well in school? (1) (2) (3) (4) (5)  
(6) (7) (8) (9)
23. How well can you implement alternative strategies in your classroom? (1) (2) (3) (4) (5)  
(6) (7) (8) (9)
24. How well can you provide appropriate challenges for very capable students? (1) (2) (3) (4) (5)  
(6) (7) (8) (9)

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## APPENDIX B

**The Culturally Responsive Teaching Self-Efficacy Scale**

A number of statements about organizations, people, and teaching are presented below. The purpose is to gather information regarding the actual attitudes of educators concerning these statements. There are no correct or incorrect answers. We are interested only in your frank opinions. Your responses will remain confidential.

**INSTRUCTIONS:** Please indicate your personal opinion about each statement by circling the appropriate response at the right of each statement.

**1=nothing 3=very little 5=some influence 7=quite a bit 9=A great deal**

- |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| 1. I am able to adapt instruction to meet the needs of my students.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2. I am able to obtain information about my students' academic strengths.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 3. I am able to determine whether my students like to work alone or in a group.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 4. I am able to determine whether my students feel comfortable competing with other students.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 5. I am able to identify ways that the school culture (e.g., values, norms, and practices) is different from my students' home culture. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 6. I am able to implement strategies to minimize the effects of the mismatch between my students' home culture and the school culture   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 7. I am able to assess student learning using various types of assessments.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 8. I am able to obtain information about my students' home life.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 9. I am able to build a sense of trust in my students.  | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 |   |
| 10. I am able to establish positive home-school relations.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 11. I am able to use a variety of teaching methods.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 12. I am able to develop a community of learners when my class consists of students from diverse backgrounds and social classes.        | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 13. I am able to use my students' cultural background to help make learning meaningful.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 14. I am able to use my students' prior knowledge to help them make sense of new information.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 15. I am able to identify how students communicate at home that may differ from the school norms.                                       | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 16. I am able to obtain information about my students' cultural background.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 17. I am able to teach students about their cultures' contributions to science.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 18. I am able to greet English Language Learners with a phrase in their native tongue.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 19. I am able to design a classroom environment using displays  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

- that reflects a variety of cultures.
20. I am able to develop a personal relationship with my students. 1 2 3 4 5 6 7 8 9
  21. I am able to obtain information about my students' academic weaknesses. 1 2 3 4 5 6 7 8 9
  22. I am able to praise English Language Learners for their accomplishments using a phrase in their native language. 1 2 3 4 5 6 7 8 9
  23. I am able to identify ways that standardized tests may be biased towards linguistically diverse students. 1 2 3 4 5 6 7 8 9
  24. I am able to communicate with parents regarding their child's educational program. 1 2 3 4 5 6 7 8 9
  25. I am able to structure parent-teacher conferences so that the meeting is not intimidating for parents. 1 2 3 4 5 6 7 8 9
  26. I am able to help students to develop positive relationships with their classmates. 1 2 3 4 5 6 7 8 9
  27. I am able to revise instructional material to include a better representation of cultural groups. 1 2 3 4 5 6 7 8 9
  28. I am able to critically examine the curriculum to determine whether it reinforces negative cultural stereotypes. 1 2 3 4 5 6 7 8 9
  29. I am able to design a lesson that shows other cultural groups have made use of mathematics. 1 2 3 4 5 6 7 8 9
  30. I am able to model classroom tasks to enhance English Language Learner's understanding of classroom tasks. 1 2 3 4 5 6 7 8 9
  31. I am able to communicate with the parents of English Language Learner's regarding their child's achievement. 1 2 3 4 5 6 7 8 9
  32. I am able to help students feel like important members of the classroom. 1 2 3 4 5 6 7 8 9
  33. I am able to identify ways that standardized tests may be biased towards culturally diverse students. 1 2 3 4 5 6 7 8 9
  34. I am able to use a learning preference inventory to gather data about how my students like to learn. 1 2 3 4 5 6 7 8 9
  35. I am able to use examples that are familiar to students from diverse cultural backgrounds. 1 2 3 4 5 6 7 8 9
  36. I am able to explain new concepts using examples that are taken from my students' everyday lives. 1 2 3 4 5 6 7 8 9
  37. I am able to obtain information regarding my students' academic interests. 1 2 3 4 5 6 7 8 9

38. I am able to use the interests of my students to make learning meaningful for them. 1 2 3 4 5 6 7 8 9
39. I am able to implement cooperative learning activities for those students who like to work in groups. 1 2 3 4 5 6 7 8 9
40. I am able to design instruction that matches my students' development needs. 1 2 3 4 5 6 7 8 9

From "Preservice teachers' culturally responsive teaching self-efficacy and outcome expectancy beliefs," by K. O. Siwatu, 2005, *Teaching and Teacher Education*, 23, p. 1086–1101. Copyright 2006 by Elsevier Ltd. Adapted with permission.



## APPENDIX C

**Demographic Information**

We are greatly interested in your beliefs and would like you to answer a few demographic questions. Please take a few minutes to answer the following questions and mark the scaled statements that follow. The information contained in this document is confidential. The information will be kept confidential and individuals cannot be identified except by the primary researcher for statistical or qualitative purposes. This questionnaire is voluntary.

**Please complete this instrument and return it in the envelope to the box provided.**

1. Please circle your teaching assignment: 1)Special education 2) Reading  
3)Language Arts 4)Mathematics 5)Fine arts 6)Coach 7)Science 8)History  
9)Elective\_\_\_\_\_
2. Circle the years of experience completed in teaching: 1 2 3 4 5 6 7 8 9  
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 25+
3. Circle your route to certification:  
**Alternative Certification Program (ACP)**  
**Traditional four year university**  
**Deficiency Plan**
4. If your route to certification was **ACP**, which institution: TAMIU; LCC;  
REGION ONE; Houston ISD; Dallas ISD; TAMUK  
Other\_\_\_\_\_
5. If your route to certification was Traditional or Deficiency plan what  
University?\_\_\_\_\_
6. Gender; **Male** **Female** Age:\_\_\_\_\_
7. How many years have you been at this school: 1 2 3 4 5 6 7 8 9 10  
11 12 13 14 15
8. Are you certified in: **ESL** or **Bilingual** or **Both**
9. Please circle your ethnicity:
 

1. White Not Hispanic	4. Native American
2. African American	5. Asian / Pacific Islander
3. Hispanic	
10. Educational Attainment, circle one: 1) Bachelor 2) Masters  
3) Masters plus minimum 30 hrs 4) Doctorate

## APPENDIX D

## IRB

**TEXAS A&M UNIVERSITY**  
**VICE PRESIDENT FOR RESEARCH - OFFICE OF RESEARCH COMPLIANCE**

1186 TAMU  
 College Station, TX 77843-1186  
 1500 Research Parkway, Suite B-150

979.458.1467  
 FAX 979.862.3176  
<http://researchcompliance.tamu.edu>

Institutional Biosafety Committee   Institutional Animal Care and Use Committee   Institutional Review Board

**DATE:** 13-Dec-2007

**MEMORANDUM**

**TO:** COSTON, WOOD SIGHTS  
 77843-3578

**FROM:** Office of Research Compliance  
 Institutional Review Board

**SUBJECT:** Initial Review

**Protocol Number:** 2007-0639

**Title:** An Examination of Culturally Responsive Self-Efficacy Beliefs and Teacher Self-Efficacy Beliefs of Alternatively and Traditionally Certified Hispanic Teachers Working with Hispanic Students

**Review Category:** Expedited

**Approval Period:** 13-Dec-2007 To 12-Dec-2008

**Approval determination was based on the following Code of Federal Regulations:**

45 CFR 46.110(b)(1) - Some or all of the research appearing on the list and found by the reviewer(s) to involve no more than minimal risk.

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(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation or quality assurance methodologies.

(Note: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b) (3). This listing refers only to research that is not exempt.)

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**Provisions:**

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This research project has been approved for one (1) year. As principal investigator, you assume the following responsibilities

1. **Continuing Review:** The protocol must be renewed each year in order to continue with the research project. A Continuing Review along with required documents must be submitted 30 days before the end of the approval period. Failure to do so may result in processing delays and/or non-renewal.
2. **Completion Report:** Upon completion of the research project (including data analysis and final written papers), a Completion Report must be submitted to the IRB Office.
3. **Adverse Events:** Adverse events must be reported to the IRB Office immediately.
4. **Amendments:** Changes to the protocol must be requested by submitting an Amendment to the IRB Office for review. The Amendment must be approved by the IRB before being implemented.
5. **Informed Consent:** Information must be presented to enable persons to voluntarily decide whether or not to participate in the research project.

This electronic document provides notification of the review results by the Institutional Review Board.

## APPENDIX E

## INTERVIEW PROTOCOL

1. In what manner do you indicate to your students that you are a caring individual?
2. When examining cultural differences in your students, point out how you demonstrate cultural respect, understanding and racial or cultural lack of prejudice? Why is it important to be familiar with parents of your students?
3. Interaction with students is important. Give some examples of how you are accessible. How do you demonstrate interest in your students outside of the classroom? Do you have fun with your students? Give some examples that may help other teachers.
4. Explain the term 'high expectation' in reference to your students. Could you elaborate on your ideas of student responsibility?
5. Elaborate if you could on the role of reflective practice. Reflective practice is the time involved in thinking about how you are going to teach the diverse group of individuals we call our students. Could you reveal how you spend extra time to set up a positive learning experience for your students?
6. Classroom management is one of the most important aspects in student learning. Give some examples of how you set up your classroom for learning in respect to managing the classroom in regard to: Routines? Procedures for daily activities? Transitions? Monitoring the classroom?
7. If a problem with student interpersonal issues is apparent, what techniques and skills do you employ to solve or defuse the situation?
8. Express your thoughts on routes to certification. Do you feel any one route may be superior or more advantageous to another?
9. Do you feel you are a highly qualified, effective teacher? Why?

From *Linking Teacher Evaluation and Student Learning* by Pamela D. Tucker and James H. Stronge (2005) Alexandria, VA, ASCD. Copyright 2005 by ASCD. Adapted with permission.

## APPENDIX F

**The Culturally Responsive Teaching Self-Efficacy Scale  
(Amended)**

A number of statements about organizations, people, and teaching are presented below. The purpose is to gather information regarding the actual attitudes of educators concerning these statements. There are no correct or incorrect answers. We are interested only in your frank opinions. Your responses will remain confidential.

**INSTRUCTIONS:** Please indicate your personal opinion about each statement by circling the appropriate response at the right of each statement.

**1=nothing 3=very little 5=some influence 7=quite a bit 9=A great deal**

- |  |                   |
|--|-------------------|
| 2. I am able to obtain information about my students' academic strengths.  | 1 2 3 4 5 6 7 8 9 |
| 3. I am able to determine whether my students like to work alone or in a group.                                      | 1 2 3 4 5 6 7 8 9 |
| 4. I am able to determine whether my students feel comfortable competing with other students.                        | 1 2 3 4 5 6 7 8 9 |
| 8. I am able to obtain information about my students' home life.   | 1 2 3 4 5 6 7 8 9 |
| 9. I am able to build a sense of trust in my students.   | 1 2 3 4 5 6 7 8 9 |
| 10. I am able to establish positive home-school relations.   | 1 2 3 4 5 6 7 8 9 |
| 13. I am able to use my students' cultural background to help make learning meaningful.                              | 1 2 3 4 5 6 7 8 9 |
| 16. I am able to obtain information about my students' cultural background.  | 1 2 3 4 5 6 7 8 9 |
| 19. I am able to design a classroom environment using displays that reflects a variety of cultures.                  | 1 2 3 4 5 6 7 8 9 |
| 21. I am able to obtain information about my students' academic weaknesses.  | 1 2 3 4 5 6 7 8 9 |
| 23. I am able to identify ways that standardized tests may be biased towards linguistically diverse students.        | 1 2 3 4 5 6 7 8 9 |
| 24. I am able to communicate with parents regarding their child's educational program.                               | 1 2 3 4 5 6 7 8 9 |
| 25. I am able to structure parent-teacher conferences so that the meeting is not intimidating for parents.           | 1 2 3 4 5 6 7 8 9 |
| 27. I am able to revise instructional material to include a better representation of cultural groups.                | 1 2 3 4 5 6 7 8 9 |
| 28. I am able to critically examine the curriculum to determine whether it reinforces negative cultural stereotypes. | 1 2 3 4 5 6 7 8 9 |
| 31. I am able to communicate with the parents of English Language Learner's regarding their child's achievement.     | 1 2 3 4 5 6 7 8 9 |
| 32. I am able to help students feel like important members of the classroom.   | 1 2 3 4 5 6 7 8 9 |
| 33. I am able to identify ways that standardized tests may be biased towards culturally diverse students.            | 1 2 3 4 5 6 7 8 9 |

35. I am able to use examples that are familiar to students from diverse cultural backgrounds. 1 2 3 4 5 6 7 8 9
38. I am able to use the interests of my students to make learning meaningful for them. 1 2 3 4 5 6 7 8 9
39. I am able to implement cooperative learning activities for those students who like to work in groups. 1 2 3 4 5 6 7 8 9
40. I am able to design instruction that matches my students' development needs. 1 2 3 4 5 6 7 8 9

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## VITA

Wood Sights Coston received his Certificate of Ranch Management from Texas Christian University in 1974. He completed his Bachelor of Science degree from Ambassador University, Big Sandy, Texas in 1975. He worked in agricultural management in East Texas, Southwest Texas and South Texas. He received his MBA in International Trade from Texas A&M International University in 1994. His career in education began when he received his teaching certificate through the alternative certification program at Texas A&M International University in 1995. He has certifications in Special Education EC-12; English as a Second Language; Severe Emotional Disturbance and Autism; and Principalship. He is currently a developmental behavior specialist for the public school system. His research interests include culturally responsive education, autism and program implementation of innovations.

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