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Analyses of Language and Culture Beliefs and Reported Practices of Pre-Kindergarten and Kindergarten Teachers Working with Dual Language Learners

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Analyses of Language and Culture Beliefs and Reported Practices of
Pre-Kindergarten and Kindergarten Teachers Working with Dual Language Learners

by

Giselle Sanchez

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
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ABSTRACT

This study explored the underlying factors involved in the Language and Culture Questionnaire (LCQ), a measure of lead pre-kindergarten and kindergarten teachers' ($n = 119$) beliefs and best practices for working with dual language learners (DLLs). The LCQ was found to have suboptimal reliability and all results herein should be interpreted with caution. The exploratory factor analyses suggested the LCQ weakly captures two factors, beliefs and practices. Frequencies of teachers holding the appropriate beliefs and implementing best practices were reviewed. The beliefs and practices scores exhibited a degree of relationship between each other. Finally, multiple regression designs were utilized to reveal what teachers demographic characteristics (e.g., years teaching DLLs, level of education) were related to greater scores on the LCQ.

Chapter 1:

Introduction

Statement of the Problem

Culture has been defined as “the values, norms, and traditions that affect how individuals of a particular group perceive, think, interact, behave, and make judgments about their world” (Chamberlain, 2005, p. 197). It is agreed that culture does not simply include race and ethnicity but also additional factors such as sexual identity, socioeconomic level, disabilities, age, and religion (Miranda, 2008). In today’s global society, interactions with individuals who are culturally different from the mainstream society in the United States (U.S.) are becoming the norm. As a result, it is now more of a requirement rather than a recommendation for educators to gain knowledge relating to equity and diversity in the fields of both education and psychology (Miranda, 2008). If students are always being taught in a language/cultural context in which they have limited knowledge, they are not obtaining equal access to the academic content as their monolingual peers (Ballantyne, Sanderman & Levy, 2008).

Teachers of English to Speakers of Other Languages (TESOL) specify in their standards that teachers need to know how culture and language are intertwined (TESOL Task Force on ESL Standards, 2008). Zepeda, Castro and Cronin (2011) explain that children develop language within their home culture and the values and beliefs of their cultural group are reflected in their language use. The authors further explain that this

involves how and when to use language, how children are seen as partners in language and how language helps to keep an ethnic identity.

The National Center for Educational Statistics (2009) reported that between 1979 and 2007, the number of school-aged children who spoke a language other than English at home rose from 9% to 20%. The problem exists in that teachers have reported uncertainty about intervening with dual language learners (DLLs) who are not responding to instruction and also feel limited in knowledge, time and resources when working with DLL students (Fletcher, Bos & Johnson, 1999). This problem is due in part because teacher-preparation course content related to working with DLLs had been found to have the least amount of coverage across all degree levels in early childhood teacher preparation programs nationwide (Ballantyne et al., 2008).

With the adoption of No Child Left Behind (NCLB), school districts across the nation have begun to be held accountable for the performance of groups of students who are not demonstrating academic success. The groups continuing to not meet expectations include ethnic minorities, DLLs, the economically disadvantaged, and students with disabilities. Although these gaps in achievement have been known for decades, NCLB has finally made the school districts accountable for the academic attainment of these students (Miranda, 2008). Along the same lines, the National Education Goals 2000 Report (1995) outlined the guidelines under which preschool programs throughout the nation would be held accountable in making sure that preschoolers obtained the readiness skills necessary to succeed in kindergarten.

A variety of variables such as ethnicity, social class, language fluency, education level, and skin color have been found to interact with and oftentimes surpass race and

gender as key factors that influence behavior and academic achievement (Quina & Bronstein, 2003). When compared to native English speakers, DLLs are especially at risk of being placed in special education programs because of their low levels of English language proficiency (Artiles, Rueda, Salazar, & Higareda, 2005). This phenomenon is commonly referred to as over-identification. There is also the opposite tendency of under-identification where learning problems tend to be overlooked within the DLL population because teachers often sense difficulties decoding words as resulting from a lack of language proficiency rather than a reading disability (Leseaux & Siegel, 2003). If there is not an increase in sensitivity to language proficiency issues and cultural background factors for DLLs, then these students will continue to be inappropriately placed in special education programs or not placed at all when necessary (Donovan & Cross, 2002; Vanderwood & Nam, 2008).

Researchers promote that teachers gain an understanding of the cultural diversity of their students and adopt culturally relevant practices (e.g., use of child's actual name, involve extended family) in order to promote academic success (Ladson-Billings, 2001). In response to meeting the goals outlined by National Educational Goals 2000 (1995), the progress of school children is being monitored since preschool by groups of researchers such as the National Institute of Child Health and Human Development Early Childcare Research Network (NICHD- ECCRN) in order to intervene as early as possible. DLL students who begin their schooling significantly below average can make considerable gains within a brief period of time if they are introduced to evidenced based practices

such as phonological awareness training, explicit instruction in the alphabetic principle and repeated readings of engaging English text with comprehension monitoring (Quiroga, Lemos-Britton, Mostafapour, Abbot, & Berniger, 2002).

Efforts have been made to analyze the beliefs teachers have regarding their students and how those beliefs affect their every day classroom practice. One example is Abbot-Shim, Lambert, and McCraty (2000) who evaluated the beliefs of Head Start teachers with the *Teacher Beliefs Scale*. This scale asks teachers to indicate the degree of importance they give to statements that relate to curriculum goals, teaching strategies, guidance of socio-emotional development, language development and literacy, cognitive, physical and aesthetic development, and motivation. These beliefs were found to be significantly related to the teachers' instructional practices measured by the *Instructional Activities Scale* that lists diverse classroom activities that teachers specify the frequency of utilization of such practices within their classroom. This research group also found beliefs and practices to be related to classroom quality measured with the *Assessment Profile for Early Childhood Programs: Research Version* (Abbott-Shim et al., 2000). These measures were not specific to DLLs and therefore a gap exists in research as it relates to teachers' beliefs regarding DLLs and how these beliefs influence the teacher's reported classroom practices (Paez & Tabors, 2000).

Taking into consideration the fast rate of growth of the DLL population, it should be expected that coverage in professional journals regarding DLL-related issues would equal that of the population, especially because of the dire academic standings of DLLs. Yet, a review of coverage in student service profession journals revealed that research is scarce in this area and the area of school psychology needs more research examining

cultural and linguistic issues (Albers, Hoffman, & Lundahl, 2009). Since school psychologists are expected to be able to put appropriate supports in place to help remedy difficulties that students are experiencing in their current academic setting, school psychologists need to be competent in the issues that arise when working with a DLL population (Edl, Jones, & Estell, 2008).

Theoretical Framework

The bioecological (Bronfenbrenner & Morris, 2006) model is best suited as the theoretical framework to guide this area of research. The bioecological model provides an interdisciplinary and integrative focus on age periods such as childhood and it is suitable for application to policies and programs that help improve the development of youth and families. Within Bronfenbrenner's (1979) model, the child is seen as an active participant in a system that is connected at all levels.

The bioecological model proposes that four constructs described as *Process*, *Person*, *Context*, and *Time* interact as contributors to development. *Process* involves the interactions between organism and environment, more specifically referred to as proximal processes that, over time, are said to be the means behind human development. These processes are influenced by the different characteristics of the developing *Person*, by their immediate and distant environmental *Contexts*, and the *Time* in which the proximal processes take place (Bronfenbrenner & Morris, 2006).

In this study, the proximal processes that are of interest include those practices reported by early childhood educators when interacting with a DLL child. The different characteristics of the developing *Person* can include the level of education of the teacher. An immediate *Context* can be whether or not this teacher utilizes the home language or

ESOL strategies when interacting with DLLs. A distant *Context* can be the language policies adopted by the district or state a teacher works for. *Time* can be how long a teacher keeps a child's home language and extra supports in place in the classroom. For example, teachers may feel that by the end of the year they may not need to include the home language in classroom activities or use ESL strategies such as repetition. All of these variables can be unique contributors to a DLL child's early academic success. All of these activities take place in the early learning environment. Therefore, a bioecological model is a good framework because of its use in exploring such interactions (Bronfenbrenner & Morris, 2006).

Gibbs and Huang (1998) explain that an "ecological perspective is especially relevant in analyzing the impacts of poverty, discrimination, immigration, and social isolation on the psychosocial development and adjustment of minority children and youth" (p. 6-7). Minority families oftentimes experience many more stressors than the average American family and such stressors can be quite detrimental to the child's educational attainments (Miranda, 2008). The ecological perspective allows for alterations in the environment, which lead to positive outcomes. As stated in Bronfenbrenner and Morris (2006), when the quality of the environment is improved, there is room for an increase in the developmental power of proximal processes.

Purpose of the Study

Data have been collected on a national level assessing the readiness of Head Start populations (i.e., Family and Child Experience Survey (FACES), The Head Start Impact Study), but not enough is known about the Latino DLL children who attend Head Start programs. Florida has the fourth largest enrollment of DLL children in the U.S. and there

are limited data about their school readiness (Lopez, 2007). Due to the high concentration of immigrant children attending schools in Florida, the Florida Department of Education (FLDOE) developed a Comprehensive English Language Learning Assessment (CELLA; FLDOE, 2006). In addition, Lopez (2007) partnered with five Head Start agencies in Florida to develop “a consortium to study the developmental process of language, early literacy, early numeracy, cognition, approaches to learning, and social-emotional development for 400 Spanish-speaking English language learners in both English and Spanish” (p. 4). Lopez’s (2007) project is titled, “Florida English Language Learners Attending Head Start (FELLA-HS): A Cultural and Academic Analysis” and its goal is to evaluate the school readiness of the ELL populations of southeast and central Florida.

One of the measures included in the FELLA-HS was the Language and Culture Questionnaire (LCQ); the goal of using this measure was to determine whether teacher beliefs and reported practices are helping to meet the needs of this DLL population. More specifically, evaluating whether these teachers hold the beliefs and claim to utilize the best practices that have been highlighted in research to be most conducive to meeting the needs of the DLL population. The LCQ consists of 30 questions, the first 14 related to teacher beliefs related to DLLs and the last 16 related to teacher reported use of best practices for DLLs. The present study utilized data gathered from the LCQ that were part of the more comprehensive FELLA-HS study. For optimal learning and development, young children need early childhood educators who can address their developmental, cultural, linguistic and educational needs. Yet, early childhood professionals are

confronted with the difficult task of responding to these needs through best practices (NAEYC, 1995).

Miranda (2008) emphasized that professional development in the area of diversity should occur on a frequent basis to stay up to date on new knowledge and effective practices. Therefore, one of the main goals of this study was to determine whether students' needs are being met by evaluating whether teachers who are currently in the field hold the appropriate beliefs and implement best practices while working with DLLs. Addressing linguistic and cultural diversity is complex because solutions are not often evident, there are no straightforward answers, and poor practices are abundant. Regardless, it is the early educators' responsibility to meet the diverse child's needs (NAEYC, 1995). Schools are being required to implement theoretically sound, research-based programs that can provide evidence of student learning and achievement (Freeman, 2004). This study will help to evaluate where a group of early childhood educators currently stand in meeting these challenges.

Analyses of FELLA-HS's population of teachers' beliefs and reported practices may be beneficial in providing a more comprehensive understanding of Florida's DLL population and may better inform best practices. Teacher's beliefs and reported practices regarding cultural issues may provide valuable information regarding the environmental factors linked to the development of the DLL child. The data gathered from this proposed study may be used to assist teacher preparation programs and educators in the field to develop continuing education goals based on any deficit beliefs and/or reported practices highlighted in this research.

Research Questions

1. How many underlying factors are there in the Language and Culture Questionnaire (LCQ)?
2. In what areas are pre-kindergarten and kindergarten teachers' beliefs and practices not in line with the best practices assessed in the LCQ?
3. Are teachers' language and cultural beliefs related to their reported classroom practices?
4. Are teachers' number of years working with DLL children, level of education, ESOL certification, and number of hours of training with DLLs or in diversity training related to teacher's beliefs and reported practices regarding language and culture?

Significance of the Study

There exists a gap in understanding the beliefs and practices regarding cultural issues that current teachers possess, especially as it relates to DLLs. Both teacher preparation programs and school psychology programs emphasize the need to have culturally competent professionals (Ramirez, Lepage, Kratochwill & Duffy, 1998; Prater, Wilder, & Dyches, 2008). Yet, perhaps one of the biggest downfalls in evaluating whether teacher preparation programs are successful in producing culturally competent educators is that systematic assessment seldom occurs (Alvarez-McHatton, Keller, Shircliff, & Zalaquett, 2009). No standardized methods of evaluation currently exist to determine the extent to which programs are incorporating the diversity objective (Cochran-Smith, 2003).

In order for school psychologists to be culturally competent, there is a need to be aware of the best practices that maximize the educational potential of DLLs (Edl et al., 2008). Gaining teachers' perspectives regarding DLLs allows researchers to evaluate whether they hold any negative views towards them (Lane, Pierson, & Givner, 2004) and

helps to further clarify the areas of academic and interpersonal functioning that need to be targeted with this population (Edl et al., 2008).

Definition of Terms

Best Practices. “A rigorous, systematic and objective procedure to obtain valid knowledge, which includes research that is evaluated using experimental or quasi-experimental designs, preferably with random assignment” (Slavin, 2002, p. 15).

Synonyms sometimes used include: evidenced-based practice and scientifically based research.

Culture. Culture has been termed to represent “the values, norms, and traditions that affect how individuals of a particular group perceive, think, interact, behave, and make judgments about their world” (Chamberlain, 2005, p. 197). It is agreed upon that culture does not simply include race and ethnicity but also additional factors such as sexual identity, socioeconomic level, disabilities, age, and religion (Miranda, 2008).

Cultural Competence. Cultural competence is “the ability to think, feel, and act in ways that acknowledge, respect, and build upon ethnic, sociocultural, and linguistic diversity” (Lynch & Hanson, 2004, p. 50). Cultural competence is not a distinct skill or set of facts that one acquires about particular groups of people. Rather, cultural competence includes the integration of extensive knowledge bases and specific competencies when working with diverse children and families (Ortiz, Flanagan, & Dynda, 2008).

Cultural Diversity. “Cultural diversity refers to any individual or group whose background and experiences differ significantly from that reflected by the U.S. mainstream” (Miranda, 2008, p. 1725). It also refers to how this unique background and

experiences have influenced an individual's physical, emotional, cognitive and social development (Miranda, 2008).

Dual Language Learner (DLL). A dual language learner (DLL) is a linguistically and culturally diverse student because his/her first language is not English, is starting to learn English or has obtained oral English proficiency but not yet mastered higher order English language skills (Gersten & Baker, 2000). Synonyms sometimes used include: bilingual child, English language learner (ELL), second language learner, limited English proficient (LEP), and culturally and linguistically diverse (CLD) learners.

Early Childhood Educator. One who educates children who are in early childhood, which the National Association for the Education of Young Children (NAEYC) defines as spanning from birth to the age of eight years.

English for Speakers of Other Languages (ESOL). English for speakers of other languages refers to the study of English by speakers with a different native language (TESOL, 2010). A synonym often includes: English as a second language (ESL).

Head Start. Head Start was started in 1965 and is the “most successful, longest-running, national school readiness program in the United States. It provides comprehensive education, health, nutrition, and parent involvement services to low-income children and their families” (NHSA, 2010).

Home Language. Home language is the language a person has learned from birth. Synonyms often include: first language, native language and L1 (Cook, Long, & McDonough, 1979).

Hispanic/Latino. The terms Hispanic and Latino are often used interchangeably in the U.S. when referring to people with origins from Spanish-speaking countries. These terms do not imply that all Hispanics and Latinos are of the same race and/or cultural background (Montalban-Anderssen, 1996).

No Child Left Behind (NCLB). NCLB is federal legislation that endorses the use of theories of standards-based education reform that are based on the belief that setting high standards and establishing measurable goals can improve individual outcomes in education. The Act requires states to develop assessments in basic skills to be given to all students in certain grades in order to receive federal funding for schools (U.S. Congress, 2001).

School Readiness. School readiness means a child must be 5 years old upon entry into kindergarten and demonstrate gains in development in language, early literacy and numeracy, cognition, and social-emotional functioning. In addition, DLLs need to demonstrate development in acquiring English (Snow, 2006).

Second Language. A second language is any language that is learned after the first language (Cook et al., 1979).

Organization of Remaining Chapters

The proceeding chapters will highlight the specifics of this study. Included in Chapter 2 is a review of the literature already published that describes best practices in working with DLLs in early childhood education settings and how these skills can be developed and assessed in teachers. Chapter 3 describes the methodology that was used to conduct the research study including: a description of the participants, ethical considerations, assessment instruments, procedures, research design and data analysis.

Chapter 4 provides the results of the current study. Finally, a summary of findings, implications for research, limitations, implications for practices, and directions for future research are presented in Chapter 5.

Chapter 2:

Review of the Literature

In order to develop intellectually, emotionally, socially, and morally, Bronfenbrenner and Morris (2006) have pointed out that a child requires essentially the same thing in each area. This includes “participation in progressively more complex activities, on a regular basis over an extended period of time in the child’s life, with one or more persons with whom the child develops a strong, mutual emotional attachment, and who are committed to the child’s well-being and development” (Bronfenbrenner & Morris, 2006, p. 823). Such mutual ties are what motivate a child to become interested and engaged in their current physical and social environment. Eventually this engagement will also develop in the child’s symbolic environment that allows for exploration, manipulation, elaboration, and imagination (Bronfenbrenner & Morris, 2006).

These mutual ties are essential for maximizing the potential of each child and such ties may be harder to achieve when teachers do not belong to the same cultural group or do not speak the same language as the children in their classroom. In the following review of literature, the additional challenges teachers face when working with dual language learners (DLLs) will be discussed. Furthermore, best practices in working with culturally and linguistically diverse children will be explored. This overview of research will bring to light the beliefs and practices that teachers should possess in order to be able to establish effective ties with all the children in their classroom and provide

them all with an opportunity to be successful. The Language and Culture (LCQ) questionnaire was developed on the basis of these best practices that have been highlighted through research.

As the topic of dual language learning is introduced, an operational definition provided by Gersten and Baker (2000) serves to pinpoint exactly what type of students we are describing with the use of the term dual language learner (DLL). A DLL student is a linguistically and culturally diverse student because his/her first language is not English, is starting to learn English or has obtained oral English proficiency but not yet mastered higher order English language skills (Gersten & Baker, 2000).

Culture and Cultural Competency

Culture represents “the values, norms, and traditions that affect how individuals of a particular group perceive, think, interact, behave, and make judgments about their world” (Chamberlain, 2005, p. 197). It is agreed upon that culture does not simply include race and ethnicity but also additional factors such as sexual identity, socioeconomic level, disabilities, age, and religion (Miranda, 2008). This more inclusive definition suggests that an array of intersections may exist between these different factors and as a result culture must be analyzed in a more complex manner (Quina & Bronstein, 2003).

One very important point emphasized by Lynch and Hanson (2004) is that differences within the same culture can at times be even greater than the differences between two cultures. Examples were provided by Ortiz, Flanagan and Dynda (2008) when explaining that the use of racial categories such as Hispanic or Asian Pacific/Islander that tend to combine many groups of people into one group are not

beneficial. These categories imply that everyone from that racial group fits into similar linguistic and cultural experiences. Yet, Mexicans and Cubans are both thrown into the Hispanic category but each group speaks Spanish quite differently. Japanese and Chinese are both Asian but their cultures are significantly different and they cannot communicate between each other (Ortiz et al., 2008). Therefore, teachers must also focus on analyzing the possible differences within the broader categorizations of culture they may have previously had.

Cultural competence is a widely used term that also has a variety of definitions. One generally agreed upon definition was provided by Lynch and Hanson (1998) which describes cross-cultural competence as “the ability to think, feel, and act in ways that acknowledge, respect, and build upon ethnic, sociocultural, and linguistic diversity” (p. 50). When defining cultural competence it is also helpful to know that cultural competence is not a distinct skill or set of facts that one acquires about particular groups of people. Rather, cultural competence includes the integration of extensive knowledge bases and specific competencies when working with diverse children and families (Ortiz et al., 2008). In sum, cultural competence is not a skill that can be gained in a single workshop or even one course.

Development of Cultural Competency

There are a number of theorists who discuss the process of cultural competency development (Lynch & Hanson, 2004; Pederson, 2004). Nevertheless, there are three generally agreed upon phases of development, which include personal awareness, knowledge of other cultures, and the application of that knowledge (Miranda, 2008). The first phase of development, self-awareness, involves knowing that our individual

ways of viewing the world are different from that of others (Barrera, Corso, & Macpherson, 2003). Knowing the cultural contexts that influence one's own personal behaviors, attitudes and beliefs while analyzing how they coincide with one's professional role is the first step in reflective thinking that leads to cultural competency (D'Andrea, 2005).

In order to develop knowledge of other cultures, Lynch and Hanson (1998) recommend first reading books about the culture of interest, and then interacting with people from that culture who can serve as cultural mediators. Another recommendation made by these researchers includes participating in the daily life of the culture of interest or immersing oneself in that culture. This often provides the opportunity to experience what it feels like to be an outsider or a minority for once (Miranda, 2008). The final suggestion to gain the ultimate knowledge is to learn the language (Lynch & Hanson, 1998). Many things are lost in translation and that is why learning the language of the culture of interest would allow one to gain the greatest understanding of that culture.

After one has gained personal awareness and knowledge of a culture, it is time to apply that knowledge. At times this may place educators in risky and challenging situations because it is often difficult to bring up and discuss issues related to culture (Miranda, 2008). Plus, even if a teacher learns the language of his or her dual language learner (DLL) students, it takes extra effort to use that language in the classroom and with parents without fear of making mistakes.

Importance of Cultural Competency Within Schools

One of the main roles of educators is to close the gap between what a student already knows and what that student needs to know before a skill can be successfully

learned (Anderson, Osborn, & Tierney, 1984). Cultural competence is extremely crucial because student learning can only occur when teachers and students arrive at a “shared understanding” (Staton, 1989, p. 364). If a teacher does not know what background knowledge one of his or her students is lacking, a shared understanding is unlikely to ever occur. The difficulty arises in separating ourselves from the cultural viewpoints that have been instilled in us from the day we are born (Ortiz et al., 2008). The process of cultural competency development is challenging because it requires educators to “learn to relook, reconceptualize, reexamine, and rethink” (Miranda, 2008, p. 1743).

Within schools, much more learning occurs than simply what is learned from textbooks because public school curricula are set up to perpetuate the values of mainstream society. Unfortunately, what curricula are taught is often based on the socio-political climate instead of on sound research (Ortiz et al., 2008). The Unz Initiative (Proposition 227) restricted the use of primary language programs in California, Massachusetts and Arizona. Some states even continue to strive to replace evolution with creationism to teach the origin of life on Earth (Ortiz, et al., 2008). As a result, teachers should strive to analyze the hidden message behind their curricula and also to evaluate whether these curricula are in line with best practices.

In efforts to ensure that educators are being better prepared to deal with the rapidly changing demographics, national boards are putting standards in place in attempts to better prepare future educators. The National Council for Accreditation of Teacher Education (NCATE) is responsible for the accreditation of P-12 pre-service education and they emphasize the need to integrate diversity training across the higher education curricula. NCATE specifies that cultural and linguistic diversity needs to be looked at

with sensitivity and through a strength-based perspective. Pre-service educators also need to gain an understanding of the process of language acquisition in children's first and second language (NCATE, 2008).

Joining forces with NCATE to update standards is Teachers of English to Speakers of Other Languages (TESOL). TESOL is revising standards for P-12 English as a Second Language (ESL) pre-service education (TESOL Task Force on ESL Standards, 2008). Like NCATE, TESOL also highlights the importance of knowing what is involved in both first and second language and literacy development. Furthermore, TESOL specifies the need to know how culture and language are intertwined, including the exploration of cultural identity issues. The standards also highlight educational strategies that promote English language development, identify instructional materials that are good resources, insist that teachers know what assessment methods are adequate for DLL students, and provide professional development guidelines (TESOL Task Force on ESL Standards, 2008). The inclusion of these standards in national accreditation boards speaks to the urgency of developing these skills.

Teacher Preparation Programs

Since the general consensus is that teachers are ill-equipped to handle such diversity needs (Cho & DeCastro-Ambrosetti, 2005), a number of studies are emerging that evaluate how well teacher preparation programs are preparing teachers to go out into the field (Alvarez-McHatton et al., 2009; Prater et al., 2008). Demographics and worldviews are rapidly changing, but the key question is whether teacher preparation programs are evolving as fast as our population (Darling-Hammond & Bransford, 2005). What is known is that underserved groups will make up the majority of the school age

population (U.S. Department of Education & National Institute of Child Health and Human Development, 2003) while predominantly White, middle-class women continue to teach these groups (Milner, 2006). There is little information regarding whether teacher preparation programs are effectively producing culturally competent educators.

Causey, Thomas, and Armento (2000) brought to light the difficult task of changing preservice teachers' knowledge and beliefs about other cultural groups. This group of researchers compiled a list of strongly held beliefs that preservice teachers often enter college with. These beliefs include *optimistic individualism*, which means that hard work, and effort on behalf of the child leads to overcoming any obstacle. Inexperienced teachers also tend to believe in *absolute democracy* where kids are seen as being simply kids regardless of their cultural background and that an effective curriculum will work with all students. Finally, those wanting to become teachers often espouse *naïve egalitarianism* or the belief that since everyone is equal, everyone should have equal access to resources and receive the same treatment (Causey et al., 2000). When the section of best practices is introduced later on, it will become apparent how these beliefs are counterproductive when trying to meet the needs of DLL children.

One of NCATE's mission statements highlights the importance of teaching the value of diversity when preparing future educators (NCATE, 2008). Nevertheless, no standardized methods of evaluation currently exist to determine the extent to which programs are incorporating this diversity objective (Cochran-Smith, 2003). The research group comprised of Alvarez-McHatton et al. (2009) pointed out that in general, educator preparation programs require only one diversity course (Hollins & Guzman, 2005; McFalls & Cobb-Roberts, 2001), promote opportunities for service-learning (Cooper,

2007), and seek field placements for students in diverse settings (NASP, 2000). Perhaps one of the biggest downfalls in evaluating whether teacher preparation programs are successful in producing culturally competent educators is that systematic assessment seldom occurs (Alvarez-McHatton et al., 2009).

Miranda (2008) notes that training programs that include instruction on diversity can provide educators with a knowledge base to better serve the culturally diverse students in their schools. Diversity training allows students to “understand how issues of race, class, ethnicity, and sexual orientation are interrelated with politics, economics, and power” (Miranda, 2008, p. 1742). It is also emphasized that professional development in the area of diversity should occur on a frequent basis to stay up to date on new knowledge and effective practices (Miranda, 2008). Ortiz et al. (2008) further explain that professional development should occur regularly because what constitutes best practices when working with diverse children and families is an ever-evolving process based on greater understandings gathered through research.

Even though diversity is increasing quite drastically within the U.S. school age population, the demographics of teachers have not changed much. Specifically, the majority of teachers continue to not speak a language other than English (Milner, 2006). The research of Gandara and Maxwell-Jolly (2006) pointed out that the teachers who are best prepared to teach bilingual students are fluent in those students’ home language. Nevertheless, when teachers are not bilingual, there are strategies that can be learned to best assist students with acquiring English (Artiles & Ortiz, 2002; Baca & Cervantes, 1998). Tabors (2008) explains that traditional coursework may not provide early

childhood educators with the knowledge pertaining to “understanding, facilitating, and assessing second-language and literacy acquisition” (p. 177).

The most troublesome data that researchers in the area of cultural competency are finding are that not only has the teaching force not changed along with the population, but training efforts in the area of cultural development remain inadequate for the population needs (Alvarez McHatton et al., 2009; Ortiz et al., 2008). Training programs often fail in the sense that they simply include books or articles as part of their cultural competency curriculum but such practices are not sufficient (Lynch & Hanson, 2004).

Beliefs Regarding Language

Freeman (2004) explains that the majority of U.S. schools have a language-as-problem ideological orientation. This ideology views “languages other than English, and speakers of languages other than English, as problems to be overcome” (p. *viii*). Such a deficit orientation is unfortunate because it perpetuates the subordinate status of non-English languages, and contributes to the poor academic performance of speakers of other languages (Freeman, 2004). Edl et al. (2008) analyzed how teacher reports of students’ academic and social functioning varied based on differences in students’ ethnicity, level of English proficiency, and classroom placement (i.e., bilingual education or not). Their findings revealed that students’ language proficiency was the factor that most greatly influenced teachers’ views of those students being low achievers above ethnicity. More specifically, teachers rated Latino DLLs lower than other Latinos in the classroom who were English proficient (Edl et al., 2008). Such views are problematic because even if teachers’ views of these students are erroneous, they have the possibility of turning into self-fulfilling prophecies (Espinosa & Laffey, 2003).

The opposite ideology views languages other than English, and speakers of those languages as resources that need to be tapped (Freeman, 2004). This is the philosophy of dual-language programs that build on the linguistic and cultural resources that many students already possess at the start of their schooling. Freeman (2004) argues that when this resource is tapped, ELLs, their families, and the U.S. in general benefit. This is what is involved in a strength-based approach promoted by NCATE as one of its standards.

The latter ideology where children's first language becomes the foundation for second language learning is often referred to as the additive perspective and has been demonstrated to be most effective with DLLs (Tabors, 2008). The additive perspective not only promotes language development but also makes the transition to school easier, allows for social skill development and more positive learning experiences (Chang, Crawford, Early, & Bryant, et al., 2007). Adopting such an ideology therefore impacts a number of positive changes simultaneously.

Best Practices in Working with DLLs

Schools have a very poor record when it comes to accessing empirically validated interventions and effectively using them (Walker, 2004). Yet, Walker (2004) discusses how it is not entirely the school's fault because researchers are not effectively working with schools to set up the necessary infrastructure to make these interventions work either. Educators are therefore expected to improve outcomes for at-risk children when many do not have the skills or training to do so (Walker, 2004). For these reasons, it is valuable to explore the knowledge and skills early educators already possess in regards to working with DLLs and those skills that are deficient.

Bronfenbrenner and Morris (2006) explain how a *Person's* biological resources such as “ability, experience, knowledge and skills are required for effecting functioning of proximal processes” (p.97). In terms of this study, this means that teachers need these biological resources in order to interact effectively with DLL children. Beliefs and practices in relation to second language acquisition and culture are being assessed with the Language and Culture Questionnaire (LCQ). Specifically, the knowledge and skills that have been researched to produce the greatest gains in achievement for DLLs are being evaluated. It is essential for early childhood educators to be aware of these practices because they are the most effective in closing the achievement gap of Latinos that will be subsequently discussed.

The National Association for the Education of Young Children (NAEYC) published in 1995 “Responding to Linguistic and Cultural Diversity – Recommendations for Effective Early Childhood Education.” NAEYC highlighted several recommendations that will briefly be discussed. When working with children, NAEYC asks teachers to acknowledge that all children are cognitively, linguistically and emotionally tied to the language and culture they bring from home. Consequently, it is recommended that children never be asked to give up their home language and culture to fit into their new setting. Their language and culture should therefore be integrated into their educational setting (Tabors, 2008).

NAEYC explains that there are many ways in which children can be asked to display their knowledge and what they are capable of doing. DLLs cannot express certain abilities through verbal communication at first. Educators should thus strive to constantly make observations of DLLs’ progress and develop nonverbal ways of

demonstrating what they know (Tabors, 2008). Teachers also need to understand that if children have no means of comprehending what is being taught, learning a new language can be extremely challenging (NAEYC, 1995). The use of alternative strategies (i.e., repetition, body language, gestures, etc.) to get the message across is strongly recommended (Tabors, 2008). These strategies and more will be further explained throughout this chapter.

Second Language Learning. By the year 2030, the school population is estimated to be comprised of 40% of students who speak English as a second language (U.S. Department of Education & NICHD, 2003). Systematic studies of the early reading acquisition of DLLs are quite limited (Gerber, Jimenez, Leafstedt, Villaruz, Richards, & English, 2004) but there is a good amount of research that explains the process of second language development. It is difficult for DLLs to meet reading benchmarks because by definition, DLLs have had very limited exposure to important pre-requisite reading skills such as phonology, the alphabet and vocabulary in English. That is why this population is increasingly being identified as at-risk for reading failure (Gerber et al., 2004).

Having adequate oral language skills in English is also crucial for DLLs as they learn to read in English (Carlisle, Beeman, Davis, & Spharim, 1999; Proctor, Carlo, August, & Snow, 2005). Lindholm (1991) summed up the findings between oral language skills and reading as follows: reading and academic language skills are highly dependent, oral English proficiency and academic English proficiency are not correlated, and both types of language proficiency are correlated with students' ability to read in English. Such findings have significant implications for working with DLLs because

both types of language skills, academic and conversational, should be developed in each language before educators can observe high levels of reading achievement (Lindholm, 1991).

It was pointed out by Tabors (2008) that early educators should be aware of the stages of second language acquisition that youngsters pass through on the way to becoming competent in English. Knowing a student's stage of second language learning is beneficial because it allows teachers to implement accommodations that are appropriate for that stage in learning (Zepeda, Castro, & Cronin, 2011). Targeting interventions at the right stage should lead to quicker outcome improvements.

An assessment of first language proficiency is a good reference point. Cummins (1979) introduced the developmental interdependence hypothesis to gain an understanding of how bilingual children learn two languages simultaneously. With this hypothesis, Cummins indicated that the level of second language (L2) competence reached by students is to some extent related to the competence students demonstrate in their L1 (home language) at the start of intensive immersion into an L2 setting. The next step in assessment should likely involve getting an estimate of a student's oral language skills in English.

There is a commonly held belief that young children can learn a second language without much effort or special dedication on behalf of teachers (Tabors, 2008). Yet, the reality is that with proper instruction, it takes about five to seven years for DLLs to be able to achieve grade level norms (Hakuta, 2001; Thomas & Collier, 2002). Jitendra and Rohena-Diaz (1996) explain that oral language proficiency in English is often assessed by asking surface-oriented questions related to the language instead of deeper pragmatic

or linguistic code features of the language. Consequently, students appear to have higher levels of proficiency but they still have not acquired the more cognitively demanding aspects of the language. DLLs therefore have the greater challenge of not just learning how to read English but also learning the complex uses of the language for a number of years (Malloy, Gilbertson, & Maxfield, 2007).

Tabors (2008) described that factors such as motivation, exposure, age and personality will also affect the rate at which children acquire a second language. Children faced with learning a new language have to be motivated enough to take on the cognitive challenge required in learning that new language. Once in the second language setting, one has to consider the amount of exposure the child has had to develop the new language and who is in his or her peer group. If a child only gathers around with children who speak his/her home language then that child may not be getting ample exposure to the second language. Young children benefit from the fact that what they need to learn is not as cognitively demanding as for older children. Nevertheless, younger children move through their developmental stages at a slower rate than older children. Finally, personality has to do with whether a child is outgoing and willing to make mistakes in their new language or shy and less likely to want to say something wrong (Tabors, 2008). Therefore, the instructional need of each DLL student can be quite different based on the types of experiences they have had with English both at home and at school (Artiles et al., 2005).

In addition to child factors, Zepeda et al. (2011) also discussed program and school factors that could affect the rate of second language learning. These include factors such as the instructional approaches that are implemented and the quality of

teacher preparation. The type of bilingual education program students are enrolled in greatly influences their rate of second language learning (Tabors, 2008). Socio-cultural factors such as poverty, family stress, and the degree of mismatch between home and school environments may also impact second language learning (Zepeda et al., 2011). All these variables have to be explored when assessing second language development to target the areas for intervention that are likely to produce the greatest gains in outcomes for second language learning.

Tabors (2002) delineated the classroom activities in early childhood settings that prepare children for reading and writing. Children are taught alphabetic knowledge and letter recognition. Students are also taught what sounds make up words, which is known as phonological awareness. Teachers demonstrate how books look and how they work, which is referred to as book and print concepts. Children are taught words and the meaning behind each word in attempts to build their vocabulary. Finally, teachers spend much time in early childhood reading stories, explaining the world around them and encouraging fantasy work when building discourse skills (Tabors, 2002).

In order to be culturally competent educators who utilize best practices related to issues of language, teachers need to be up to date on the findings regarding cross-language studies. Research has been done in each pre-requisite reading skill to determine the amount of transfer between each language (e.g., Dickinson, McCabe, Clark- Chiarelli, & Wolf, 2004; Lopez & Greenfield, 2004; Cobo-Lewis, Eilers, Pearson, & Umbel, 2002). It is helpful for teachers to understand which skills transfer across languages (e.g., phonological awareness) so they can better inform parents about the logic behind continuing to use their home language. Teachers can then focus on building the skills

that do not transfer (e.g., vocabulary) in the classroom setting to ensure these skills are acquired in each language.

Promoting Language Development. Implementing best practices for language development with DLLs is also beneficial to the native English speakers in early childhood settings. Therefore, these are skills that teachers should have not only to be culturally competent, but also to simply be effective teachers. The Language Acquisition Preschool at the University of Kansas utilizes a number of intervention strategies to promote language development that are useful for all the children, not just DLLs. They include setting up various opportunities to use language and interact, having children concentrate on specific language features, establishing routines to assist children in realizing how language and events coincide, and encouraging interactions between all students (Tabors, 2008).

Good communicative and social skills practically go hand in hand because each is dependent on the other for development. If a child does not have good communication skills, that child will be ignored and a child who is constantly ignored will not have enough social interaction to develop better communication skills (Tabors, 2008).

Hirschler (1994) explains how English speaking children were made aware that the DLLs of the class needed assistance with language and provided the English speaker with strategies on how to help DLLs in order to provide more opportunities for contextualized language than the teacher could have provided alone. Teachers need to be presented with recommendations such as these so they become aware of the resources available to facilitate their task of educating DLLs without feeling as if it is an overwhelming goal.

As previously mentioned, strategies for assisting DLLs may also help monolingual students in the class learn the lesson because these strategies simply make for a more interesting and effective teacher. One strategy called buttressed communication involves using gestures, actions or directed gaze. This strategy serves to provide additional information to the lesson so DLLs can figure out what is being taught. Repetition allows for a child to see particular words associated with the same actions and in turn they can figure out what everything means (Tabors, 2008).

Talking about the present puts things in focus for DLLs so they do not have to put forth a great deal of effort just trying to figure out what is going on. A good way of doing this is called “running commentary,” “event casting,” or “talking while doing.” Teachers basically explain all their actions and the actions of others while the event is taking place. Not only do students see how language is directly connected to the activities unfolding, but they also learn English vocabulary and syntactic structures (Tabors, 2008). This is a good practice because as pointed out by Fillmore and Snow (2000), DLLs need extensive supports in vocabulary development.

Once children start using short phrases in their new language, teachers can expand and extend what they just said so DLLs can see how they can more eloquently state the same thing. Another strategy referred to as fine-tuning allows teachers to rephrase a statement that was too complex for a DLL student to capture (Tabors, 2008). It takes a good amount of conscious effort for teachers to integrate these strategies, but once they do, they will produce more effective learners.

Home Language in the Classroom. Research findings have revealed that students can and will learn English even when their home language is incorporated into their curriculum (NAEYC, 1995). Research has indicated that effectively implemented dual language immersion programs provide the best long-term results for DLLs (Lindholm-Leary, 2001; Thomas & Collier, 2002). Bilingual children have been observed to succeed most often when they have good dominance of their home language before they are introduced to a second language (Collier, 1987).

Teachers need to pay special attention to the consequences of their actions in the classroom. This is because young students are “highly impressionable” and they may not feel at a loss when adopting new cultural practices (Ortiz et al., 2008). A teacher may decide to call “Juan” by “Johnny” because it is easier to pronounce and remember. Yet, what message does that send to the child? Oftentimes in a desire to fit in that young child may start to abandon his or her Spanish and only build upon his or her English skills. It is likely for these scenarios to create “acculturative stress...and disrupt the family hierarchy” (Ortiz et al., 2008 p. 1728). The growth of English skills should be encouraged, but not through the abandonment of Spanish skills. The following excerpt vividly illustrates this point:

Racism is often characterized, albeit facetiously, as an inherited disease- you get it from your parents. I guess I was lucky; I didn't get it from mine. Like so many other unsuspecting children, I went out and got it from a more authoritative source, school...I was infected with a far more insidious strain that taught me to hate my *own* people because they were different than what society said they should be...speaking Spanish simply wasn't allowed in school. Bilingual education was but a distant dream, and I was expected to learn English immediately upon entering kindergarten, never mind that my parents could barely speak it...By second grade, my teacher placed me outside the classroom in a small group where I was teaching other Spanish-speaking children how to read in English. I distinctly remember feeling superior to these children aspiring to be as proficient as I was in English...It wasn't that anyone ever said anything to me

overtly, and it wasn't that my parents didn't value their own culture or language. There just always seemed to be a clear, unspoken norm that English was *better* than Spanish and that being White was *better* than being brown. It wasn't based simply on being different; it was a question of value. White culture was superior to all other cultures including mine (Ortiz, 1999, p. 10, emphasis in original).

Ortiz does a good job at demonstrating how not respecting language sends a number of messages to non-English speakers.

Wong (1991) explained that losing a home language could have “extensive personal, familial, religious and cultural implications” (p. 343). Wong (1991) goes on to explain that when parents can't communicate with their children, parents experience shortcomings in their ability to socialize their children. Parents cannot effectively share “their values, beliefs, understandings, or wisdom about how to cope with their experiences” (p. 343). When parents can't pass on these traits then tensions can arise when children develop traits contradictory to those of their family (Wong, 1991). Wong's description further justifies Ortiz's claim of the “disruption of family hierarchy.” That is why teachers need to evaluate whether implicit messages are being delivered in all their routine activities.

Not only *could* the home language of DLLs be integrated into the classroom, but rather that it *should* (Tabors, 2008, emphasis in original). This practice has both social and cognitive benefits. It is a social benefit because using DLLs' home language within the curriculum allows them to be the experts for once and promotes pride in their home language and culture. Cognitive benefits also arise from making the curriculum more challenging for even English speakers and allowing everyone to benefit from the development of metalinguistic awareness (Tabors, 2008).

Teacher-child relationships are just as important to foster and maintain as those of the parent-child relationship because of the social and emotional development benefits (Pianta, 1999). Human development occurs as a result of “progressively more complex reciprocal interaction between an active evolving biopsychological human organism and the person, objects and symbols in its immediate external environment” (Bronfenbrenner & Morris, 2006, p. 797). This teacher-child relationship establishes either a positive or negative influence on whether children will be successful students (Pianta & Stuhlman, 2004). Or as the bioecological model explains, “for the younger generation, participation in such interactive processes over time generates the ability, motivation, knowledge and skill to engage in such activities both with others and on your own” (Bronfenbrenner & Morris, 2006, p. 797). In sum, not only does promoting the use of a child’s home language enable students to establish better relationships with their peers, but it also allows them to form stronger bonds with teachers. Bonds, which Pianta and Stuhlman (2004) pointed out, serve as both contributors and indicators of a student’s adjustment to school.

Working with Families. The ecological perspective identifies the family system as the most influential and proximal system in children’s early learning (Bronfenbrenner, 1992). It also recognizes the importance of establishing beneficial connections between families and schools (Christenson & Sheridan, 2001). A number of researchers have emphasized the relationship that exists between parental involvement and the level of their child’s achievement in school (Arnold, Zeljo, Doctoroff, & Ortiz, 2008). Perhaps even more critical a time to establish a healthy home school relationship to reap academic rewards is early on in development (Children’s Aid Society, 2003). Head Start even

recognizes the benefits of strong parental involvement as it promotes active participation from parents at every stage of educational experiences ranging from classroom participation to program governance (U.S. Department of Health and Human Services [U.S. DHHS], 1998).

There have not been a great deal of investigations involving Hispanic families but a study conducted by Chavkin and Williams (2003) revealed that Hispanic parents rely on schools to begin any lines of communication when needed. Parents may be extra hesitant, especially when they have to approach teachers who are of a different ethnicity (Garcia Coll, et al., 2002). Therefore, teachers need to reach out to parents and establish that first link. Arnold et al. (2008) brought up the possibility that teachers may be less inclined to making parents aware of a problem when there are cultural differences with parents and that only causes school problems for this at-risk population to persevere.

Administrators, teachers and staff are the ones ultimately responsible for creating a welcoming environment (Arnold et al., 2008). The practices schools use to bring parents in were recognized as being better predictors than the educational level, income status or ethnic background of parents (Christenson, 1999). Creating such a comfort zone is very important because as Tabors (2008) summed up, “raising a child bilingually in the U.S. does not just happen- it requires vigilance and persistence on the part of the parents and cooperation and continued practice on the part of the child” (p. 136). The role of school personnel in establishing home-school partnerships was described by Fantuzzo, Perry and Childs (2006) as more important than variables such as family income and education. Educators therefore cannot place the majority of the blame on parents if a successful home-school link is not created.

Perhaps one of the most significant tasks an early childhood educator faces at the beginning of the school year is convincing parents that continued use of their home language is actually beneficial to their child. A critical practice for reaching culturally and linguistically diverse children involves making sure their parents and families are included in the educational process. Parents are often unaware of the cognitive benefits of being bilingual and often try to encourage that only English is spoken at home. It is in the best interest of teachers to provide parents with information as to how to best support and encourage the use of their home language (NAEYC, 1995).

When parents have too many obligations to become involved, the possibility of including extended family members such as grandparents can be explored. The extended family plays a role in many cultures (Arnold et al., 2008) and parents may be more responsive if they see to what great lengths educators are going to work together. Although demanding, these efforts go a long way because parents and the family are children's first teachers and they continue to be key players in how they develop (Arnold et al., 2008). Parenting quality and language stimulation make the greatest impact on children's development than any other early childhood environment (NICHD ECCRN & Duncan, 2003). If parents and families are only fluent in a language that is not English, they can only provide their children with sufficient language stimulation in the language that they know best.

Respecting Values and Culture. Interesting findings were reported by Lynch and Hanson (2004) as they relate to young children and culture. They noted the following: (a) as early as 5 years of age, an understanding of one's home culture is already well ingrained, (b) children can more readily learn new cultural patterns than

adults, (c) children learn the values of their home culture, but may need to adopt alternative values to be successful in a second culture, and (d) a lack of understanding in one's home culture can lead to misunderstanding of a second culture. These findings speak to the importance of having early childhood educators who are competent of these phenomena and who respect and value the child's home language and culture.

Much of the previously discussed research has pointed out the interconnectedness between language and culture. That is because children develop language within their home culture and the values and beliefs of their cultural group are reflected in their language use. Zepeda et al. (in press) further explain that this involves how and when to use language, how children are seen as partners in language and how language helps to keep an ethnic identity. Not only are DLLs learning the oral components (vocabulary, phonology, syntax, and pragmatics) and the literacy-based components (phonological awareness, alphabet knowledge, print conventions) of their new language but they are also learning the social rules, beliefs and values of this new culture that may differ from their own (Zepeda et al., 2011). This last statement does well in illustrating just how much DLLs have to juggle on their journey towards learning English.

Academic Trends with Latino Population

Latinos represent the fastest growing minority group in the U.S. (U.S. Census Bureau, 2000). Unfortunately, Latinos also represent the poorest and least educated group in the nation (Zabala & Minnici, 2008). These numbers are alarming because of the fact that the group that educators are less successful at educating will just continue to multiply in size. D'Angiulli, Siegel and Maggi (2004) explained that a community's potential for success is to a certain extent dependent on the literacy levels of its children.

Therefore, the success of countries with a great influx of immigrants, such as the U.S., may depend on DLLs developing adequate reading skills in their second language (D'Angiulli et al., 2004). Since the development of literacy continues to be the primary mission of schools (Walker, 2004), the following paragraphs will highlight how Latino students are faring in the area of literacy.

One of the primary academic areas that Latino students are struggling with is reading. Overall, Spanish-speaking students represent the lowest-achieving cultural group in the U.S. when it comes to reading achievement (Jimenez, 2004). It is difficult to interpret the performance of DLLs on English-reading tasks because of their limited exposure and proficiency in English (Gerber et al., 2004). This results in disproportionately high levels of special education referrals and climbing rates of learning disabled labels (Gunn, Smolkowski, Biglan, & Black, 2002). Findings from the *24th Annual Report to Congress on IDEA* indicate that over 17% of students identified as learning disabled are Hispanic yet they only represent about 12-13% of the population (Office of Special Education Programs, 2002). Solutions for decreasing the overrepresentation in special education are crucial especially with the growing population size of DLLs and because Donovan and Cross (2002) highlighted that school districts with the highest concentration of minority students will be most affected by shortages in qualified special education staff.

When compared to Caucasian age-mates, a greater proportion of Hispanic students are falling behind on reading achievement from an early age. As DLL children reach later grades, their reading scores get even worse which cause more grade retentions and eventual school dropouts (Hernandez & Nesman, 2004; McCardle, Mele-McCarthy,

Cutting, Leos, & D-Emilio, 2005; Rueda & Windmueller, 2006). Plus, when the reading achievement of Hispanic adults was recently assessed, the gap as compared to Caucasians in reading achievement had grown (NCES, 2003; NAAL, 2003). Therefore, DLLs are starting out with weaker literacy skills and that gap only continues to increase with time. A number of factors contribute to the array of negative academic outcomes of DLL students such as educators' beliefs about language acquisition, the instructional practices that are being utilized, biases at both institutional and personal levels, and socioeconomic difficulties (Harry & Klinger, 2006). As a result, it is imperative to further explore and assess teachers' beliefs and practices in order to try to bring to light some possible solutions for producing better outcomes with DLLs.

Assessments of Beliefs and Practices Related to Language and Culture

The characteristics of culturally competent teachers include those who (a) 'understand culture and its role in education,' (b) 'take responsibility for learning about students' culture and community,' (c) 'use student culture as a basis for learning,' and (d) 'promote a flexible use of students' local and global culture' (Ladson-Billings, 2001, p. 98). The amount of research directly evaluating teachers' beliefs and practices related to language and culture is rather limited. Plus, the little that exists does not relate to the practices that early childhood educators should be utilizing in their classrooms with DLLs. The Head Start Language Diversity Project (HSLD) evaluated this area of Head Start teachers' language and cultural competence but they had to utilize a measure that was created by one of its principal investigators because the researchers were not aware of any existing measures when they engaged in the study.

HSLD was initiated as a sub-project of the New England Quality Research Center for Head Start (NEQRC). It involved surveying Head Start teachers in terms of their beliefs and reported practices regarding English language learners. This study piloted the use of the Language and Culture Questionnaire (LCQ). The HSLD group found that teachers' beliefs were positively related to their reported practices and this relationship was maintained even after controlling for the teachers' backgrounds. The background variables included the teachers' educational level, years in current position, years in Head Start, ethnicity, and language skills. None of these background variables were related to teacher beliefs or reported practices (Paez & Tabors, 2000).

The regression analyses conducted by the group revealed that teachers' beliefs explained 17% of the variance in reported practices. This relationship that was found between the beliefs and reported practices of Head Start teachers suggested that professional development efforts are likely to improve culturally competent practice if teachers' knowledge base is increased. Another important finding suggests that formal education and experience may not be the strongest determinants of teacher beliefs and reported practices (Paez & Tabors, 2000). These findings were in line with Abbot-Shim et al., (2000) who observed that other variables including staff development training were better predictors of teacher beliefs than the background variables investigated by Paez and Tabors (2000). Exploration of additional teacher background variables utilizing a different sample of teachers is therefore warranted. A better understanding of what beliefs teachers currently hold and what practices they utilize with DLLs can help to generate solutions in trying to produce better outcomes for this population of students.

Chapter 3:

Methods

The purpose of this study was to explore the beliefs and practices of pre-kindergarten and kindergarten teachers in regards to working with DLLs. Multiple methods were employed to answer the following research questions: (a) How many underlying factors are there in the Language and Culture Questionnaire (LCQ)? (b) In what areas are pre-kindergarten and kindergarten teachers' beliefs and practices not in line with the best practices assessed in the LCQ? (c) Are teachers' language and cultural beliefs related to their reported classroom practices? and (d) Are teachers' number of years working with DLL children, level of education, ESOL certification, and number of hours of training with DLLs or in diversity training related to teacher's beliefs and reported practices regarding language and culture? Specific details regarding participants, ethical considerations, data collection measures, and procedures are presented in this chapter. Information about the methods used for data analysis is also included.

Participants

The research study Florida English Language Learners Attending Head Start (FELLA-HS) was a longitudinal 2-year project in which Lopez (2007) partnered with five Head Start agencies in Florida to develop "a consortium to study the developmental process of language, early literacy, early numeracy, cognition, approaches to learning,

and social-emotional development for 400 Spanish-speaking English language learners in both English and Spanish” (p. 4). The goal of the FELLA-HS project was to evaluate the school readiness of the DLL populations of southeast and central Florida. The Language and Culture Questionnaire (LCQ) that was analyzed with this study was one survey component of the broader FELLA-HS project. The aim of the LCQ was to assess teachers’ self-reported competency in regards to issues related to language and culture when working with DLL children.

Survey packets were distributed to 56 lead teachers. Pre-kindergarten classrooms often have teacher assistants in addition to the lead teacher but only data from the lead teachers were used for this study. Of the 56 teachers who received packets, 55 teachers (98.2%) returned the LCQ with their survey packets during Year 1. During this first year, all the teachers who received packets were in pre-kindergarten classes. The second year, the questionnaire was administered to both pre-kindergarten and kindergarten lead teachers. One hundred and twenty packets were distributed Year 2 and 78 teachers (65%) returned their survey packets during Year 2. Nevertheless, 14 of the teachers had previously completed the LCQ in Year 1 and two teachers returned the LCQ incomplete during the second year. Therefore, 119 teachers’ LCQ data were available for the purpose of running the majority of the statistical analyses. All pre-kindergarten teachers were teachers within the Head Start program in one of five counties in the state of Florida (Hillsborough, Lee, Monroe, Palm Beach, and Pinellas) who were part of the FELLA-HS project. These Head Start agencies were prioritized for the FELLA-HS project because they are located in the south and central regions of the state, which is where the largest percentage of the immigrant population resides.

Teachers in the sample were all females and had been teaching for a range of 0-43 years. The ethnic makeup of the 118 teachers who answered this demographic question included 65.3% Caucasian, 22.9% Latino/Hispanic, 5.9% Black, 1.7% Native American, 1.7% Multi-racial, 1.7% Other and 0.8% Asian/Pacific Islander. In regards to educational level, 66.4% had a Bachelor's degree, 15.1% had a graduate degree, 11.8% had an Associate's degree and 6.7% had a high school diploma or GED. The percentages of teachers who had less than a Bachelor's degree were Head Start teachers who, unlike Kindergarten teachers, are not required to hold a Bachelor's degree to be hired as pre-kindergarten teachers. Of the 115 teachers who reported whether or not they were ESOL certified about half said they were certified (49.6%).

Table 1

Demographic information of teachers

Ethnic Makeup (n = 118)

Ethnicity	% of teachers
Caucasian	65.3
Latino/Hispanic	22.9
Black	5.9
Native American	1.7
Multi-racial	1.7
Other	1.7
Asian/Pacific Islander	0.8

Level of teacher education (n = 119)

Degree	% of teachers
Bachelor	66.4
Graduate	15.1
Associate's	11.8
High school diploma/GED	6.7

ESOL Certification (n = 115)

	% of teachers
Yes	49.6
No	50.4

Ethical Considerations

The principal investigator of FELLA-HS, following ethical guidelines, sought permission from her Institutional Review Board (IRB) to conduct the assessments that were utilized for this study. Nevertheless, the current researcher also sought permission from the University of South Florida's (USF) IRB in order to ensure that no analyses were conducted with the data unless they also meet USF's ethical guidelines. No analyses were conducted until the study was approved by the IRB committee.

Measures

The Language and Culture Questionnaire (LCQ) was first published in the second edition of a book written by one of the measure's developers, Patton Tabors, titled *One Child, Two Languages* (Tabors, 2008). The LCQ (Appendix A) consists of two parts in which teachers are first asked to respond to statements regarding the process of second language acquisition and factors that influence that process. Teachers are then asked about their classroom practices related to dual language learners (Paez & Tabors, 2000).

The measure was first piloted with the Head Start Language Diversity Project (HSLD). Internal consistency analysis for the beliefs items of the LCQ resulted in a Cronbach's alpha reliability coefficient of .62 and the practices items resulted in a reliability coefficient of .81 (Paez & Tabors, 2000). The beliefs items include matched pairs of questions that are stated positively and negatively and scored on a four-point scale (strongly disagree, disagree, agree, strongly agree). Questions 1, 2, 4, 5, 6, 10, 12, and 14 are the negatively stated questions that should be answered in disagreement by teachers. Questions 3, 7, 8, 9, 11, and 13 are the positively stated questions and should be answered in agreement by the teachers. The higher the scores, the greater teachers'

self-reported cultural sensitivity and knowledge of the learning process for second language acquisition in young children. The practices items are scored on a four-point scale (always, often, sometimes and never). Higher scores on these items indicate that teachers are using practices that accommodate dual language learners and their families on a more frequent basis (Paez & Tabors, 2000).

In addition to the LCQ, the Head Start teachers were also given a questionnaire that asked about numerous background variables (Appendix B). Some of the questions from the questionnaire that were of interest to this study included: “How many years have you worked in a classroom with children who are second language learners?” “What is your highest completed educational degree?” “Are you ESOL certified?” and “How many hours of training have you received on working with DLL children and/or cultural competency training?”

Procedure

Participating teachers were mailed out research packets that included a letter explaining that one or more children in their classroom were participating in the FELLA-HS study and the details of the project. Within the packet was the LCQ along with the teacher questionnaire that asked the demographic questions and multiple child rating scales. Packets were either mailed or hand delivered if the teachers taught at a local school. Teachers had approximately 5 weeks to complete the packet contents and return the questionnaires. During Year 1, all the teachers received Wal-Mart \$10 gift cards for completing the packet unless residing in Monroe County. Teachers from Monroe County received Office Depot gift cards because there were no local Wal-Mart stores. During

Year 2, teachers were allowed to choose if they wanted a Wal-Mart, Target or Office Depot \$10 gift card.

Research assistants scanned the survey packet contents upon receipt using Remark OMR software that automatically plugs the data into an Excel spreadsheet. After scanning each questionnaire a research assistant quality checked each item to ensure the data inputted into the spreadsheet matched the answers on the questionnaire. Once all the questionnaires were scanned a second research assistant quality checked every fifth entry to ensure accuracy. If errors were found on a particular questionnaire, then every entry was checked to ensure no additional errors were present.

Data Analysis. Descriptive statistics were calculated as preliminary analyses for this study. For example, the means and standard deviations for both teacher beliefs and practices were calculated. Means and standard deviations were also calculated for the background variables such as the number of years teachers worked with DLLs and the hours of training they received on working with DLL children and/or cultural competency training. Cronbach's alpha reliability coefficients were calculated for the LCQ with this new sample. A correlation analysis was conducted to determine the degree of relationship between teachers' beliefs and their practices. Regression analyses were also conducted to determine which teacher demographic variables are most related to teacher's beliefs and practices utilizing simultaneous multiple regression. Test re-test reliability was calculated for the 12 teachers who returned completed LCQ surveys both years it was administered.

The LCQ was developed to gain an idea of Head Start teacher's language and cultural competency because the developers did not know of any cultural competency

measures specific for DLLs. Nevertheless, the LCQ developers have not conducted further analyses with the measure to determine the number of factors underlying the measure, whether those factors are correlated, and/or the possibility of naming any of those factors (Stevens, 2002).

The exploratory factor analysis model was chosen to determine the structure of correlations among the variables because one of the research goals of this study was to identify the latent constructs underlying the LCQ. A maximum likelihood estimator was used for factor extraction. To determine the number of factors to be retained, the following analyses were conducted: a visual scree test (Catell, 1966) and a parallel analysis (Horn, 1965). In regards to factor rotation, an oblique rotation was used. In order to determine meaningful factors, the factors were expected to have pattern loadings greater than .34 (Stevens, 2002) and a minimum of three unique variable loadings (Tabachnick & Fidell, 2001). Kaiser's rule was used to drop all factors with eigenvalues less than 1.0 (Kaiser, 1974).

Chapter 4:

Results

Overview

The Language and Culture Questionnaire (LCQ) was administered to a group of pre-kindergarten and kindergarten teachers. Each teacher had at least one dual language learner enrolled in her classroom. In addition to the LCQ, teachers were also given a demographic questionnaire that inquired about variables such as their level of education and years in the teaching profession. Exploratory factor analyses were utilized to explore the underlying factors within the LCQ. Multiple linear regressions were utilized to investigate what teacher characteristics predicted scores on the LCQ.

Research Questions

1. How many underlying factors are there in the Language and Culture Questionnaire (LCQ)?
2. In what areas are pre-kindergarten and kindergarten teachers' beliefs and practices not in line with best practices assessed in the LCQ?
3. Are teachers' language and cultural beliefs related to their reported classroom practices?
4. Are teachers' number of years working with DLL children, level of education, ESOL certification, and number of hours of training with DLLs or in diversity training related to teacher's beliefs and reported practices regarding language and culture?

Descriptive Statistics

For the items assessing beliefs, teachers scored a mean of 27.40 ($SD = 3.57$) out of 42 possible points within that section of the LCQ. With the items assessing reported practices, teachers scored a mean of 36.79 ($SD = 6.47$) out of 48 possible points. In regards to practices, a couple of teachers reported always using each of the practices listed. Overall, teachers scored a mean of 64.18 ($SD = 7.94$) points out of a possible 90 points (see Table 2).

Table 2

Descriptive statistics of beliefs, practices and total LCQ score by year

Variables	Combined Group (<i>n</i> = 119)			Year 1 (<i>n</i> = 55)			Year 2 (<i>n</i> = 64)		
	Mean	<i>SD</i>	Range	Mean	<i>SD</i>	Range	Mean	<i>SD</i>	Range
LCQ Total	64.18	7.94	37 – 80	68.01	6.16	51 – 80	60.89	7.86	37 – 77
Beliefs	27.40	3.57	18 – 37	27.76	3.56	20 – 36	27.09	3.60	18 – 37
Practices	36.79	6.47	15 – 48	40.25	4.80	30 – 40	33.80	6.26	15 – 47
DLL Hours (<i>n</i> = 106)	63.16	98.68	0 – 300	37.83	65.70	0 – 300	79.78	112.75	0 – 300
DLL Years	8.92	7.57	0 – 37	10.47	7.92	0 – 35	7.59	7.06	0 – 37
% of DLLs in class	60.71	26.88	0 – 100	69.45	25.23	0 – 100	53.20	26.15	0 – 100

Ethnicity									
Caucasian	65.3%			47.3%			79.7%		
Latino/Hispanic	22.9%			34.2%			12.5%		
Black/African American	5.9%			9.3%			3.1%		
Native American	1.7%			3.7%			0%		
Multi-racial	1.7%			1.9%			1.9%		
Asian/Pacific Islander	0.8%			1.9%			0%		
Other	1.7%			0%			3.1%		

Educational Level									
High School/GED	6.7%			12.7%			1.6%		
Associate's	11.8%			20.2%			4.7%		
Bachelor's	66.4%			58.2%			73.4%		
Graduate	15.1%			9.1%			20.3%		

The number of hours of training teachers reported to have received regarding working with dual language learners and/or cultural competency varied greatly from 0 to 300 hours. The mode was zero hours with 35 teachers (33%) reporting no training in the area whatsoever. Although 13 teachers (10.9%) reported 300 training hours, the majority of teachers (84.9%) received less than 100 hours of training to work with this at-risk population. The percent of DLLs in each classroom ranged from 0 to 100 with a mean of 60.71% (see Table 2). The mode percentage was 100%.

The demographics of teachers were also divided by year of participation in the study. During the Spring of 2009, 55 teachers returned the LCQ. These teachers obtained a higher mean for both the LCQ practice and total score. Teachers in this first sample therefore reported more implementation of best practices for working with DLLs in their classrooms. This first group had a greater representation of Latino/Hispanic teachers and less Caucasian teachers than the overall group. The 42 teachers who reported the number of training hours for working with DLLs averaged 37.83 hours. This mean was almost half the hours as that of the overall group. In regards to years working with DLLs, this group averaged about 1.5 years more than the total sample. Year one teachers also reported having obtained less education with a greater percentage reporting their highest degree as high school/GED or Associate's degree.

Sixty-four teachers returned surveys during the spring of 2010, the second year of data collection. This group was more homogenous and consisted of 80% Caucasian teachers with almost 95% having at least a Bachelor's degree. The mean for the total belief score was about the same as the combined group but the practices and LCQ total score was somewhat lower. The second year teachers reported more hours of training in

working with DLLs with a mean of 80 hours. The second year teachers also had less years of experience with DLLs with a mean of 7.59 years ($SD = 7.06$).

Sixty two percent of classrooms were comprised of at least half of the students being DLLs (see Table 3). In other words, about 74 of the 119 teachers surveyed had a majority of DLLs in their classroom. About 90% of teachers reported that 1 in 5 students in their classroom were DLLs. As a result, the documented increase in this population of learners previously mentioned in the literature is clearly apparent with this study (U.S. DOE & NICHD, 2003).

Table 3

Frequency of percentages of DLLs in classrooms (n = 119)

%	Frequency	Cumulative%	%	Frequency	Cumulative %
0	3	2.5	56	2	46.2
5	1	3.4	58	2	47.9
6	1	4.2	59	1	48.7
11	2	5.9	60	1	49.6
16	2	7.6	61	2	51.3
17	1	8.4	63	2	52.9
19	1	9.2	64	1	53.8
20	1	10.1	65	2	55.5
22	1	10.9	67	5	59.7
29	1	11.8	68	2	61.3
33	1	12.6	69	1	62.2
34	1	13.4	70	1	63.0
35	1	14.3	72	3	65.5
36	1	15.1	75	1	66.4
37	1	16.0	78	1	67.2
38	2	17.6	79	2	68.9
39	5	21.8	80	3	71.4
40	3	24.4	83	4	74.8
41	2	26.1	85	2	76.5
42	4	29.4	88	1	77.3
43	2	31.1	89	3	79.8
44	1	31.9	90	5	84.0
47	4	35.3	93	1	84.9
50	3	37.8	94	5	89.1
53	4	41.2	95	3	91.6
55	4	44.5	100	10	100.0

The specific amounts of DLLs in each classroom are displayed according to the year of participation in Table 4. Teachers had as little as 7 and as many as 22 students in their classroom. The number of DLLs in each classroom ranged from 0 to 20 students.

Year one teachers had greater percentages of DLLs in their classrooms with a mean percentage of 69.45% as compared to a mean percentage of 53.20% for the second year surveyed.

Table 4
Number of DLLs in classrooms each year

Teacher ID	#of DLLs/ # of students	% of DLLs	Teacher ID	#DLLs/ # of students	% of DLLs
Year 1					
1	9/14	64	29	18/20	90
2	9/13	69	30	18/20	90
3	18/20	90	31	17/18	94
4	13/18	72	32	11/18	61
5	10/18	56	33	13/18	72
6	9/18	50	34	15/18	83
7	19/20	95	35	11/20	55
8	9/19	47	36	18/18	100
9	12/20	60	37	15/15	100
10	3/19	16	38	7/17	41
11	12/19	63	39	12/18	67
12	6/12	50	40	6/18	33
13	13/20	65	41	16/18	89
14	8/20	40	42	15/18	83
15	8/20	40	43	16/18	89
16	0/20	0	44	11/17	65
17	11/20	55	45	4/20	20
18	19/20	95	46	17/18	94
19	18/20	90	47	17/20	85
20	16/16	100	48	6/14	43
21	12/15	80	49	16/20	80
22	10/12	83	50	19/20	95
23	12/18	67	51	17/20	85
24	9/9	100	52	11/20	55
25	15/16	94	53	15/18	83
26	12/15	80	54	13/18	72
27	0/20	0	55	15/20	75
28	15/15	100			

Teacher ID	#of DLLs/ # of students	% of DLLs	Teacher ID	#DLLs/ # of students	% of DLLs
Year 2					
56	3/18	17	89	11/19	58
57	5/14	36	90	1/18	6
58	11/19	58	91	8/15	53
59	8/18	44	92	17/18	94
60	6/17	35	93	14/15	93
61	7/18	39	94	12/19	63
62	3/7	43	95	20/20	100
63	3/19	16	96	15/19	79
64	10/17	59	97	15/19	79
65	18/18	100	98	14/20	70
66	4/18	22	99	0/20	0
67	12/18	67	100	3/16	19
68	15/18	88	101	13/19	68
69	14/18	78	102	9/19	47
70	7/18	39	103	8/19	42
71	12/18	67	104	10/18	56
72	12/18	67	105	9/22	41
73	2/18	11	106	19/19	100
74	13/19	68	107	9/19	47
75	2/19	11	108	11/22	50
76	7/18	39	109	16/18	89
77	18/20	90	110	6/16	38
78	20/20	100	111	1/19	5
79	7/18	39	112	8/16	50
80	9/19	47	113	10/19	53
81	8/19	42	114	11/20	55
82	17/18	94	115	8/19	42
83	6/16	38	116	10/19	53
84	11/18	61	117	6/21	29
85	6/15	40	118	7/19	37
86	7/18	39	119	9/17	53
87	8/19	42			
88	17/17	100			

The demographic characteristics of the teachers scoring within the top, middle, and bottom of the beliefs, practices, and LCQ total scores are displayed in Tables 5-7 for a visual comparison. The *n*'s differed with some demographic variables in order to include all the teachers who obtained a score at the designated cutoff. Nevertheless, efforts were made to keep the groups as close to the top and bottom 10 scorers for each section.

Table 5
Demographics of teachers according to LCQ beliefs scores

Variable	Top	Middle	Bottom
LCQ Beliefs: Mean (<i>SD</i>)	34.70 (1.25)	27.29 (2.40)	21.20 (1.32)
Range	33 - 37 <i>n</i> = 10	23 - 32 <i>n</i> = 99	18 - 22 <i>n</i> = 10
DLL Hours: Mean (<i>SD</i>)	116.25 (152.26)	56.40 (88.56)	80.20 (128.42)
Range	0 - 300 <i>n</i> = 8	0 - 300; outliers = 180, 260, 300(8) <i>n</i> = 88	0 - 300 <i>n</i> = 10
DLL Years: Mean (<i>SD</i>)	9.40 (7.90)	8.59 (7.13)	11.80 (11.20)
Range	2 - 25; outlier = 25 <i>n</i> = 10	0 - 35; outliers = 30, 35 <i>n</i> = 99	3 - 37; outlier = 37 <i>n</i> = 10
Ethnicity	<i>n</i> = 10	<i>n</i> = 98	<i>n</i> = 10
Caucasian	70% <i>n</i> = 7	64.29% <i>n</i> = 63	70% <i>n</i> = 7
Latino/Hispanic	20% <i>n</i> = 2	24.49% <i>n</i> = 24	10% <i>n</i> = 1
Black/African American	10% <i>n</i> = 1	5.10% <i>n</i> = 5	10% <i>n</i> = 1
Asian/Pacific Islander	0%	1.02% <i>n</i> = 1	0%
Native American	0%	1.02% <i>n</i> = 1	10% <i>n</i> = 1
Multi-racial	0%	2.04% <i>n</i> = 2	0%
Other	0%	2.04% <i>n</i> = 2	0%
Educational Level			
High School/GED	0%	7.07% <i>n</i> = 7	10% <i>n</i> = 10
Associate's	10% <i>n</i> = 1	13.13% <i>n</i> = 13	0%
Bachelor's	70% <i>n</i> = 7	65.66% <i>n</i> = 65	70% <i>n</i> = 7
Graduate	20% <i>n</i> = 2	14.14% <i>n</i> = 14	20% <i>n</i> = 2

The top 10 scoring teachers within the beliefs section obtained a mean of 34.70 that was an average of 7.3 points above the combined group. Eight of these teachers reported the hours of training for working with DLLs and they averaged 116.25 hours. These teachers taught for a mean of 9.4 years, which was only about a half year more than the combined group. Their ethnic identity and education level paralleled that of the combined group. The 10 lowest scoring teachers had a mean of 21.20 that was an average of 6.2 points lower than the combined group. The ethnic makeup also approximated that of the overall population. In regards to level of education, only one of the 10 teachers had less than a Bachelor's degree.

Table 6

Demographics of teachers according LCO practices scores

Variable	Top	Middle	Bottom
LCQ Practices: Mean (<i>SD</i>)	46.23 (1.09)	36.82 (4.60)	24.10 (4.12)
Range	45 - 48 <i>n</i> = 13	29 - 44 <i>n</i> = 96	15 - 28 <i>n</i> = 10
DLL Hours: Mean (<i>SD</i>)	66.27 (86.58)	47.60 (83.26)	192.00 (140.85)
Range	0 – 300; outlier = 300 <i>n</i> = 11	0 – 300; outliers = 180(2), 260, 300(6) <i>n</i> = 85	0 - 300 <i>n</i> = 10
DLL Years: Mean (<i>SD</i>)	15.38 (11.79)	8.48 (6.72)	4.80 (3.08)
Range	2 – 37; outliers= 35, 37 <i>n</i> = 13	0 - 27 <i>n</i> = 96	0 - 10 <i>n</i> = 10
Ethnicity	<i>n</i> = 13	<i>n</i> = 95	<i>n</i> = 10
Caucasian	30.77% <i>n</i> = 4	66.32% <i>n</i> = 63	100% <i>n</i> = 10
Latino/Hispanic	38.46% <i>n</i> = 5	23.16% <i>n</i> = 22	0%
Black/African American	7.69% <i>n</i> = 1	6.32% <i>n</i> = 6	0%
Asian/Pacific Islander	7.69% <i>n</i> = 1	0%	0%
Native American	7.69% <i>n</i> = 1	1.05% <i>n</i> = 1	0%
Multi-racial	7.69% <i>n</i> = 1	1.05% <i>n</i> = 1	0%
Other	7.69% <i>n</i> = 1	2.11% <i>n</i> = 2	0%
Educational Level			
High School/GED	7.69% <i>n</i> = 1	7.29% <i>n</i> = 7	0%
Associate’s	23.08% <i>n</i> = 3	11.46% <i>n</i> = 11	0%
Bachelor’s	53.85% <i>n</i> = 7	66.67% <i>n</i> = 64	80% <i>n</i> = 8
Graduate	15.38% <i>n</i> = 2	14.58% <i>n</i> = 14	20% <i>n</i> = 2

The top 13 scoring teachers within the practices section obtained a mean of 46.23 that was an average of 9.4 points above the combined group. Eleven of these teachers reported the hours of training for working with DLLs and they averaged 66.27 hours that was almost the same as the combined group. These teachers taught for a mean of 15.38 years, which was about 6.5 more years than the combined group. Their ethnic identities were less Caucasian and had more Latino/Hispanic and ethnic minority representation.

In regards to education level, there was more representation among teachers with less than a Bachelor's than the combined group. The 10 lowest scoring teachers had a mean of 24.10 that was an average of 12.69 points lower than the combined group. The ethnic makeup was 100% Caucasian. In regards to level of education, all the teachers had at least a Bachelor's degree.

Table 7
Demographics of teachers according to LCQ total scores

Variable	Top	Middle	Bottom
LCQ Total: Mean (<i>SD</i>)	76.64 (1.96)	64.42 (5.50)	48.10 (4.31)
Range	74 - 80	53 - 73.08	37 - 52 outlier = 37
	<i>n</i> = 11	<i>n</i> = 98	<i>n</i> = 10
DLL Hours: Mean (<i>SD</i>)	111.30 (133.49)	44.67 (76.96)	174.00 (142.69)
Range	0 - 300	0 - 300; outliers = 180, 260, 300(5)	0 - 300
	<i>n</i> = 10	<i>n</i> = 86	<i>n</i> = 10
DLL Years: Mean (<i>SD</i>)	10.09 (8.85)	9.17 (7.71)	5.20 (2.53)
Range	0 - 30	0 -37; outliers = 35, 37	2 - 10
	<i>n</i> = 11	<i>n</i> = 98	<i>n</i> = 10
Ethnicity	<i>n</i> = 11	<i>n</i> = 97	<i>n</i> = 10
Caucasian	45.5%	64.95%	90%
	<i>n</i> = 5	<i>n</i> = 63	<i>n</i> = 9
Latino/Hispanic	45.5%	21.65%	10%
	<i>n</i> = 5	<i>n</i> = 21	<i>n</i> = 1
Black/African American	0%	7.22%	0%
		<i>n</i> = 7	
Asian/Pacific Islander	0%	1.03%	0%
		<i>n</i> = 1	
Native American	9%	1.03%	0%
	<i>n</i> = 1	<i>n</i> = 1	
Multi-racial	0%	2.06%	0%
		<i>n</i> = 2	
Other	0%	2.06%	0%
		<i>n</i> = 2	
Educational Level		(<i>n</i> = 98)	
High School/GED	9.09%	7.14%	0%
	<i>n</i> = 1	<i>n</i> = 7	
Associate's	9.09%	13.27%	0%
	<i>n</i> = 1	<i>n</i> = 13	
Bachelor's	63.64%	65.31%	80%
	<i>n</i> = 7	<i>n</i> = 64	<i>n</i> = 8
Graduate	18.18%	14.29%	20%
	<i>n</i> = 2	<i>n</i> = 14	<i>n</i> = 2

The top scoring teachers within the LCQ total obtained a mean of 76.64 that was an average of 12.46 points above the combined group. Ten of these teachers reported the hours of training for working with DLLs and they averaged 111.30 hours that was almost double that of the combined group. These teachers taught for a mean of 10.09 years, which was about a year more than the combined group. Their ethnic identities were again less Caucasian and mainly more Latino/Hispanic representation. Level of education approximated that of the combined group. The 10 lowest scoring teachers had a mean of 48.10 that was an average of 16.08 points lower than the combined group. The ethnic makeup was 90% Caucasian and 10% Latino/Hispanic. In regards to level of education, all the teachers had at least a Bachelor's degree.

The majority of teachers (57%) answered a little over half of the belief items within the desirable range (see Table 6). Almost half (43%) of the belief questions were not answered within the desirable range by at least 75% of teachers. Abbreviated versions of the items will follow to assist with the discussion of the items. Less than half of the teachers answered the following items within the desirable range: 1. Easy learn second language, 7. Long time learn second language, and 12. English learning same as other. In comparison, only 25% of the practice items were not answered within the desirable range by at least 75% of the teachers. The majority of teachers endorsed utilizing almost all of the best practices at least often. The following classroom practices were identified by teachers as not being used as often as desirable: 17. Use keywords from parents, 24. Attend cultural festival/community activities, 27. Informed of bilingual program options, 28. Invite parents' use language in class.

Table 8

Percentages of teachers answering within desirable range (n = 119)

Item	%	Item	%
1. Easy learn second language	19.3	15. Collect home language info	91.6
2. American values program best	83.2	16. Use body language/gestures	95.0
3. All know children language learning	88.2	17. Use keywords from parents	50.4
4. Same program even not bilingual	73.1	18. Include books reflecting language/culture	79.0
5. English only school language	83.1	19. Plan activities for bilingual participation	96.7
6. Parents not fluent help in English	70.6	20. Ensure bilingual interaction with English speaking	100
7. Long time learn second language	10.9	21. Keep bilingual language skill notes	76.5
8. Help children become bicultural	94.9	22. Talk with parents of bilingual language goals	79.9
9. Share home languages with class	87.4	23. Effort learning second language process	84.0
10. Not worth talking non-fluent parents	96.6	24. Attend cultural festival/community activities	35.3
11. Parents continue home language	96.7	25. Encourage first language at home	90.8
12. English learning same as other	42.8	26. Plan language development activities for all	92.4
13. Exposed other languages/cultures	99.2	27. Informed of bilingual program options	68.9
14. More bilinguals, more special education	72.3	28. Invite parents use language in class	49.6
		29. Provide safe places	76.5
		30. Make bilingual parents welcome	99.2

Note. Bolded items represent items which less than 75% of teachers answered within the desirable range. Items are abbreviated from original.

Reliability

In order to obtain a second assessment of reliability for the LCQ, Cronbach's alpha was calculated for the belief items, practice items, and for the measure as a whole.

Adequate reliability was obtained for the practices items and the measure overall.

Nevertheless, reliability was found to not be adequate for the belief items ($\alpha = .50$). Item

to scale reliabilities were calculated and four belief items (1, 4, 7, 12) were found to be

the least reliable items within the belief section of the LCQ. Questions 1, 7 and 12 are

related to the process of second language learning. Question 4 is related to what

educational program is best for bilingual students. Due to the low reliabilities, these

items were removed and new reliabilities were calculated for the beliefs section and for

the LCQ overall. Without these items, the reliability of the beliefs items produced an acceptable alpha of .70. In general, the practice items demonstrated higher reliabilities than the belief items. A summary of reliabilities can be found in Table 9.

Table 9

Reliability of Language and Culture Questionnaire (LCQ)

Section of test	Cronbach's alpha	Items
Belief items	.50 (.70)	14 (10)
Practice items	.83	16
LCQ Overall	.77 (.84)	30 (26)

Note. Values enclosed in parentheses represent the belief items after removal of inadequate belief items.

Test re-test reliability was calculated with the 12 teachers who completed the LCQ both of the years it was administered. The beliefs items resulted in a correlation of .69. It turned out to be the most reliable section of the LCQ. The practices items resulted in a correlation of .60. Overall, the measure produced a correlation of .64. The means, standard deviations and ranges for each of the sections across the years can be found in Table 10.

Table 10

Descriptive statistics of beliefs, practices, and total LCQ scores by year for repeat teachers (n = 12)

Variables	Year 1			Year 2		
	Mean	SD	Range	Mean	SD	Range
LCQ Total	69.67	6.13	59 – 80	68.83	5.56	60 – 79
Beliefs	29.67	3.65	23 – 35	27.33	4.10	21 – 34
Practices	40.00	4.13	33 – 45	41.50	4.62	33 – 47

Exploratory Factor Analyses

Mplus software (Version 6) was used to conduct the exploratory factor analysis. Of the 120 teachers who completed the questionnaire, one had to be excluded for returning the questionnaire blank. As a result, 119 teachers were used for the factor

analyses. A maximum likelihood estimator was used for factor extraction. An oblique rotation was designated for the factor rotation because of the expected correlations among the factors. Factor solutions ranging from one to six factors were examined.

Out of the analyses conducted with up to six factors, the model that extracted three factors provided the most parsimonious and best fitting model. According to the sample correlation matrix, the first three factors account for the greatest amount of variance. Nevertheless, upon further analysis, none of the loadings on the third factor were above .34. In addition, although there were 10 eigenvalues over 1, the scree plot suggested two factors. Therefore, the eigenvalues and scree plot suggest two underlying factors make up the LCQ.

While two factors were not found to produce ideal fit statistics, they were found to produce acceptable fit. The chi-square value was 547.28 ($p < .0001$, $df = 376$), and although the Comparative Fit Index (CFI) and Tucker Lewis Index (TLI) scores were somewhat lower than desirable with a CFI of .76 and a TFI of .72, the remaining fit indices met the acceptable values endorsed by Hu and Bentler (1999) and Brown (2006) with a root mean square error of approximation (RMSEA) of $\leq .06$ and Standardized Root Mean Square Residual (SRMR) $\leq .08$. The RMSEA was .06 and the SRMR had a value of .07.

The factor loadings and factor structure suggest that the first factor may indeed be measuring language and culture beliefs considering that the strongest loadings were mainly belief items except for the following items: 17. Use key words from parents, 18. Include books reflecting, 25. Encourage first language at home, 28. Invite parents use language in class, and 29. Provide safe places. The second factor is more in line with

measuring practices. All practice items had strong loadings, except for item 26. Plan language development activities for all, with a moderate loading of .26. The following items: 16. Use body language/gestures, 20. Ensure bilingual interaction with English speaking, and 30. Make bilingual parents welcome, had smaller loadings of .19, .11 and .12, respectively (See Table 11).

Table 11

Two-factor solution using maximum likelihood estimator

Item	Factor I	Factor II
1. Easy learn second language	-0.233	-0.348
2. American values program best	0.314	-0.213
3. Everyone know children language learning	0.419	0.295
4. Same program even not bilingual	-0.089	-0.279
5. English only school language	0.303	0.008
6. Parents not fluent help in English	0.603	0.248
7. Long time learn second language	-0.289	-0.213
8. Help children become bicultural	0.336	0.045
9. Share home languages with class	0.408	0.219
10. Not worth talking non-fluent parents	0.389	0.108
11. Parents continue home language	0.637	0.215
12. English learning same as other	-0.179	-0.372
13. Exposed other languages/cultures	0.581	0.212
14. More bilinguals, more special education	0.433	0.055
15. Collect home language info	0.285	0.475
16. Use body language/gestures	0.242	0.193
17. Use keywords from parents	0.450	0.511
18. Include books reflecting language/culture	0.490	0.544
19. Plan activities for bilingual participation	0.294	0.356
20. Ensure bilingual interaction with English speaking	0.134	0.112
21. Keep bilingual language skill notes	0.084	0.619
22. Talk with parents of bilingual language goals	0.189	0.674
23. Effort learning second language process	0.289	0.720
24. Attend cultural festival/community activities	0.203	0.621
25. Encourage first language at home	0.566	0.450
26. Plan language development activities for all	0.334	0.256
27. Informed of bilingual program options	0.179	0.463
28. Invite parents use language in class	0.392	0.583
29. Provide safe places	0.373	0.368
30. Make bilingual parents welcome	0.132	0.119

Note. Bold indicates a salient (> .34)loading.

One of the main goals of this study was to examine the underlying factor structure of the Language and Culture Questionnaire (LCQ). Results of the EFA demonstrated that a two-factor model best fit the data from this sample of pre-kindergarten and kindergarten teachers. The first factor consisted of 8 of the 14 beliefs items. The second factor consisted of 12 of the 16 practices items. There was a low correlation (.35) between Factor I and Factor II.

The researcher began to explore the first research question by analyzing the factor loadings and factor structure of each of the LCQ items. The first factor was named “beliefs” because a little over half of the intended beliefs items loaded sufficiently on this factor. Eight of the 14 belief items had adequate factor loadings. Four of the intended belief items (1, 4, 7, and 12) had negative loadings with the belief factor. Such a finding makes it more difficult to interpret the implications of teacher responses since the majority of teachers did not answer within the desirable range. Two remaining belief items (2. American values program best and 5. English only school language) had sub-optimal loadings on the belief factor, .32 and .30, respectively.

The second factor was named “practices” because 12 of the 16 intended practice questions adequately loaded on this factor. The remaining 4 items (16. Use body language/gestures, 20. Ensure bilingual interaction with English speaking, 26. Plan language activities for all, and 30. Make bilingual parents welcome) had positive although sub-optimal loadings within the practices factor. In summary, based on fit indices, number of eigenvalues, dual loadings, and lack of a simple factor structure, the EFA did not clearly reveal the expected factors of beliefs and practices.

Correlation Analyses

Pearson's correlation calculated with the complete 30-item LCQ between the beliefs and practices items was $r = .18, p = .05$. As a result, how teachers performed on the belief items was found to not necessarily be related with how they performed on the practice items. A subsequent Pearson's correlation was calculated with the 26-item LCQ that excluded the four unreliable belief items. The correlation between the 10 belief items and the 16 practice items was found to be statistically significant ($r = .39, p < .01$). Therefore, after these items were removed how teachers performed on the beliefs section was found to be related with how they performed on the practice items. Pearson's correlations were also calculated between each of the teacher demographic variables and teacher's beliefs, practices and total LCQ scores.

As illustrated in Table 12, three of the demographic variables were significantly correlated amongst each other. Years working with DLLs were significantly correlated with total LCQ 30-item scores. There was a negative significant correlation between level of education and total LCQ score. None of the demographic variables were correlated to teachers' LCQ beliefs score but all were significantly correlated to their LCQ practices score. Educational level was significantly correlated with ESOL certification. ESOL certification was also correlated with years working with DLLs and hours of training regarding DLLs or cultural competency.

Table 12

Correlations between demographic variables and LCQ total score (n = 103)

	LCQ Total	LCQ Beliefs	LCQ Practices	EDULEVEL	ESOL	DLL Hrs	DLL Yrs
LCQ Total	1						
EDULEVEL	-.215*	-.099	-.214*	1			
ESOL	-.130	.041	-.183*	.383***	1		
DLL Hrs	-.135	.074	-.206*	.104	.289**	1	
DLL Yrs	.223*	.015	.269**	-.002	.185*	-.057	1

Note. * $p < .05$ ** $p < .01$ *** $p < .001$; EDULEVEL = Educational Level; ESOL = ESOL certification; DLL Hrs = Hours in working with DLLs training; DLL Yrs = Years working with DLLs.

Correlations were also conducted excluding the four items within the beliefs section that demonstrated poor reliabilities (see Table 13). In comparison to the full version of the LCQ, this shorter version resulted in greater significance between a couple of the independent variables and the total LCQ score. Specifically, level of education showed a stronger negative correlation with LCQ total score. Years working with DLLs also demonstrated a stronger relationship with LCQ total score. Within the beliefs scores, removing the least reliable items resulted in significant findings between the same independent variables and teachers' total belief score. That is, educational level was negatively correlated and years working with DLLs were positively correlated to total beliefs score.

Table 13

Correlations between demographic variables and LCQ total score with unreliable belief items removed (n = 103)

	LCQ Total	LCQ Beliefs	LCQ Practices	EDULEVEL	ESOL	DLL Hrs	DLL Yrs
LCQ Total	1						
EDULEVEL	-.248**	-.222*	-.214*	1			
ESOL	-.153	-.038	-.183*	.383***	1		
DLL Hrs	-.158	-.006	-.206*	.104	.289**	1	
DLL Yrs	.267**	.166*	.269**	-.002	.185*	-.057	1

Note. * $p < .05$ ** $p < .01$ *** $p < .001$.

Multiple Regression

Multiple linear regressions were employed to help determine which teacher demographic variables could be used to predict scores on the LCQ. The demographic variables of interest in this study included teachers' educational level, ESOL certification, number of years working with dual language learners, and hours involved in trainings for working with dual language learners/cultural competency. Since no *a priori* hypotheses had been made to determine the order of entry of the predictor variables, a direct method was used for the multiple linear regression analyses.

Assumptions. Multiple regression analyses are based on several assumptions and the data were examined in order to justify the use of such procedures. The assumptions that errors are independent, normally distributed, and with constant variance were explored with residual plots (Stevens, 1999). Graphical displays of the residuals against predicted values were created for the demographic variables with the LCQ section and total scores. Homoscedasticity was examined with these scatterplots that indicated reasonable consistency of spread through the distributions.

Collinearity, the undesirable circumstance where high correlations exist between the independent variables, was examined. Tolerance statistics were calculated for each of the models. This value indicates the proportion of variance that is not accounted for by other variables in the model (Kinnear & Gray, 2006). Another measure of collinearity that was computed was the variance inflation factor (VIF). Neither one of these collinearity gauges revealed that intercorrelations among the predictors were problematic.

Histograms for each variable were also examined. The number of years working with DLLs and the number of hours involved in trainings for working with DLLs were

both moderately positively skewed. As a result, natural log transformations of these scales were computed. The regression analyses were conducted using both the transformed and nontransformed scores and no drastic differences were noted between the results. For purposes of simplicity, only the nontransformed scores are reported hereafter.

In regards to the beliefs score, none of the four demographic variables was a significant predictor with the multiple linear regression that produced an adjusted R^2 of .02 ($F = .532, p = .71$). Nevertheless, caution should be taken with the interpretation of these results because of the low reliability of these belief items. Multiple regressions with the unreliable items removed can be found later in this chapter. For the practices LCQ score, the four demographic variables produced an adjusted R^2 of .13 ($F = 4.73, p < .01$). The only significant predictor was the number of years working with DLLs (LCQ practices, $\beta = .29, p < .01$). Finally, the total LCQ score yielded an adjusted R^2 of .08 ($F = 3.05, p < .05$). Again, the number of years working with DLLs was the only significant predictor of total LCQ scores (LCQ total, $\beta = .23, p < .05$).

Table 14

Multiple linear regression for variables predicting LCQ beliefs score (n = 103)

Variable	B	SE B	β
Educational level	-.645	.524	-.134
ESOL certification	.495	.797	.072
DLL training hours	.002	.004	.068
DLL working years	.002	.045	.005

Note. $R_{adj} = .02$

Table 15

Multiple linear regression for variables predicting LCQ practices score (n = 103)

Variable	B	SE B	β
Educational level	-1.33	.920	-.145
ESOL certification	-1.86	1.400	-.142
DLL training hours	-.009	.006	-.134
DLL working years	.236	.078	.287**

Note. $R_{adj} = .13$, ** $p < .01$.

Table 16

Multiple linear regression for variables predicting LCQ total score (n = 103)

Variable	B	SE B	β
Educational level	-1.97	1.18	-.174
ESOL certification	-1.36	1.79	-.084
DLL training hours	-.006	.008	-.079
DLL working years	.238	.100	.233*

Note. $R_{adj} = .08$, * $p < .05$

The four belief items with poor reliabilities were removed to conduct the multiple regressions again. The multiple linear regression for the belief items produced an adjusted R^2 of .04 ($F = 2.06$, $p = .09$). Using the 10 most reliable belief items resulted in level of education becoming a significant negative predictor of total belief score (LCQ beliefs, $\beta = -.23$, $p < .05$). As a result, it turns out that for this sample the less education a teacher had, the more likely she was to obtain a higher score on the beliefs section of the LCQ.

Table 17

Multiple linear regression for variables predicting 10-item beliefs score (n = 103)

Variable	B	SE B	β
Educational level	-1.08	.496	-.229
ESOL certification	.089	.756	.013
DLL training hours	.001	.003	.023
DLL working years	.070	.042	.164

Note. $R_{adj} = .04$.

When the multiple regression was run without the four beliefs items, the total LCQ score yielded an adjusted R^2 of .12 ($F = 4.48, p < .01$). Again, the number of years working with DLLs was the only significant predictor of total LCQ scores. Nevertheless, greater significance was obtained with these 26 items (LCQ total, $\beta = .28, p < .01$).

Table 18

Multiple linear regression for variables predicting total 26-item LCQ total score (n = 103)

Variable	B	SE B	β
Educational level	-2.41	1.22	-.199
ESOL certification	-1.77	1.86	-.102
DLL training hours	-.008	.009	-.093
DLL working years	.306	.104	.281**

Note. $R_{adj} = .12, **p < .01$

Summary

Conducting an exploratory factor analysis to observe the possible underlying factors within the LCQ did not clearly reveal the expected factors of beliefs and practices. Four items (1, 4, 7, and 12) negatively loaded on the belief factor, making it difficult to determine the implications of teachers' responses. The reliability of the measure was concerning given the low Cronbach's alphas and correlation coefficients of the test re-test. Subsequent multiple regression analyses were conducted with and without the least

reliable items. Number of years working with DLLs was found to be a significant predictor of both practices and LCQ total score. No significant predictors were found with the 14-item belief section but level of education was a significant negative predictor of beliefs scores with the 10-item beliefs section.

Chapter 5:

Discussion

How to best educate our dual language learners is one of the least understood issues within our pre-K-12 educational system (Garcia & Kleifgen, 2010). The Language and Culture Questionnaire was developed with the aim of assessing what understanding teachers have in regards to dual language learners and to determine whether or not they are employing best practices in their classrooms. In this present study, the LCQ was administered to pre-kindergarten and kindergarten teachers in Florida who worked with dual language learners during the spring of 2009 or the spring of 2010.

One of the main goals of this study was to explore the number of underlying factors within the LCQ. Another main goal was to examine whether any teacher characteristics predicted scores on the LCQ. Throughout this chapter, a summary of the findings along with implications for research and practice are discussed.

Summary of Findings

Prior to beginning to explore the first research question, the reliability of the LCQ was examined. Reliability estimates paralleled that of Paez and Tabors (2000) who found lower reliabilities for the beliefs section of the LCQ than for the practices section. Exact comparisons cannot be made because items that were used and thought to be inadequate with the Paez and Tabors (2000) study were removed from the LCQ version used for this study. Due to the low reliability of the beliefs section, all subsequent results should be

interpreted with caution. Low reliabilities within the beliefs section made it harder to find relationships because of the random error within that section of the LCQ.

To answer the first research question an exploratory factor analysis (EFA) was conducted. Although the EFA produced a couple of adequate fit indices, the model was not perfect. The model did somewhat separate the belief and practices items as expected. Yet, some of the belief items were also found to load on the practices factor. This makes the correlation observed between the 10-item belief section and the 16-item practice section more apparent. After working to improve the reliability of the measure, a greater sample size is warranted to re-analyze whether the expected factors of beliefs and practices indeed reveal themselves more clearly in revised versions of the LCQ. Suggestions on how to improve the reliability of the measure will follow in the directions for future research section.

Before getting into the discussion of the second research question and highlighting the areas teachers' beliefs and practices were not in line with best practices, the finding that three teachers reported not having any DLLs in their classroom needs to be emphasized. As explained in the methods section, included within the survey packet was a letter specifically telling teachers that they were being targeted for participation in this study because of the fact that they had one or more DLLs in their classroom. Even after this, three teachers continued to remain unaware that they had at least one DLL enrolled in their classroom. The possibility also exists that these three teachers were careless in answering this question.

With that said, let's begin to explore what beliefs and practices the teachers in this sample endorsed. Initially, the beliefs section of the LCQ was designed for each question

to have a matched pair. Since questions were removed from the original LCQ, a couple of questions did not have a matched pair. Nevertheless, the discussion related to the second research question will revolve around analyzing the responses to these matched pairs.

The first and seventh belief questions were among the most frequently answered outside the desirable range with 19.3% answering the first question and only 10.9% answering the seventh question within the desirable range. Although the research literature highlights the strenuous process of learning a second language, the majority of teachers surveyed seemed to view it as an easy process for young children. An alarming 90% of the teachers believe that young children learn to speak a new language within a short period of time. These two questions helped to illustrate the argument made by Tabors (2008) that it is a commonly held belief that young children can learn a second language without much effort. The possibility that teachers interpreted the meaning of certain questions differently from what the researchers intended will be discussed within the implications for research section. Notwithstanding, it is quite surprising that so many teachers answered that they thought learning a second language for children was a relatively short and simple process.

The majority (83.2%) of teachers disagreed that the most appropriate school program for all children is based entirely on American values and ways of doing things. Even more teachers (94.9%) agreed with the matched pair and believe that they can help children from other cultures to become bicultural by respecting their home culture and introducing aspects of American culture. The researcher interpreted these results as

meaning that the remaining 5% of teachers seem to think that simply respecting these children's home culture is too much to ask.

A vast majority (88.2%) of teachers also agreed that everyone in a school should know how children learn a language. Yet, more than half (57.2%) of teachers believe that the process of learning English is remarkably similar for all children no matter what other language they speak. Therefore, this question needs to be further explored to find out why teachers answered this way. One way of doing this may be to follow up this question with one asking about the research regarding linguistically similar languages such as English and Spanish being easier to learn than those that are not linguistically similar such as English and Chinese (Garcia & Kleifgen, 2010).

A little more than a quarter of teachers (26.9%) believe the same program will work for all children, bilingual or not. This exemplifies the inappropriate beliefs discussed by Causey et al. (2000) who stated that inexperienced teachers tend to believe in *absolute democracy* where kids are seen as simply kids regardless of their cultural background and that an effective curriculum will work with all students. The results of the multiple regressions also lend support to this argument because years working with DLLs resulted in higher scores on the LCQ. It seems the more years of experience teachers have in working with DLLs, the better they understand their academic demands. It would be interesting to follow up this question by asking these same teachers whether they have ever referred for a special education evaluation. If they have referred at least one child then these teachers do not have a clear understanding of what is being asked by this fourth belief question of the LCQ.

A similar response rate was obtained for belief question 14 that was the matched pair with this fourth question just discussed in the previous paragraph. Almost the exact percentage of teachers (27.7%) believes that more bilingual education equates with a greater need for special education services. This finding adds support to the research of Artiles et al. (2005), which explained how DLLs are especially at risk of being placed in special education programs because of their low levels of English language proficiency.

Almost 17% of teachers believe that English should be the only language spoken during school-sponsored activities. Yet, just one teacher did not believe that all children should be exposed to materials from other languages and cultures. It would be interesting to explore why some teachers believe children should be exposed to materials from other languages and cultures but at the same time feel that English should be the only language spoken during school-sponsored activities.

About 30% of teachers expressed a belief that parents whose first language is not English should speak English at home to help their child learn it as quickly as possible. This is a common misconception. This question highlights that teachers currently in the field still hold an ideology that languages other than English are a problem for schooling (Hornberger, 2003). On the other hand, almost all teachers (96.7%) believe that parents should continue to speak their home language with their children. Therefore, the researcher believes the gap in knowledge seems to arise in teachers understanding that parents cannot offer the necessary language stimulation in English when parents are themselves not fluent in English (NICHD ECCRN & Duncan, 2003).

Almost 13% of teachers believe that it is not important to share information about home languages with all the other children in the classroom. Asking teachers whether

they believe children in their classrooms should be aware of why some peers may not be able to communicate effectively with them would be a good follow up question. It may also be beneficial to expose these teachers to the research of Hirschler (1994) who provided English speakers with strategies on how to help DLLs in order to provide the DLLs with more opportunities for contextualized language than the teachers could have provided alone.

Finally, the vast majority of teachers believe attempts should be made to communicate with parents who speak a different language (96.6%). This is a positive finding since Bronfenbrenner (1992) identified the family system as the most influential and proximal system in children's early learning. These last two questions discussed are the ones without matched pairs and thus there are no comparison questions with which to analyze how teachers would have answered if the question were presented differently. In summary, these data point out that a number of questions were not answered by teachers within the desirable range. Since the reliability of the LCQ is not adequate, definite conclusions regarding what beliefs teachers clearly hold cannot be made.

A discussion regarding the best practices for working with DLLs that teachers reported to engage in will follow. A minimum of 75% of teachers reported at least often engaging in all the classroom practices except for the following activities. The least reported activity by teachers (35.5%) included attending cultural festivals and community activities related to the cultures of the children in their classrooms. Meaning that the majority of teachers have not engaged in the strategy recommended by Lynch and Hanson (1998) of participating in the daily life of the culture of interest as a tool for gaining cultural competence. Cultural festivals and community activities are few and far

between. Perhaps the item can be changed to include activities that occur more often in the daily life of the students such as visiting their homes or eating at a restaurant from the culture of the student. At times ordering at ethnic minority restaurants can present teachers with the similar challenges that their DLLs experience each day in their classrooms.

About half of the teachers (49.6%) invite parents and others who speak the languages of children to come to class and use those languages to do activities with the children. Ironically, all but one teacher (99.2%) reported making a special effort to make bilingual parents feel welcome in the classroom. It is somewhat perplexing how practically all teachers reported making a special effort to make parents feel welcome but only half of them have actually invited them to come participate in the class. This question may be followed up with asking whether teachers have faced administrative challenges when inviting parents into the classroom.

About half (50.4%) of the teachers reported that they ask bilingual parents a few key words in their home language to use in the classroom. A little over two-thirds (68.9%) of teachers reported informing themselves about the types of elementary school programs, such as bilingual education, that are available for the children from linguistically and culturally diverse families. These findings somewhat contradict what was expressed by Garcia and Kleifgen (2010) that not enough teachers have a sufficient understanding of the issues surrounding dual language learners. Perhaps it would be better to include items that ask specific questions relating to different bilingual programs rather than just asking teachers whether they sought out this knowledge.

On a positive note, a minimum of 75% of teachers reported using 12 of the 16 practices at least often in their classroom. In regards to home language, teachers (91.6%) seem to be collecting information about students' home language. Teachers are also reporting to be encouraging use of the first language at home (90.8%). These are optimistic findings since NAEYC (1995) stressed the importance of providing parents with information as to how to best support and encourage the use of their home language. To a lesser degree (79.9%), teachers are talking to parents about their children's bilingual language goals.

In regards to classroom activities, 100% of teachers reported ensuring that bilingual students interacted with English speaking classmates. The extent to which this practice is being done effectively, especially for the 10 teachers who reported 100% DLL enrollment, may merit further exploration. A high percentage (92.4%) reported planning language development activities for all children and an even higher percentage (96.7%) reported planning specific activities to promote the participation of bilingual students. A lower percentage (79.0%) of teachers reported including books reflecting the language and culture of the students in their classrooms.

The majority of teachers seemed interested in better understanding their DLLs by engaging in the following activities. A good percentage of teachers (84.0%) reported at least often making an effort to learn about the process of second language learning. About three-quarters of the teachers (76.5%) reported keeping careful notes of the language skills of the children in their classrooms. It would be helpful to collect a sample of such language notes to see whether teachers are collecting the important information highlighted by Tabors (2008).

An overwhelming 95% of teachers reported using body language and gestures at least often to supplement their verbal communication in the classroom. Further examination comparing what teachers think is sufficient use of body language and gestures with what is an ideal use should occur. A discussion related to this issue will follow within the direction for future research section. Finally, a less often practiced (76.5%) strategy is providing children with a quiet safe place where they can go settle down if they feel overwhelmed.

The third research question initially produced some unanticipated findings. Since Paez and Tabors (2000) found that the beliefs and practices sections of the LCQ were correlated, it was surprising to observe that no relationship was found with this sample involving the 30-item version. Nevertheless, as previously mentioned, their study involved more belief items, each of which had a matched pair. The four items that were dropped are important questions that should be included in future versions of the measure due to their value in assessing teachers' second language acquisition knowledge. As a result, ways to improve the reliability of such items should be explored. Ideas for how these items can be improved will follow within the implications for research section.

Prior to answering the fourth question with multiple regression analyses, some simple correlation analyses between the demographic variables were examined. The simple correlations that were observed between the demographic variables were not surprising. Educational level has a degree of relationship with whether or not teachers have ESOL certification because the state of Florida requires a Bachelor's degree or higher when seeking certification. There was also a degree of relationship between ESOL certification and the number of training hours focusing on DLLs. Such a

relationship was also expected because in the process of obtaining ESOL certification, teachers often obtain training in how to work with dual language learners. Finally, the number of years working with DLLs was related to whether or not teachers had ESOL certification. This finding is also logical in expecting more teachers to have a desire to seek certification when they continue to experience a high number of DLLs enrolled in their classrooms year after year.

Basic bivariate correlations between number of years working with DLLs and their practice and total LCQ scores also began to make it apparent that this variable would likely be an important predictor. These initial findings were confirmed with the multiple regression analyses. Number of years working with DLLs was one of the most important predictors of both LCQ practice and LCQ total score. Paez and Tabors (2000) did not find a significant relationship between years in Head Start and LCQ scores. Consequently, teachers are more likely to score better on the LCQ if they have had more years experience with DLLs rather than more years experience teaching in general.

The only additional significant negative predictor of beliefs was level of education. Therefore, one cannot assume that just because teachers hold less than a Bachelor's degree, like many of the pre-kindergarten teachers did, they will not hold the desirable beliefs for working with DLLs. Level of education was not found to be a significant predictor in the Paez and Tabors (2000) study. This may be a result of their lower reliability for the beliefs section ($\alpha = .62$). Level of education was not found to be a significant predictor in this study until the multiple regression was again run with the 10-item beliefs section that had the higher Cronbach's alpha of .70 for the dependent variable.

Although ethnicity and language fluency were not variables explored within the multiple regression of this study, analyses of the demographics of the top ten scoring teachers revealed that there was more language minority representation within this top ten group than that of the greater sample. Specifically, within the top ten LCQ total scoring teachers 45.5% were Latino/Hispanic, in contrast to only 22.9% of the full sample of the 118 teachers who provided their ethnic background. This finding adds support to the research of Lee and Oxelson (2006) that argues that teachers fluent in the home language of their students have better attitudes towards dual language learners and employ more classroom practices for their benefit. These researchers developed a measure quite similar to the LCQ that inquired about K-12 teachers' beliefs, attitudes and practices towards maintaining students' home language in the classroom.

Limitations

The author is aware of certain limitations of this current research study and these limitations will be discussed within this section. Since the LCQ is a self-report measure, it may be biased in the sense that teachers may report using practices in the classroom that are socially desirable instead of what they actually do. Nevertheless, there is reason to believe that these biases may be limited in nature. There is not much known about teacher reporting accuracy when it comes to individual children, but the findings of Stipek and Byler (1997) have revealed that when general classroom practices are evaluated, teachers do report their actual classroom behaviors. These researchers found moderate to large correlations between kindergarten teachers stated beliefs about adequate education and what was observed in their classroom practices (Stipek & Byler, 1997).

Another limitation of this study includes being a secondary data source. As a result, the researcher cannot go back and observe teacher practices to see if teachers did indeed implement some of the classroom practices that they reported to be utilizing. Perhaps the greatest limitation of conducting secondary analyses is that data were not collected to answer the specific research questions of this study (Boslaugh, 2007). Nevertheless, since the primary investigator of the original data source is part of this researcher's committee, caution was taken to not draw research questions that could not be answered with the existing data. Since this questionnaire is the only one of its kind to date, it was greatly beneficial to obtain information regarding its reliability prior to continued use of the measure in its current form.

Nevertheless, conclusions regarding teachers' level of competence in the areas of language and culture should not be made on the sole basis of one measure. All data collection methods have their limitations and attempts should be made to collect multiple sources of information in the future. Obtaining achievement data from students, conducting parent interviews and evaluating teachers over time are extra sources of data that would allow researchers to make clearer links to teachers' level of competence in this area. Case studies and interviews may be one of the most data rich sources that can benefit researchers in the process of developing similar language and cultural competence questionnaires.

An additional limitation is that it became apparent while attempting to make direct comparisons to the Paez and Tabors (2000) study that more questions were used within the beliefs section of their analyses. Their means were higher than the maximum score possible for that section with this version of the LCQ. That was when the

developer of the measure was contacted and it was confirmed that the number of items within the measure was indeed reduced. As a result, the anticipated direct comparisons further analyzing the reliability of the measure could not be completed. Since the LCQ is still in its developmental stages, caution was taken to not make too strong of conclusions with the results just discussed.

It is possible that having conducted the study across two years could be interpreted as a limitation. Notwithstanding, even though the demographics of the two samples of teachers across the years appeared to be different as displayed in Chapter 4, analyses were conducted together because the questions asked in the LCQ are not beliefs and practices that generally change from one year to the next. The differences observed between years were not likely a result of the differences in years but rather a difference in the demographics of the teachers. The descriptive statistics and regression analyses discussed within this study help to point out how these demographic differences were more likely related to the differences in the LCQ scores. Plus, considering these are pre-kindergarten and kindergarten teachers, it was important to analyze as a whole what beliefs they hold and what practices they employ since they are the first teachers these DLLs are exposed to. Inclusion of both years also enabled a more robust sample with which to explore questions.

One of the demographic characteristics that was highlighted to impact teachers' scores on the LCQ was level of education. Unfortunately, more detailed data regarding the depth and coverage of teacher training for working with DLLs was not collected in this study in order to further understand this negative relationship with level of education. However, it also seemed that this finding was confounded with the tendency for teachers

who were less educated to be fluent in both of the languages of their DLLs and these teachers also had more years experience working with DLLs. The opposite was true for the more educated teachers who were often not fluent in the home language of the DLL and had less years experience working with this population.

Implications for Research

The LCQ questions that did not generate good reliabilities should be revised and re-examined. For example, there is a possibility that questions one (easy learning a second language) and seven (long time to learn second language) are poorly written questions. More so because these questions are matched pairs and these were the two questions that most frequently fell within the undesirable range. Responders to question one may interpret it to imply a comparison of the ease of children learning a second language to the ease of adults learning a second language. If so, responders are likely to answer within the undesirable range. Question seven is very open-ended in asking that learning to speak a second language requires a long time. If the five to seven years reported in the research literature (Hakuta, 2001; Thomas & Collier, 2002) are placed in parenthesis after the words a long time, it might help trigger the awareness of those teachers who are up to date on the research to better answer this question. Including a time frame allows the question to be less open-ended because individuals have different conceptualizations of what they believe is a long time.

There are other questions within the LCQ that although the majority of teachers answered within the desirable range, could also be re-examined to obtain further clarity. For example, the second question is a double-barreled question. This occurs when someone asks a question that touches upon more than one issue and only allows for one

answer. Question two asked about American values and ways of doing things. It should perhaps be divided into two different questions to obtain more accurate results. Another solution is that “ways of doing things” is removed to capture only one issue within the question. Question three (everyone know children language learning) may specify exclusion or inclusion criteria for what is meant by the word everyone. It may better read that it is important for everyone (including administrators, teachers and educational support staff) in a school to know how children learn a new language. Or the question could be rephrased to state that it is important for everyone (excluding non-educational staff such as security and janitors) to know how children learn a new language. This may better clarify what is meant by the word everyone within the third item.

The possibility exists that question 17 (use key words from parents) could potentially penalize bilingual teachers. If bilingual teachers already know the language of the child, they do not need to ask parents for key words. Since only 50.4% of teachers reported engaging in this practice, it would be a good idea to assess whether this question was predominantly being answered as desired by monolingual teachers.

Dropping questions 20 (ensure bilingual interaction with English speaking) and 30 (make bilingual parents welcome) from the LCQ should be considered because of their ceiling effects. Since one hundred percent of teachers reported engaging in this practice, it does not discriminate between teachers with varying demographic characteristics. Even the teachers with classrooms with 100% enrollment of DLLs reported being able to accomplish this practice. It is hard for bilingual students not to interact with English speaking students, especially since special area classes (such as art and P. E.) are generally given in conjunction with other students from diverse classes. It

is possible that the question's intent was not captured with the general way it was phrased. Possible rewording of question 20 should be considered. The exception to keeping Question 30 is if the reliability check with parents is incorporated in future studies as discussed in the directions for future research section.

In general, consideration should be taken to refine the LCQ regarding language and culture. This would allow researchers to see whether teachers clearly possess the knowledge necessary for working with DLLs instead of assessing what beliefs they hold. Specific knowledge questions may translate into a greater relationship with practices than the current assessment of more abstract beliefs. For example, a possible question could be: How many years does it generally take for DLLs to acquire sufficient English language skills to perform successfully in the classroom? Answer choices could be 1-2 years, 3-4 years, 5-7 years, and 7-10 years. Such a question would allow for a more direct way of measuring second language acquisition knowledge than for example question seven asking whether it takes a long time to learn a second language. Such concrete questions may also better lend themselves for designing workshops targeting the areas in which teachers continue to lack knowledge.

In addition to making the modifications recommended for the LCQ, it may also be a good idea to build new questions from the research literature. Researchers may generate a conceptual model that highlights more research-based beliefs and practices. Questions can then be developed based on such a conceptual model.

Implications for Practice

When the demographics of the top LCQ total scoring teachers were analyzed in depth, ten of them reported the number of hours of training they have had related to

working with dual language learners. The mean for these ten teachers was 111.30 hours of training. Only one of these top-scoring teachers reported not receiving any training in regards to working with dual language learners. Plus, a teacher who reported 300 hours of training obtained the highest score on the LCQ of 80. Although training hours was not found to be a significant predictor of LCQ scores, perhaps because of the non-normal distribution of this data, these top scoring teachers highlight the possible importance of participating in trainings. Staff development training was a better predictor of teachers' beliefs in the Abbot-Shim et al. (2000) study than the demographic variables they explored. Training hours should therefore be seen as a variable to keep in mind, even though it was not found to be a significant predictor with the multiple regression findings of this study.

The multiple regression also made it apparent that administrators and educators should not expect more educated or even ESOL certified teachers to already know how to work with DLLs. Therefore, teachers should not be excluded from training efforts based on these characteristics. Since a consistent significant predictor throughout the multiple regressions was years working with DLLs, perhaps some of these experienced teachers can share the lessons they have learned throughout the years working with DLLs that can supplement topics at trainings. That way more teacher to teacher validation of the topics can occur rather than only unfamiliar researchers passing this information down to the teachers.

One related noteworthy finding was that a third of the teachers who have dual language learners in their classroom have had zero training hours regarding how to best assist this group of learners. These findings are in line with a survey conducted by the

National Center for Educational Statistics (2003) that pointed out that although 42% of the teachers had dual language learners in their classroom, just 13% of these teachers obtained more than 8 hours of training hours regarding how to work with dual language learners. Greater efforts need to be made in order to disseminate this information to teachers currently in the field and especially to pre-service teachers. Yet, the review of literature brought up how poorly a job is also being done with pre-service teachers. In 2009 the United States Government Accountability Office (GAO) specifically investigated bilingual coursework and they found that on a national level, less than 20% of teacher training programs require at least one course.

Garcia and Kleifgen (2010) eloquently summed up the present situation stating, “there is a growing dissonance between *research* on the education of emergent bilinguals, *policy* enacted to educate them, and the *practices* we observe in schools” (p. 4, emphasis in original). These researchers further elucidate that this incongruity between research, policy and practice is one of the main causes of our educational system’s failure to adequately teach dual language learners. These inequities arise from the lack of knowledge that both policy makers and educators hold regarding bilingualism. Due to the low reliability of the LCQ within this study, clear correlations between the demographic characteristic of pre-kindergarten and kindergarten teachers sampled and the beliefs they hold could not be made. As a result, better efforts need to be made to educate and continue to assess the knowledge of educators who are currently in practice with these populations of students.

Directions for Future Research

Future researchers should consider surveying more teachers during the same year. If not, attempts to survey more homogenous samples across the years should be made. That would enable more definite conclusions to be made about whether differences between pre-kindergarten and kindergarten teachers may be related to LCQ scores. It would also be a good idea to include academic measures of the DLLs to compare to teachers' performance on the LCQ. This would allow researchers to explore whether teachers who score higher on the LCQ tend to produce more successful DLLs.

In future studies, researchers should also conduct observations of teachers who complete the LCQ in order to determine how accurate their reported classroom practices are with what teachers actually do in the classroom. Such data would allow further validation analyses (i.e., convergent validity) to be conducted with the LCQ practices section. This is especially important because teachers in this sample reported more use of best practices than have been generally observed. Garcia and Kleifgen (2010) reported that dual language learners for the most part are not in classrooms that apply best practices or use home language supports.

If observations are not feasible in future studies, a solution for a validity check may be a questionnaire for parents related to the classroom practices. For example, a number of questions are related to working with parents. Therefore, parents could be asked questions such as whether their child's teacher encourages them to speak English at home. This can be followed up with a question asking whether their child's teacher encourages them to speak their native language at home. The majority of practice

questions could be generated as questions for parents and therefore serve as at least some form of a reliability check for teachers.

It would also be ideal to include a qualitative component, especially for the belief items. This could involve either a space underneath each question where teachers are allowed to comment regarding what they interpreted the question to mean or include the reasoning for their answer choice. It may also be beneficial to conduct focus groups or individual interviews to discuss how questions are interpreted and why teachers chose certain answers. This will allow researchers to determine whether the questions were poorly understood or whether knowledge in this area is indeed lacking.

The answer choices within the practices section may not truly capture a sense of whether the frequency with which teachers implement these strategies can actually be considered best practices. The author is not aware of any research literature highlighting the quantity of strategies that need to be employed for DLLs to effectively learn lessons. Yet, let's assume the research were to specify that 75% of English story time needs to be accompanied by body language and gestures in order for DLLs to at least obtain the gist of the story. A teacher may think she is engaging in these practices often enough. However, future studies involving classroom observations of teacher practices may reveal that they are only using body language and gestures during 20% of their story time.

Such a revelation creates a two-fold direction for research. First, if the research does indeed not exist, it would be ideal to research how much of each practice is needed to be considered a true best practice. This would allow for some structure while conducting observations of the practices in the future. Using such a quantitative

approach can offer more information than a subjective response such as “often” when determining whether the approach is being implemented efficaciously.

The second direction of this revelation is that such a quantitative approach may generate more evaluative power for assessing the effectiveness of training efforts. If a teacher is observed to engage in the use of body language and gestures 20% of story time prior to a workshop and then 55% after the workshop, then researchers will have a better understanding of the effectiveness of that training. Such evaluative precision is not available with the current version of the LCQ. Alvarez-McHatton et al. (2009) pointed out that systematic assessment evaluating whether teacher preparation programs are successfully teaching these skills seldom occurs. With continued efforts to improve this measure, it may one day serve as part of a group of measurement tools employed in a systematic fashion across teacher training programs.

Conclusion

Research assessing teacher competence in the areas of language and culture are very scarce. The development of measures such as the LCQ are needed in order investigate the beliefs and knowledge teachers possess and the practices they utilize when working with DLLs. As reported by the results of this study and by previous researchers (e.g. Garcia & Kleifgen, 2010), the majority of teachers in the U.S. have not received any preparation regarding how to teach DLLs. Therefore, further development of this measure should be undertaken in order to further gauge the success or failure we continue to have with our training efforts.

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Appendices

Appendix A: Language and Culture Questionnaire

Read each statement carefully and then bubble the one response that most closely fits your level of agreement with the statement.

1. It is easy for children to learn a second language.
 - strongly disagree
 - disagree
 - agree
 - strongly agree

2. The most appropriate school program for all children is one that is based entirely on American values and ways of doing things.
 - strongly disagree
 - disagree
 - agree
 - strongly agree

3. It is important that everyone in a school know how children learn a new language.
 - strongly disagree
 - disagree
 - agree
 - strongly agree

4. The same school program will work for all children, bilingual or not.
 - strongly disagree
 - disagree
 - agree
 - strongly agree

5. English should be the only language spoken during school-sponsored activities.
 - strongly disagree
 - disagree
 - agree
 - strongly agree

6. Parents whose first language is not English should speak English at home to help their children learn it as quickly as possible.
 - strongly disagree
 - disagree
 - agree
 - strongly agree

7. It takes a long time for young children to learn to speak a second language.
- strongly disagree
 - disagree
 - agree
 - strongly agree
8. Teachers can help children from other cultures become bicultural by respecting their home culture and introducing aspects of American culture.
- strongly disagree
 - disagree
 - agree
 - strongly agree
9. It is important for teachers to share information about home languages with all the children in the classroom.
- strongly disagree
 - disagree
 - agree
 - strongly agree
10. There's no point in teachers trying to communicate with parents who speak a different language.
- strongly disagree
 - disagree
 - agree
 - strongly agree
11. Parents should continue to speak their home language with their children.
- strongly disagree
 - disagree
 - agree
 - strongly agree
12. The process of learning English is remarkably similar for all children no matter what other language they speak.
- strongly disagree
 - disagree
 - agree
 - strongly agree

13. All children should be exposed to materials from other languages and cultures.
- strongly disagree
 - disagree
 - agree
 - strongly agree
14. The more bilingual children there are in an educational program, the more need there will be for special education services.
- strongly disagree
 - disagree
 - agree
 - strongly agree

Read each statement and then bubble the one response that most closely fits your practice.

15. I collect information about all of the families whose children are in my class, including where the families come from and what languages are spoken at home.
- always
 - often
 - sometimes
 - never
16. I use body language and gestures when I talk to bilingual children to help them understand what I am saying.
- always
 - often
 - sometimes
 - never
17. I ask bilingual parents to provide a few key words in their home language so I can use them with their children in my class.
- always
 - often
 - sometimes
 - never
18. I include materials, such as books, pictures, toys, and labels, that reflect the cultures and languages of all the children in the classroom.
- always
 - often
 - sometimes
 - never

19. I plan activities in my classroom so bilingual children can participate fully.

- always
- often
- sometimes
- never

20. I make sure that bilingual children have opportunities to interact with English-speaking children.

- always
- often
- sometimes
- never

21. I keep careful notes about the language skills of the bilingual children in my classroom.

- always
- often
- sometimes
- never

22. I talk with parents of bilingual children about their language goals for their children.

- always
- often
- sometimes
- never

23. I make a special effort to find out all I can about how young children learn a second language.

- always
- often
- sometimes
- never

24. I attend cultural festivals and community activities related to the cultures of the children in my classroom.

- always
- often
- sometimes
- never

25. I encourage parents of bilingual children to continue to speak their first language at home.

- always
- often
- sometimes
- never

26. I plan specific activities in the classroom, like story time or circle time, as opportunities for language development for both English speaking and bilingual children.

- always
- often
- sometimes
- never

27. I inform myself about the types of elementary school programs, such as bilingual education, that are available for the children from linguistically and culturally diverse families.

- always
- often
- sometimes
- never

28. I invite parents and others who speak the languages of the children to come to class and use those languages to do activities with all the children.

- always
- often
- sometimes
- never

29. I make sure that there are quiet places in my classroom where bilingual and other children can "get away from it all" and feel safe.

- always
- often
- sometimes
- never

30. I make a special effort to make bilingual parents feel welcome in my classroom.

- always
- often
- sometimes
- never

Appendix B: Teacher Questionnaire
Teacher Questionnaire (FELLA-HS)

Teacher Name: _____ School: _____

1. What is your role in the classroom?

- Lead teacher
- Assistant teacher
- Other (specify) _____

2. How many total years have you worked in a classroom? _____

3. How do you identify your racial or ethnic background?

- Latina/o or Hispanic
- Caucasian or White (non-Hispanic)
- Asian or Pacific Islander
- Black or African American
- Native American or American Indian and Alaskan Native
- Multi-racial/Multi-ethnic (specify) _____
- Other (specify) _____

4. What is your highest completed educational degree? (check **one**):

- High School or GED
- Associates degree
- Bachelor's degree
- Graduate degree
- Other (specify) _____

5. What is your degree in?

- Early Childhood Education
- Elementary Education
- Child Development
- Psychology
- Other _____

6. What institution was this degree obtained at?

7. Are you ESOL certified?

- yes
- no

8. How many hours of training have you received on working with ELL children and/or cultural competency training? _____

9. Are you enrolled in a degree program at this time?

- no
- yes

10. **IF YES:** Which one?

- High School or GED
- Associates degree
- Bachelor's degree
- Graduate degree
- Other (specify) _____

11. What is the degree in?

- Early Childhood Education
- Elementary Education
- Child Development
- Psychology
- Other _____

12. What institution is this degree being obtained at?

13. Have you completed your CDA?

- Yes
- No

14. **IF NO:** Are you working on completing your CDA?

- Yes
- No

15. How many years have you worked in a classroom with children who are second language learners?

16. What language(s) do you speak?

Bubble the correct circle concerning your proficiency level (limited, moderate, or fluent) for each of the languages. If you speak a language not indicated please add it under other.

Language	Not at all	limited	moderate	fluent
English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spanish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
French	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Portuguese	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. How many children are enrolled in your classroom right now? _____

18. How many children enrolled in your classroom right now speak a language other than English at home? _____

19. For how many of these children is Spanish one of the languages spoken at home? _____

20. When you are doing an **INSTRUCTIONAL ACTIVITY** that involves the entire class at the **beginning** of the year, which of the following language(s) do you use?

- All English
- Mostly English
- Equal Amounts of English and Spanish
- Mostly Spanish
- All Spanish

21. When you are **ORGANIZING** the entire class to go outside or get ready for lunch, etc. at the **beginning** of the year, which of the following language(s) do you use?

- All English
- Mostly English
- Equal Amounts of English and Spanish
- Mostly Spanish
- All Spanish

22. When you are doing an **INSTRUCTIONAL ACTIVITY** that involves the entire class at this time of the year, which of the following language(s) do you use?

- All English
- Mostly English
- Equal Amounts of English and Spanish
- Mostly Spanish
- All Spanish

23. When you are **ORGANIZING** the entire class to go outside or get ready for lunch, etc. at this time of the year, which of the following language(s) do you use?

- All English
- Mostly English
- Equal Amounts of English and Spanish
- Mostly Spanish
- All Spanish

24. When you are **TALKING PERSONALLY** with a child who is Spanish dominant, which of the following language(s) do you use?

- All English
- Mostly English
- Equal Amounts of English and Spanish
- Mostly Spanish
- All Spanish

25. When you are **TALKING PERSONALLY** with a child who speaks both Spanish and English, which of the following language(s) do you use?

- All English
- Mostly English
- Equal Amounts of English and Spanish
- Mostly Spanish
- All Spanish