INVESTIGATING HEAD START TEACHERS’ BELIEFS ABOUT LANGUAGE AND LITERACY PRACTICES FOR ENGLISH LANGUAGE LEARNERS (ELLS)

by

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A Dissertation Submitted to the Graduate Faculty of George Mason University in Partial Fulfillment of The Requirements for the Degree of Doctor of Philosophy Education

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DEDICATION

This is dedicated to the three people who are the dearest to me: my husband, Doug, and my two wonderful daughters, Rachel and Skye. Thank you for supporting me and allowing me to continue my life-long learning. I am so proud to be called your wife and mother.
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ABSTRACT

INVESTIGATING HEAD START TEACHERS’ BELIEFS ABOUT LANGUAGE AND LITERACY PRACTICES FOR ENGLISH LANGUAGE LEARNERS (ELLS)

Wendy L. Orner Young, Ph.D.

George Mason University, 2013

Dissertation Director: Dr. C. Stephen White

A changing classroom population and lack of English as a Second Language or bilingual instruction at the preschool level has required Head Start teachers to teach English language and literacy skills to English Language Learners (ELLs). The purpose of this dissertation was to develop and validate a new scale to measure preschool teachers’ beliefs about language and literacy practices for ELLs. The scale was administered to teachers (n=78) and teacher assistants (n=23) at a state Head Start Association Conference. An exploratory factor analysis found three factors, accounting for 44.6% of the scale’s total variance. The factors underlying teachers’ beliefs about language and literacy practices for ELLs are classroom curriculum and instructional practices, home language and culture, and early literacy strategies. Significant differences in the language and literacy belief scores were found when examining teachers’ and teacher assistants’ responses. Additional data analysis indicated that the Preschool Teachers’ Language and
Literacy Beliefs (PTTLB) scale is a valid and reliable instrument for use with classroom teachers. Implications for the use of the PTTLB in professional development are discussed.
CHAPTER 1: Introduction

This study focused on culturally and linguistically diverse young learners. An increasing number of children in the United States come from homes where a language other than English is spoken. Practicing teachers are held accountable to show progress in teaching language and literacy skills to children who are not proficient in English. Preschool teachers, in particular, may not have training in how to teach language and literacy skills to their culturally and linguistically diverse young learners. What preschool teachers believe are the most appropriate language and literacy practices for the young culturally and linguistically diverse learners as measured by a newly developed instrument were the core of this study.

Background of the Problem

Prevalent demographic changes within the classrooms of the United States call for a new understanding of teaching culturally and linguistically diverse learners. Based on state-reported data, it was estimated that the number of English Language Learners (ELLs) enrolled in United States public schools (PreK-12) rose from 3,228,799 in 1995-96 to 5,074,572 in 2005-06 (National Clearinghouse for English Language Acquisition, 2005). This change represented a 57% increase in the ELL population during that time period. In 2007, it was estimated that almost 20% of the United States population spoke a language other than English (U.S. Census Bureau, 2007). The 2010 Census collected
data concerning an individual’s race and ethnicity through two separate questions. Individuals self-identified ethnicity as to either being Hispanic or Latino or Not Hispanic and Latino and were asked to identify their race through six choices (i.e., White; Black, African American, or Negro; American Indian or Alaskan Native; Asian; Native Hawaiian and Other Pacific Islander; or Some Other race). Individuals were also allowed to identify with more than one race. The most recently released 2010 Census data indicated that the Hispanic population increased by 43% between 2000 and 2010 and all major race groups increased in population size with the Asian population also increasing by 43% (Humes, Jones, & Ramirez, 2010). The federal government has recognized how this change in our national population has affected our public school classroom populations and has made some provisions to accommodate the situation.

In 1994, the Elementary and Secondary Education Act (ESEA, 1965) was reauthorized and entitled Improving America’s Schools Act (IASA, 1994). The Improving America’s Schools Act required that schools provide ELLs with a special language program that helps them to acquire English as a second language. The latest reauthorization of the ESEA occurred in 2002 and was entitled No Child Left Behind (NCLB, 2002). Grants for English learner programs that are distributed to states on a per-capita and required annual assessments of English proficiency were included in NCLB legislation. Schools were also required to prove that students, including the subgroups of minorities and ELLs, were making adequate yearly progress (AYP) for proficiency in language arts and math with all students reaching grade-level proficiency
by 2014 (NCLB, 2002). Recently, states are asking for a waiver from having to meet NCLB benchmarks, but will have to follow state Board of Education goals for increasing student achievement and closing the achievement gaps, especially in the demographic subgroups.

The method of educating ELLs has become an area of great interest due to these governmental requirements and the increasing population of these students. The form of delivery of educational programs for ELLs can range from two-way bilingual education to English as a Second Language (ESL) pull-out programs to immersion programs where English is used exclusively. Because there is such diversity in languages within the United States and only a small number of teachers who speak another language, most students do not have the chance to receive bilingual education (Kushner & Ortiz, 2000). A large number of ELLs, therefore, are placed in ESL programs where they are given language support until they are declared English proficient. The majority of these programs, however, are pullout where ELLs are removed from their general education classroom for a portion of the day and provided English instruction adapted to the level of student’s comprehension. English Language Learners would still spend a substantial amount of time in their general education classrooms (Kushner & Ortiz, 2000).

**Statement of the Problem**

For the youngest ELLs, ESL programs may not even be offered at the preschool level. In fact, there is no mandate for bilingual children to be served by bilingual programs at the prekindergarten level in the United States (Tabors & Snow, 2004).
Teaching young children whose first language is not English is becoming more of a norm for preschool teachers. As the student composition changes in the classroom, many preschool teachers currently in the field may not have had training in meeting the literacy needs of the youngest culturally and linguistically diverse learners. What these preschool teachers believe about language and literacy practices for the young ELLs in their classrooms was the focus of this research. In order to determine preschool teachers’ beliefs about language and literacy practices for ELLs, a reliable instrument needed to be developed. The purpose of this investigation was to develop and validate a new scale that measures preschool teachers’ beliefs about language and literacy practices for ELLs, employing the following questions:

1. What items written for a self-reported instrument best reflect preschool teachers’ beliefs about language and literacy instructional practices for ELLs?

2. What level of reliability can be attained with this instrument?

3. What evidence of validity can be demonstrated?

4. What factors comprise preschool teachers’ beliefs about language and literacy practices for ELLs?

5. Is there a difference between teachers’ beliefs about language and literacy instructional practices for ELLs and teacher assistants’ beliefs about language and literacy instructional practices for ELLs?
Theoretical Perspective

A sociocultural perspective was the basis for this study. Vygotsky (1978) stated that learning “presupposes a specific social nature and a process by which children grow into the intellectual life of those around them” (p. 88). In other words, children’s learning is of a social nature that is facilitated through the adults with whom they interact. When a child’s language and cultural background are taken into account, then a social-emotional climate can be created that is conducive to learning (Fumoto, Hargreaves, & Maxwell, 2007; Heath, 1983).

Culturally relevant pedagogy, which includes teachers’ conceptions of self and others, how teachers structure social relations, and teachers’ concepts of knowledge (Ladson-Billings, 1995) is one means for general classroom teachers to meet the cultural and social needs of ELLs in their classrooms (Yoon, 2007). When examining teachers’ beliefs about ELLs, it is assumed that the students are from cultures where another language or dialect (for example, African American Vernacular English) is spoken and is not the dominant language used within the classroom. When teachers see their ELLs as entering the classroom with funds of knowledge (Gonzalez, Moll, & Amanti, 2005) from which students have much to offer, then a climate of mutual respect can be created. Delpit (1988) challenged teachers to examine their beliefs when she stated, “We do not really see through our eyes or hear through our ears, but through our beliefs” (p. 297). In order to create a literary environment that supports young ELLs, teachers must look at
themselves and discover how their own cultures affect what they believe about ELLs (Sousa, 2011; Xu, 2003).

In summary, practicing preschool teachers are being asked to teach an increasing number of ELLs. However, these preschool teachers may not have had any training in how to teach language and literacy to their young culturally and linguistically diverse learners. Identifying what practicing preschool teachers believe about language and literacy practices for ELLs is the first step in providing support to early childhood educators in their task of educating these young ELLs. A new instrument needs to be developed that will reliably measure the practicing preschool teachers’ beliefs about language and literacy practices for ELLs. Since there are no existing instruments that measure early childhood teachers’ beliefs about teaching language and literacy practices to ELLs, one needed to be developed. It was the purpose of this study to design and use such an instrument.

**Scholarly Significance**

One important result from this study, if the instrument, the Preschool Teachers’ Language and Literacy Beliefs survey (PTLLB) is found to be reliable, is the use of this survey as a valuable tool to the field of early childhood education that measures preschool teachers’ beliefs about language and literacy practices with ELLs. This tool could help provide self-reflection by teachers and open conversations with peers and supervisors. In addition, the survey might be useful when planning professional development for programs. Also, this survey in combination with observations of
classroom practices could provide a more complete picture in determining if preschool teachers are indeed influenced by their beliefs and teach what they believe. This study contributes to previous research on early childhood teachers’ instructional practices specific to ELLs by producing a tool which allows teachers to examine their beliefs about instructional practices for ELLs.

**Definition of Terms**

Developmentally Appropriate Practice (DAP)—as defined by the National Association for the Education of Young Children (NAEYC) is a framework for best practice in early childhood programs serving children from birth through age 8 which has been revised several times since it was first publish in 1987. Developmentally appropriate practice refers to providing an environment and offering content, materials, activities, and methodologies that are coordinated with a child's level of development and for which the individual child is ready.

Early Childhood Teachers’ Beliefs about Literacy—Based on the work of earlier researchers, (Charlesworth, Hart, Burts, & Hernandez, 1991; Charlesworth et al., 1993; DeFord, 1985), Hindman and Wasik (2008) defined teachers’ beliefs about literacy as “what they [teachers] assume, think, and know about how young children develop literacy skills; what they perceive a teacher’s role in this process to be; and how they feel they should implement these practices in a classroom” (p. 480). This definition will be utilized for the purposes of this study.
English Language Learner (ELL) is used exclusively throughout this review. Other terms that are associated with ELLs are Limited English Proficient (LEP; LaCelle-Peterson & Rivera, 1994), Second Language Learners (SLL; Genesee, Paradis, & Crago, 2004), and Dual Language Learners (DLL; Genesee et al.). The researcher chose the term ELLs to represent students in this study who have a language other than English as their first language with English being learned in addition to the first or even several other languages. The term ELL was coined by LaCelle-Peterson and Rivera to evoke a positive image of students learning the English language.

Majority Language—language spoken by the members of a majority ethnolinguistic group (i.e., English speaking students from mainstream sociocultural backgrounds in the United States) (Genesee et al.)

Native Language—usually the first language a person acquires, known also as the L1 (Sousa, 2011)

Teachers’ Beliefs—what teachers accept as what is right or true. A personal construct that can provide an understanding of a teachers’ practice (Pajares, 1992).

This chapter provided the background and significance of the problem to be addressed in this study. In addition, the purpose, questions, and definition of terms were included. In Chapter 2, a comprehensive review of the literature on young ELLs and English language acquisition, early childhood teachers’ beliefs, and survey development is presented to demonstrate how the proposed study is situated in the broader literature.
CHAPTER 2: Literature Review

Given that the purpose of this study was to develop and validate a new scale to measure preschool teachers’ beliefs about language and literacy practices for ELLs, this review is divided into three sections: young ELLs and English language acquisition, early childhood teachers’ beliefs, and survey development. The first section includes a theoretical overview on language development that provides a framework for examining young ELLs and English language acquisition. This section also addresses developmental stages in language acquisition, language transfer, target-deviant structures, factors that influence second language learning, early predictors of reading achievement for ELLs, representation of ELLs in special education, and assessment and cultural issues. In order to know what practices of language and literacy instruction are appropriate to use with ELLs, early childhood teachers must first understand the process of language acquisition and the issues surrounding it. This section of the literature review provides the theoretical and research base for the survey items.

In the second section of this literature review, research concerning early childhood teachers’ beliefs about language and literacy practices with young children is included. Early childhood teachers’ beliefs and developmentally appropriate language and literacy practices have been the focus of several studies. In addition, several studies
were conducted with Head Start teachers exclusively. Two studies dealt with early childhood teachers’ beliefs about ELLs. No studies were identified that examined early childhood teachers’ beliefs about language and literacy practices for ELLs. Surveys were the method most often used in the reviewed studies that measured teachers’ beliefs.

The third section of this literature review focuses on survey development. The creation of a survey is a multi-step process. In order to create a valid and reliable instrument, it is necessary to consider the following aspects of survey development: survey mode, construct identification and item generation, question format, evaluation of items by a panel of experts, item organization, experimental pilot, preliminary analysis, and final administration and analysis.

**Young English Language Learners and English Language Acquisition**

It is important for teachers to consider how young ELLs in their classrooms acquire English (their second language or L2) as they continue to develop their first language (L1). This section includes the developmental stages in language acquisition, language transfer, target-deviant structures, factors that influence second language learning, early predictors of reading achievement for ELLs, representation of ELLs in special education, and assessment and cultural issues. Teachers’ understanding of how ELLs acquire English can serve as a guide for choosing appropriate teaching strategies to facilitate young ELLs second language learning. While effective teaching strategies are appropriate for all students, young ELLs need curricular adaptations as they go through the process of acquiring English (Espinosa, 2010).
Developmental Stages in L2 Acquisition

When preschool ELLs find themselves in a classroom in which their home language is not spoken or understood, the only options for them are to continue to speak their home language or be silent. Initially, they will try to use their home language, but their attempts will only meet with frustration over the lack of understanding by their teacher and classmates. Eventually, the children may give up their attempts of communication and be silent. Tabors (2008) has identified four periods through which a young ELL will traverse as she arrives in a classroom in which English is the language used for instruction. The consistent developmental sequence includes: 1) home-language use, 2) nonverbal period, 3) telegraphic and formulaic use, and 4) productive use. While these periods are sequential, they are not discrete in their attainment, and language abilities obtained from one period may continue to be displayed even as new skills from the next level are being added (Tabors, 2008).

Following home language use, the next period young ELLs enter is the nonverbal. Tabors (2008) elected to call this period nonverbal instead of the silent period as she observed that children still communicated by using nonverbal techniques even though language was not spoken. Young ELLs used facial expressions, objects, sounds, or gestures to make their point. Tabors (2008) noted that nonverbal behavior is most often used for attention getting, requesting, protesting, or joking. It is also during this time that the preschool ELLs gathered information about the new language by spectating and rehearsing. Spectating refers to the observations by the ELLs as they are in proximity to
English speakers and are concentrating on the language being used around them.

Rehearsing is when the ELL is not communicating with anyone, but repeating English words that have just been spoken.

Tabors’ third period of English acquisition has two components: telegraphic speech and formulaic speech. Telegraphic speech is when ELLs use a word or a few key words to convey their meaning (Tabors, 2008). For example, a child may be playing with a ball and is asked “What’s this?” The child would answer, “Ball.” Naming colors, letters, or numbers is also telegraphic speech. Formulaic speech involves using phrases in situations previously observed by the child. Usually formulaic speech is involved in play situations. “No,” “Stop,” and “I don’t know” are examples of formulaic speech.

Productive language is when ELLs use phrases and then sentences which they construct by themselves (Tabors, 2008). In this phase (or stage) language may be adapted from English speakers surrounding the ELLs (Tabors, 2008). For example, in a setting where children are playing with play dough and an English speaker says, “I made a snake.” An ELL might piggyback on that comment by saying, “I make frog.” As ELLs are analyzing and constructing their own sentences, they are developing vocabulary, grammar, phonology, and pragmatics (Bialystok, 2001; Snow, Griffin, & Burns, 2005; Tabors, 2008). It is through these elements that language transfer occurs.

**Language Transfer**

Language transfer is a valuable tool in scaffolding the English language learning process for ELLs. Certain dimensions of language (i.e., vocabulary, grammar,
phonology, and pragmatics) are susceptible in varying ways to language transfer. 

Genesee et al. (2004) defined language transfer as when “children rely on their existing linguistic knowledge from their L1 when acquiring their L2, and this L1 influence on the L2 is often referred to as transfer from the L1” (p. 131). Language transfer can be looked at as either positive, where the first language helps with language transfer, or negative, where the first language interferes with the understanding of the new language (Sousa, 2011). An example of language transfer is with vocabulary. Vocabulary acquisition is highly variable in bilinguals and ELLs (Bialystok, 2001). It is extremely difficult to measure vocabulary size in the two languages and make a comparison to the vocabulary obtained if only one language was being learned. Vocabulary is measured in terms of rate and pattern, correct or incorrect word usage, and the relationship between vocabulary and cognitive development (Bialystok, 2001). The interaction between an ELL’s two languages may affect these vocabulary measurements. Overall, studies (August, Carlo, Dressler, & Snow, 2005; Bialystok, 2001; Genesee et al., 2004) indicate a deficit in the vocabulary of bilinguals and ELLs. Therefore, intentional effort must be made to establish vocabulary across two languages. One method of vocabulary development for ELLs is to build upon cognate pairs between the ELL’s two languages. Cognate pairs are two words that are similar both orthographically and semantically (August et al., 2005). Spanish and English have numerous cognates. For example, *amoroso-amorous* is a Spanish-English cognate.
Grammar acquisition for children learning two languages is similar to monolinguals, but not the same (Bialystok, 2001). The difference relates primarily to time because children learning two languages take longer to learn grammar than children who are only focusing on one language. However, the more exposure the ELL has to English, the more quickly the grammar structures can be incorporated. The way in which the child’s two languages interact can also influence the way children learn the grammar of the two systems (Bialystok, 2001). The transfer of word order rules from one language to the other is always done from the language with the simpler rules to the language with more complex structure. For example, children would transfer French, English, or Italian into German, but never from German to the other languages (Bialystok, 2001).

Phonological development is another avenue through which ELLs exhibit language transfer. An ELL’s phonological development begins as an infant with the ability to distinguish phonemes in a language. Werker and Tees (1984) found that infants can discriminate many of the phonetic distinctions in languages without relevant experience, but there is a decline in this ability as the infants encounter specific language experiences. By the age of one, infants are no longer able to identify sounds of languages that are not in their environment. However, the phonological system of the native language is often a major source of transfer from L1 (Dickinson, McCabe, Clark-Chiarelli, & Wolf, 2004; Genesee et al., 2004). Dickinson et al. (2004) demonstrated that strong phonological transfer was evident in their study of 123 Spanish dominant and
English dominant Head Start students. This is an important finding as phonological awareness has been identified as a predictor of later reading achievement (National Early Literacy Panel, 2008). Even very young children around the age of two and a half can demonstrate this phonological transfer (Genesee et al., 2004). In a review of literature on effective interventions for ELLs, Vaughn, Linan-Thompson, Pollard-Durodola, Mathes, and Hagan (2006), indicated that pointing out phonological similarities and differences between two languages can be beneficial for ELLs. In addition, the authors suggested teaching regular words (decodable sounds) first which could assist in teaching the irregular words (Vaughn et al., 2006).

Another development in the productive language use period involves pragmatics. Pragmatics is the study of language use with communication being the ultimate goal (Bialystok, 2001). Communication, however, involves more than language. During the nonverbal period, ELLs communicate without words by using gestures and facial expressions. However, as ELLs obtain English, it is more a matter of using the right words for the right audience (Tabors, 2008). Children learning a second language will “adopt and adapt” (Tabors, 2008, p. 61) to the language being used around them.

In sum, the acquisition of English by ELLs can be viewed through Tabors’ (2008) four periods: home-language use, nonverbal, telegraphic and formulaic, and productive use. These periods are developmental in sequence, but ELLs may fluctuate between periods as the need arises (Tabors, 2008). As ELLs begin to produce their own sentences, the development of vocabulary, grammar, phonology and pragmatics takes
place (Bialystok, 2001; Snow et al., 2005; Tabors, 2008). It is also through each of these components that language transfer can occur, increasing an ELL’s ability to use English (August et al., 2005; Bialystok, 2001; Genesee et al., 2004).

**Target-Deviant Structures**

Target-deviant structure, a term coined by Genesee et al. (2004) is used to describe “inaccuracies that first and second language learners produce in their phonology and grammar of the target language” (p. 225). The term target-deviant is used because the child’s form of language is not the same as the targeted (correct) adult form. There are certain developmental “errors” that young children will commit when learning a first or second language. For example, a child might say, “Me no hungry,” when the proper adult form would be “I am not hungry.” These inaccuracies should not be looked at as errors, but are developmental target-deviant structures naturally occurring as part of the language acquisition process for all learners and are not part of their L1 transfer (Genesee et al., 2004). Developmental target-deviant structures are most prominent in grammatical morphology (Genesee et al., 2004).

ELLs commonly have difficulty with target-deviant structures in grammatical morphology (Genesee et al., 2004). Grammatical morphemes are the smallest units of meaning in language dealing with grammar (Snow et al., 2005). One of the most prevalent grammatical morphemes with which children exhibit errors is the past-tense marker *-ed* in *walked* (Genesee et al., 2004). Errors of omission (leaving out a morpheme) and errors of commission (using a morpheme incorrectly) are demonstrated
by many children learning English with errors of omission being far more prominent (Genesee et al., 2004). For example, an error in omission would occur when a child said, “That (is) my Momma.” An example of an error of commission would be if a child said, “That my’s (mine).”

While most target-deviant structures are developmental, they may also transpire in transfer. As previously mentioned, ELLs rely on transfer of their L1 for L2 learning (August et al., 2005; Bialystok, 2001; Genesee et al., 2004); however, transfer target-deviant structures may also result. For example, in terms of phonology, native speakers of Japanese have difficulty pronouncing consonant clusters and final consonants in English because Japanese does not have consonant clusters, rather there are only nasal consonants at the end of a word. The word, English, might be pronounced “engulisu” (Genesee et al., 2004). In addition, many times the grammatical structures of an ELL’s L1 and L2 word order are different and target-deviant structures may occur (Genesee et al., 2004). For example, the English sentence “I see it” would read “je le vois” in French with the italics showing the positional difference of the words (Genesee et al., 2004). An English speaking child learning French might create a target-deviant structure by keeping the French object pronoun after the verb.

To summarize, ELLs display developmental and transfer target-deviant structures as they learn English (Genesee et al., 2004). The developmental target-deviant structures are not dependent upon the child’s L1 (Genesee et al., 2004). Transfer target-deviant structures are subject to the child’s L1 and vary accordingly. These target-deviant
structures are to be expected and are transitional, allowing students to use all of their available knowledge (in both L1 and L2) to communicate with world around them (Genesee et al., 2004). Target deviant structures are a typical and natural part of the language acquisition process for ELLs.

**Factors that Influence Second Language Learning**

There are numerous factors such as age and rate of learning, attitude and motivation, exposure to language, language aptitude, personality, and intelligence which influence second language acquisition (August & Hakuta, 1997; Genesee et al., 2004; Tabors, 2008; Snow et al., 2005). The age of a child can help to determine the rate of learning the second language of English (Tabors & Snow, 2004). A myth exists that young children acquire a second language faster than older students (August & Hakuta, 1997; Genesee et al., 2004; Snow et al., 2005). Actually, preschool and kindergarten students who begin schooling in English-only settings take longer to achieve age appropriate levels on academic tasks than do students who begin English learning in grades two through six (August & Hakuta, 1997; Snow & Tabors, 2004; Snow et al., 2005; Tabors, 2008). The reason for this could be that the older students bring more developed cognitive skills from the L1 to the task. Young children, however, are expected to become native-like in their oral competence of English, whereas, older learners of English may always have an accent (Bialystok, 2001; Genesee et al., 2004; Tabors, 2008). In addition, it may take ELLs five to seven years to master the aspects of
English that are needed for successful school achievement (Genesee et al., 2004; Hardin, Roach-Scott, & Peisner-Feinberg, 2007).

Attitude and motivation are important for ELLs (August & Hakuta, 1997; Genesee et al., 2004; Tabors, 2008). Learning a second language is a choice and young ELLs must want to learn English (Tabors, 2008). However, “the absence of motivation is not a common characteristic of L1 minority children” (Genesee et al., 2004, p. 137). Young children whose native language is not spoken by other children in their class are highly motivated to learn English, the L2 majority language (Tabors & Snow, 2004). Young ELLs are also motivated by their parents’ ideas about learning (Tabors, 2008). If learning English is a high priority for parents of ELLs, then the children typically exert effort to learn the new language. Unfortunately, in striving to learn a high status language such as English, young children may lose their first language in the process (Snow et al., 2005; Wong Fillmore, 1991).

Exposure to English is also crucial to those learning English as a second language (Genesee et al., 2004; Tabors, 2008). Tabors (2008) points out that prior exposure to English before coming to school will affect how quickly an ELL will learn English. She also indicates that the amount of time spent in contact with the English language will influence the speed with which the child may acquire English. Genesee et al. (2004), however, state that it is not necessarily the quantity of language exposure, but the quality of exposure that influences the rate of language acquisition. Tabors (2008) suggests that while ELLs may be in an English-only classroom, they may choose to interact or not to
interact within the school setting, affording themselves different levels of English exposure.

Language aptitude may influence how quickly an ELL acquires English as a second language. Language aptitude can be defined as “the ability or potential that an individual has for learning language” (Genesee et al., 2004, p. 220). It is thought to be an intrinsic ability and not a learned skill (Genesee et al., 2004). Tabors (2008) stated that some children have more talent than others for second language learning. Language aptitude has been shown to correlate with language learning success with adult ELLs more so than personality, social, or attitudinal factors (Genesee et al., 2004). Language aptitude is hard to measure with young children, but cannot be ignored as a possible relevant factor in child L2 learning (Genesee et al., 2004).

A young ELL’s personality is also thought to play a part in terms of how she approaches language learning (August & Hakuta, 1997; Genesee et al., 2004; Tabors, 2008). A review of literature on ELLs and factors related to predisposition (August & Hakuta, 1994) showed difficulties in measuring personality constructs across cultures with any degree of validity. However, Tabors (2008) noted that children who are shy and reserved are more likely to use caution when approaching a second language (Tabors, 2008). Conversely, children with more outgoing personalities will move more quickly through the language acquisition process (Tabors & Snow, 2004).

Intelligence is another factor in second language acquisition (Bialystok, 2001; August & Hakuta, 1997). Intelligence, however, can be defined by various positions and
definitions (Bialystok, 2001). The approach most often used with ELLs in public schools is a psychometric approach, the intelligence quotient (IQ; Bialystok, 2001). However, assessing the intelligence of young ELLs is not easy (August & Hakuta, 1997). Bias in testing occurs in intelligence tests as they “tend to underestimate the potential of culturally and linguistically diverse students” (Klinger, Artiles, & Barletta, 2006, p. 115) and lack of language proficiency is seen as an intelligence deficit. August and Hakuta (1997) suggest that the assessments should be done in the student’s native language unless tied to school tasks, in which case ELLs may display better performance in English.

To summarize, there are many factors which influence second language acquisition. Age and rate of learning, attitude and motivation, exposure to language, language aptitude, personality, and intelligence have been identified by researchers (August & Hakuta, 1997; Genesee et al., 2004; Tabors, 2008; Snow et al., 2005) as contributing elements impacting ELL’s English development. Although many of the factors (i.e., language aptitude, personality, and intelligence) are difficult to measure in young children, their influence cannot be ignored (August & Hakuta, 1997; Genesee et al., 2004) as these factors are likely to affect L2 learning (Genesee et al., 2004).

**Early Predictors of Reading Achievement for ELLs**

Similar to the numerous factors associated with second language learning, several early predictors of reading achievement for ELLs have also been acknowledged. These early predictors include phonological awareness, print awareness, memory for sentences,
and alphabetic knowledge (Klinger et al., 2006; Dickinson et al., 2004; Lipko & Siegel, 2007). In a review of literature on ELLs who were struggling to read, Klinger et al. (2006) reported the factors that correlated with later reading achievement, whether in English or in the native language, were phonological awareness, print awareness, and alphabetic knowledge with the latter being the foremost indicator as it facilitated phonological awareness acquisition. Lipko and Siegel (2007) found that letter identification and memory for sentences made large contributions to predicting third grade reading ability in a longitudinal study of 831 (703 English-speaking; 128 ELLs) kindergarten students. One hundred twenty three Spanish-English bilingual Head Start students were assessed in a study by Dickinson et al. (2004). Phonological awareness was tested by using Spanish and English versions of the Early Phonological Awareness Profile. Phonological awareness in each language was strongly related to the phonological awareness in the other language. Therefore, research indicates that preschool teachers may develop skills in phonological awareness, print awareness, memory for sentences, and alphabetic knowledge (Klinger et al., 2006; Dickinson et al., 2004; Lipko & Siegel, 2007) as a means of supporting reading development for ELLs.

**Representation of ELLs in Special Education and Assessment Issues**

While there are positive ways to support reading development for ELLs found in the literature, a number of researchers have identified the concern that there is an overrepresentation of ELLs in special education (Genesee et al., 2004; Hardin et al., 2007; Kalyanpur & Harry, 1999; Klinger et al., 2006). Klinger et al. (2006) found that
some subpopulations of ELLs (i.e., Mexican-American ELLs in mid-SES schools who spoke Spanish at home) were found to be vulnerable for placement in special education. The decision for these placements, however, could be based on a lack of precise information about the proficiency levels of children’s native language and English, the lack of knowledge about specific characteristics of ELLs, and differences in school and program characteristics. Lack of systematic data collection which varies between districts and states was also cited as contributing to issues with placement decisions for ELLs. Language acquisition issues were ignored as a possible explanation for a child’s struggles (Klinger et al., 2006).

While overrepresentation of ELLs in special education seems to be a growing problem, there is also concern about underrepresentation of ELLs in special education (Klinger et al., 2006). Many times, general education teachers are reluctant to refer ELLs to special education because it is difficult to determine if the issues are due to language acquisition or a learning disability (Klinger et al., 2006). Therefore, educators are often conflicted about their recommendations for placement of ELLs in special education.

Cultural conflict is also considered a contributor when examining the contexts in which ELLs struggle (Genesee et al., 2004; Klinger et al., 2006). Behaviors which might be typical in a child’s culture may appear learning disabled (LD) in a school experience (Klinger et al., 2006). Some school activities presuppose cultural knowledge which ELLs and their families may not have obtained (Klinger et al., 2006). In addition, ELLs from cultures that have language socialization patterns that differ from the United States
may appear language delayed or having a learning disability because they do not respond the way a preschool teacher might expect (Espinosa, 2010; Genesee et al., 2004). Also, some children will appear to be more competent in one setting over another. Assessment is another area in which there is concern about the representation of ELLs.

Achievement tests are considered to contain several biases for ELLs in terms of norms, content, and language and culture (August & Hakuta, 1997; Espinosa, 2010; Snow et al., 2005). Minorities represent only a small portion of the normed population and are therefore often underrepresented (Snow et al., 2005). Content is typically based on the language and knowledge of the dominant culture (Snow et al., 2005). Furthermore, most assessments were found to be conducted in English regardless of the child’s native language (Klinger et al., 2006). Speed of performance during English-only assessment can hinder ELLs for optimal performance (Snow et al., 2005). This is not to say that assessment in English is always inappropriate. Students may perform better on school tasks using the language of the school, especially if the student has not received instruction in his L1 (Snow et al., 2005). The determination of English proficiency, however, is a concern.

Under the provision of NCLB, states must develop wide-range English-language proficiency tests. However, most currently available assessments only test basic English proficiency (Snow et al., 2005). Some states use multiple sources of information to classify ELLs. For example, the California State Board of Education suggests that their districts use the scores from the California English Language Development Test
(CELDT), academic achievement, teacher evaluation, and parental input to evaluate whether an ELL has reached fluent English proficiency (Jepsen & de Alth, 2005). It has been suggested that a more effective way of assessing an ELL’s language development is to consider both languages (Espinosa, 2010; Tabors, 2008). A dual language assessment would allow for direct comparisons to be made between the two languages (August & Hakuta, 1997).

In summary, there is both an overrepresentation (Genesee et al., 2004; Hardin et al., 2007; Kalyanpur & Harry, 1999; Klinger et al., 2006) and underrepresentation (Klinger et al., 2006) of ELLs in special education. Cultural issues may also play a part in the selection of students for special education (Espinosa, 2010; Genesee et al., 2004; Klinger et al., 2006). Assessment provides additional concerns as ELLs are considered for placement in special education (August & Hakuta, 1997; Espinosa, 2010; Klinger et al., 2006; Snow et al., 2005) and evaluated for English proficiency (August & Hakuta, 1997; Espinosa, 2010; Jepsen & de Alth, 2005; Snow et al., 2005; Tabors, 2008).

**Cultural Issues and English Language Learners**

Aside from the cultural issues previously mentioned when determining an ELL’s placement in a special education program (Espinosa, 2010; Genesee et al., 2004; Klinger et al., 2006), including an ELL preschooler’s culture in language and literacy practices is vital for English development (Espinosa, 2010; McNaughton, 2006; Restrepo & Dubasik, 2008; Tabors, 2008; Xu, 2003). Restrepo and Dubasik (2008) emphasized a threefold approach in producing an optimal learning environment for ELL preschoolers: (a) build
on native language development at home to strengthen native language, which will, in turn, influence English skills, (b) use English as a second language (ESL) strategies to foster the children’s English development, and (c) connect homes and schools. The development of the native language of an ELL has several benefits. Families build stronger relationships when their home language is kept intact. Strong native language development can transfer to language and literacy development in English (Bialystok, 2001; Dickinson et al., 2004; Espinosa, 2010; Genesee et al., 2004; Klinger et al., 2006; Kohnert, Yim, Nett, Kan, & Duran, 2005). Also, native language development ensures against its loss, and allows for ethnic and cultural identity. In addition, Restrepo and Dubasik (2008) noted that ESL strategies enhance English development.

Some ESL strategies used when teaching young children include specific communication skills with ELLs, book reading techniques, and vocabulary development (Restrepo & Dubasik, 2008). Communication skills with ELLs involve gestures, visual aids, and repetition (Restrepo & Dubasik, 2008; Tabors, 2008). English-speaking children can be partnered with ELLs to provide appropriate peer models (Restrepo & Dubasik, 2008; Tabors, 2008; Vaughn et al., 2006). Predictable language combined with an established routine facilitates ELLs in their language learning (Espinosa, 2010; Restrepo & Dubasik, 2008; Tabors, 2008). Book reading is also recognized by researchers (Espinosa, 2010; Restrepo & Dubasik, 2008; Tabors, 2008) as important for English development. It is recommended that books be chosen carefully. For example, predictable and wordless books have been found to be beneficial for ELLs (Espinosa,
Similarly, bilingual picture books have been found to be effective in teaching vocabulary (Restrepo & Dubasik, 2008). Explicit vocabulary instruction, especially when conducted in the primary language, is beneficial for the development of core concepts and vocabulary. In addition, English in an academic setting requires different vocabulary that ELLs may not have access to out of the school setting (Klinger et al., 2006; Vaughn et al., 2006).

Connecting home and school can be implemented by communicating in the parents’ native language whenever possible. Parents should be well-informed of their children’s progress and school expectations. In some cultures, it is not deemed appropriate to be involved in the education of children and this must be carefully considered when communicating with families. A common practice suggested by research (Espinosa, 2010; Tabors, 2008) is for families and schools to foster communication by inviting families to come into the classroom. Sharing of cultures can be done by asking families to write environmental print in their language and place it around the room. For example, parents can share their native words for shapes and colors, writing them on cards and hanging them on the walls. Another way to communicate with families is by sharing materials from the classroom (e.g., books and music) through the use of book bags (Restrepo & Dubasik, 2008).

In summary, the acquisition of English can be seen through a series of developmental periods (Tabors, 2008) with developmental and transfer target-deviant structures occurring as English is expanded (Genesee et al., 2004). Language transfer can
take place, increasing an ELL’s ability to use English (August et al., 2005; Bialystok, 2001; Genesee et al., 2004). Certain dimensions of language are more susceptible to language transfer than others depending on the similarities and differences between the L1 and L2. Factors such as age and rate of learning, attitude and motivation, exposure to language, language aptitude, personality, and intelligence (August & Hakuta, 1997; Genesee et al., 2004; Tabors, 2008; Snow et al., 2005) influence English acquisition. Language proficiency is measured to determine whether or not an ELL has achieved the desired level of English acquisition (Jepsen & de Alth, 2005). There is concern with the overrepresentation (Genesee et al., 2004; Hardin et al., 2007; Kalyanpur & Harry, 1999; Klinger et al., 2006) and underrepresentation (Klinger et al., 2006) of ELLs in special education. Cultural (Espinosa, 2010; Genesee et al., 2004; Klinger et al., 2006; McNaughton, 2006; Restrepo & Dubasik, 2008; Tabors, 2008; Xu, 2003) and assessment (August & Hakuta, 1997; Espinosa, 2010; Klinger et al., 2006; Snow et al., 2005) issues are also prevalent. Research (Espinosa, 2010; Genesee et al., 2004; Tabors, 2008) suggests that preschool teachers can prepare themselves to support and teach ELLs by being aware of the development of English acquisition and the influences surrounding it. It is no longer a matter of if there will be ELLs in a preschool classroom, but it is a matter of how best to facilitate ELL learning and literacy practices.

**Teachers’ Beliefs**

Much attention has been given to research on teachers’ beliefs in the past thirty years or so (Fang, 1996; Isenberg, 1990; Kagan, 1992; Pajares, 1992; Prawat, 1992;
Raths, 2001; Ruitenberg, 2011; Zeichner & Tabachnick, 1981). Teachers’ beliefs have been examined in terms of pre-service teachers (Pajares, 1993; Raths, 2001; Zeichner & Tabachnick, 1981), teachers’ sense of self-efficacy (Kagan, 1992; Woolfolk, Rosoff, & Hoy, 1990) and content-specific beliefs (Kagan, 1992). A constructivist perspective (Prawat, 1992) and staff development (Richardson, 1992) were avenues utilized to change teachers’ beliefs. Problems were found with the construct of teachers’ beliefs, however (Anders, Hoffman, & Duffy, 2000; Pajares, 1992; Ruitenberg, 2011).

A consistent pattern in the area of teachers’ beliefs that emerged during the 1970’s and early 1980’s was in the change of pre-service teachers’ beliefs as they engaged in student teaching and moved into their teaching practice (Zeichner & Tabachnick, 1981). In a review of the literature concerning pre-service teachers’ beliefs, Zeichner and Tabachnick (1981) noted that students held beliefs that were more progressive and liberal during their years at a university and then shifted to more traditional views as they engaged in student teaching or in-service practice. Zeichner and Tabachnick provided three potential reasons for this shift:

1. College students obtained more progressive or liberal views during university attendance. The effects of college, however, were “washed out” (p. 7) by actual teaching experience as students interact with their cooperating teachers, pupils, school bureaucracy, and teaching colleagues.

2. College students were heavily influenced by their “biography” (p. 8) which is defined by the years of experiences with teachers internalized as students and prior to
formal teacher training. These teaching models may have had a more traditional perspective.

3. College students saw theory and practice demonstrated as separate elements as colleges and universities espoused liberal views, but actually carried out traditional practices within their own classrooms. Students, therefore, shifted to traditional attitudes when they actually experienced full-time teaching.

Raths (2001) also reviewed the literature concerning pre-service teachers’ beliefs. Raths suggested changing the beliefs of teacher candidates early on in the teacher education program as to allow the candidates time to practice their new beliefs. There were problems, however, in how to change teacher candidates’ beliefs, the ethical issues concerning changing others’ beliefs, and deciding exactly what beliefs should be taught. Raths challenged the entire concept of teachers’ beliefs and espoused that teachers’ beliefs should be thought of in terms of dispositions. Dispositions were thought of as “a summary of actions observed” (Katz & Raths, 1985, p. 302). By looking at teacher candidate dispositions, some of the issues with teachers’ beliefs may disappear (Raths, 2001) as it is easier to strengthen a disposition rather than change a belief. Reforms of pedagogy at the university level, therefore, were viewed as necessary to elicit change in teachers’ beliefs (Zeichner & Tabachnick, 1981). One such reform was looking at teachers’ beliefs through a constructivist approach.

The 1990’s were viewed as a time of educational reform. Prawat (1992) wrote, “We are in the midst of a major paradigm shift in education” (p. 354). Teachers were
asked to become agents of change. According to Prawat, however, in order for teachers to be willing to change their beliefs, they must first be dissatisfied about their existing beliefs. An alternative idea would be sought, but it must be deemed useful and intelligible. Finally, teachers would need to find a way to connect the new idea with beliefs to prior conceptions. Prawat posits that the constructivist approach, with its interactive and dynamic curriculum, assists teachers in changing their beliefs about educational practices as the focus of teaching shifts from a transmission of knowledge to opportunities for students to experiment and self-reflect. A constructivist approach was also used during a study (Richardson, 1992) designed to allow teachers to examine their beliefs in a staff development process.

In an effort to provide a means for teachers to examine their beliefs and introduce them to new practices based on current research, Richardson (1992) employed a constructivist approach in a staff development program. The year-long study included 11 teachers of grades 4, 5, and 6 in two elementary schools within a large Southwestern school district. The goal of the study was to develop a discourse environment in which teachers would examine their beliefs about their practices in relation to current research on reading comprehension. Results showed that the participants of the study gradually moved towards a constructivist approach in which they shared their research knowledge and practice, however, this process took a large amount of time and was particularly difficult with teachers from one of the schools. Richardson suggested that the difficulty stemmed from two aspects inherent to the staff development process: teachers do not
normally rely on other teachers as a source of knowledge and teachers are accustomed to a top-down type of staff development in which they are only receptors of information. With repeated practice and support, however, teachers can shift to a constructivist process in staff development (Richardson, 1992).

Teachers’ beliefs were also examined in terms of teachers’ sense of self-efficacy and content-specific beliefs. Kagan (1992) reviewed the literature on teachers’ beliefs by grouping the belief according to two research agendas: teachers’ sense of self-efficacy and content-specific beliefs. Teachers’ sense of self-efficacy was defined as the belief of teachers in their ability to positively influence students (Woolfolk et al., 1990). Teachers’ sense of self-efficacy was found to be positively correlated with several classroom behaviors such as persevering with low-achievers, raising mathematics and reading achievement, and being task-oriented (Kagan, 1992). Content-specific beliefs incorporated teachers’ epistemological concepts of the field to be taught as well as the instructional strategies to be employed (Kagan, 1992). While there was variability in correlations with content-specific beliefs; classroom practices were consistent with teachers’ beliefs (Kagan, 1992).

The basic premise for studying teachers’ beliefs is that they are indicators of the decisions that teachers will make in the classroom (Pajares, 1992). Therefore, while teachers’ beliefs are studied for their own merit (Kowalski, Pretti-Frontczak, & Johnson, 2001; Pajares, 1992), they are often researched in combination with actual classroom practices (Burgess, Lundgren, Lloyd, & Pianta, 2001; Charlesworth et al., 1993; Fang,
1996; Isenberg, 1990, Stipek & Byler, 1997; Vartuli, 1999). In other words, researchers want to know if teachers “practice what they preach” (Stipek & Byler, 1997, p. 305). In general, teachers do indeed practice what they believe (Charlesworth et al., 1991; Charlesworth et al., 1993), especially in the earliest grades of preschool and kindergarten (Stipek & Byler, 1997; Vartuli, 1999).

There are problems with the construct of teachers’ beliefs (Anders et al., 2000; Pajares, 1992; Ruitenber, 2011), however. Pajares (1992) calls teachers’ beliefs a “messy construct” (p. 307) and the first problem lies with the definition of teachers’ beliefs. A simple definition of teachers’ beliefs would be what teachers accept as what is right or true. However, numerous other terms are used in place of or in conjunction with the term teachers’ beliefs. These other terms, which are varied and may not have the same meaning include: perspectives, dispositions, personal knowledge, predispositions, attitudes, personal practical knowledge, opinions, views, and understandings. The list of terms is not exhaustive; however, it depends on how researchers operationalize their terms.

A second problem with the construct of teachers’ beliefs is how it is conceptualized. Pajares (1992) argues that there is a distinction between teachers’ knowledge and beliefs. Knowledge and beliefs are inextricably intertwined, however, and beliefs are the filter through which knowledge is interpreted (Pajares, 1992). Fang (1996) states that teachers’ theories and beliefs “make up an important part of teachers’ general knowledge through which teachers perceive, process, and act upon the
information in the classroom” (p. 49). Clearly, researchers do not have consensus on the conceptualization of belief.

In summary, the research on teachers’ beliefs have been reviewed by examining changes in pre-service teachers’ beliefs (Pajares, 1993; Raths, 2001; Zeichner & Tabachnick, 1981) with a push toward educational reform utilizing a constructivist approach (Prawat, 1992; Richardson, 1992). Teachers’ beliefs have also been investigated through research agendas such as teachers’ sense of self-efficacy (Kagan, 1992; Woolfolk et al., 1990) and content-specific beliefs (Kagan, 1992). Although the study of teachers’ beliefs has become more prevalent, the construct of teachers’ beliefs is still in the process of being defined (Anders et al., 2000; Pajares, 1992; Ruitenberg, 2011). The meaning of the term teachers’ beliefs has been operationalized by researchers in different ways and the conceptualization of teachers’ beliefs has varied. Teachers’ beliefs are usually examined in light of teachers’ practices (Burgess et al., 2001; Charlesworth et al., 1993; Fang, 1996; Isenberg, 1990, Stipek & Byler, 1997; Vartuli, 1999).

Early Childhood Teachers’ Beliefs

Early childhood teachers’ beliefs have been associated with a range of topics relevant to teaching young children, including the identification of developmentally appropriate practice (DAP) and language and literacy practices (Brown, Molfese, & Molfese, 2008; Burgess et al., 2001; Charlesworth et al., 1991; Charlesworth et al., 1993; Kowalski et al., 2001; Lee & Ginsberg, 2007; Stipek & Byler, 1997; Vartuli, 1999).
Several studies have focused specifically on Head Start teachers’ beliefs about language and literacy practices (Hawken, Johnston, & McDonnell, 2005; Hindman & Wasik, 2008; O’Leary, Cockburn, Powell, & Diamond, 2010; Powell, Diamond, Bojczyk, & Gerde, 2009). There are a few studies that have addressed teachers’ relationships with ELLs (Fumoto et al., 2007; Han, 2010); however, no studies that investigated preschool teachers’ beliefs about language and literacy practices with ELLs were identified.

**Early Childhood Teachers’ Beliefs about Language and Literacy Practices**

Practices designated as the most appropriate by the National Association for the Education of Young Children (NAEYC; Bredekamp, 1987; Bredekamp & Copple, 1997) were the foci of several earlier studies (Brown et al., 2008; Charlesworth et al., 1991; Charlesworth et al., 1993; Kowalski et al., 2001; Stipek & Byler, 1997; Vartuli, 1999). Charlesworth et al. (1991) developed a questionnaire based on the NAEYC’s guidelines for use with kindergarten teachers. The questionnaire, Teacher Belief Scale (TBS), was given to 113 kindergarten teachers. The teachers were asked to rate their responses in a 5-point Likert scale from *not important at all* (1) to *extremely important* (5). Four teachers were observed and their responses were evaluated in regard to their actual classroom practices. There was a moderate, statistically significant correlation between reported beliefs and practices concerning developmentally appropriate teaching.

Charlesworth et al. (1993) revised the TBS, eliminating a few items which did not load on any factor in the first analysis and modifications were made due to changes made in the NAEYC guidelines. The objective of the second study was to obtain a larger sample...
and determine validity through more extensive classroom observation. A sample of 204 kindergarten teachers was administered the TBS. An Instructional Activities Scale (IAS) was also included to allow teachers to self-report when and how frequently DAP activities were offered in their classrooms. Twenty classroom observations were then conducted to provide evidence as to whether teachers were actually implementing DAP activities. The results indicated that the kindergarten teachers within that school system used instruction that was at least moderately related to their reported beliefs.

Vartuli (1999) conducted a longitudinal study measuring early childhood teachers’ beliefs and practices across grade levels, which included 137 teachers (i.e., 18 Head Start, 20 kindergarten, 33 first grade, 33 second grade, and 33 third grade). The Teachers Beliefs Scale (TBS, Charlesworth et al., 1991; Charlesworth et al., 1993) was one of the instruments utilized to measure the teachers’ beliefs. Two other instruments (i.e., the Early Childhood Survey of Beliefs and Practices and the Classroom Practices Inventory) measured both beliefs and practices or just practices. The TBS was developed to document the nature of early childhood instructional practice as it might fit with NAEYC guidelines for developmentally appropriate practice. The TBS asked teachers to rate DAP belief statements as to their relative importance. The overall results indicated that preschool and kindergarten teachers’ beliefs about literacy were found to be closely associated with the NAEYC guidelines. The higher the grade level taught by a teacher, the least likely she would espouse practices deemed most appropriate by NAEYC. Vartuli’s study supports the results of Stipek and Byler (1997) who found that 18
preschool and 26 kindergarten teachers espoused beliefs that significantly correlated with the practices implemented in their classrooms. The first grade teachers in the study, although fewer in number (n=16) were found to hold beliefs that were not consistent with what was observed in their classrooms, suggesting that the first grade teachers did not subscribe to only one set of beliefs.

Kowalski et al. (2001) surveyed 470 preschool teachers (Head Start, public, and special education) about their beliefs concerning the importance of various student developmental skills and abilities. In a survey designed by the authors and based upon DAP, all three groups of teachers indicated that they believed social-emotional skills were more important for children to learn than academic skills. Brown et al. (2008) also utilized the self-reported questionnaire developed by Kowalski et al. (2001) in a study which examined student outcomes in correlation to preschool teachers’ beliefs. The preschool children’s skills in letter identification and number concepts (enumeration, cardinality, and numeral identification) were assessed in the fall and spring to obtain measures of changes in skill performances. Results indicated that the preschool teachers’ beliefs about literacy and mathematics were only weakly correlated to the student learner outcomes. It should be noted that only 8 teachers were part of this study. The authors also suggested that teachers may not be able to act on their beliefs as more classroom practices are being mandated by district or state standards.

Recent research (Goodwin, Cheruvu, & Genishi, 2008), however, has taken exception to the “reliance on developmentally appropriate practices (DAP) as the lens
through which children’s progress should be measured and assessed, because they [researchers] understand the culturally grounded (and informed) nature of child development, in contrast to the (mono) cultural specificity of the DAP guidelines” (p. 7). Charlesworth et al. (1993) suggested looking at “individual appropriateness” (p. 274) which would take into consideration gender and culture as well as development.

Preschool teachers’ beliefs about language and literacy practices were the focus of two additional studies (Burgess et al., 2001; Lee & Ginsberg, 2007). In a study of 240 preschool teachers who were part of the Virginia Preschool Initiative (VPI) program, Burgess et al. (2001) found that, in general, the teachers endorsed eclectic, literature-based approaches, and all teachers reported spending time reading aloud to students each day. The VPI teachers reported their beliefs through an instrument, the Preschool Literacy Practices Check List (PLPC), which was designed by the authors by combining items from several existing surveys. It is important to note that the Burgess et al. study was published as a report from the Center for the Improvement of Early Reading Achievement.

Lee and Ginsburg (2007) utilized written vignettes and interviews to obtain qualitative measures concerning preschool teachers’ beliefs about early literacy and mathematics education for low and middle socioeconomic status children. Lee and Ginsburg sought to determine if the preschool teachers’ beliefs were related to the socioeconomic status of their students and if the beliefs differed by subject matter. Results indicated that teachers of low-SES children: (a) viewed their children as
underdeveloped in their readiness to learn because of the lack of enrichment in their homes, (b) mainly focused on academics through the use of readymade materials in order to have their students prepared for kindergarten, and (c) supported classroom use of the computers due to lack of such equipment in their students’ homes. Teachers of middle-SES students reported social development as a high priority and did not support classroom computer usage (as students already used them in their homes). Literacy and mathematics in the middle SES classrooms were developed by saturating the classrooms with literacy and math materials and allowing children to choose their own activities. In general, teachers of low- and middle-SES children held vastly different views about preschool education. One of the possible reasons given for this discrepancy was that many of the low-SES children were English language learners and the teachers may have perceived that the ELLs did not have their literacy skills developed which encouraged their teachers to focus on academics.

In sum, teachers generally expressed beliefs that were congruent with accepted early literacy practices. The established developmentally appropriate practices by NAEYC were the focus of numerous studies (Brown et al., 2008; Burgess et al., 2001; Charlesworth et al., 1991; Charlesworth et al., 1993; Kowalski et al., 2001; Stipek & Byler, 1997; Vartuli, 1999) with which many teachers’ beliefs aligned. Teachers’ beliefs about early literacy practices varied according to the perceived socioeconomic status of their students (Lee & Ginsberg, 2007).
Head Start Teachers’ Beliefs and Early Literacy

Several recent studies on early childhood teachers’ beliefs and early literacy (Hawken et al, 2005; Hindman & Wasik, 2008; O’Leary et al., 2010; Powell et al., 2009; Rohs, 2007) solely utilized Head Start teachers as participants. Hindman and Wasik (2008) specifically examined 28 Head Start teachers’ beliefs about language and literacy practices and teacher background factors related to these beliefs. In order to determine the Head Start teachers’ beliefs about language and literacy practices for their preschool students, Hindman and Wasik piloted a revised version of the Preschool Teacher Literacy Beliefs Questionnaire (TBQ; Seefeldt, 2004). The questionnaire consisted of 30 items clustered into four hypothesized subscales: code-related skills, oral language/vocabulary, book reading, and writing. The TBQ was designed “to go beyond the simple dichotomy of appropriate vs. inappropriate instruction to capture congruence between recent research findings and practicing teachers’ ideas about what and how preschoolers learn literacy” (Hindman & Wasik, 2008, p. 483). A Cronbach’s alpha reliability analysis was calculated on the four subscales and total score. The items did reflect a single underlying construct with teachers demonstrating substantial variability with an alpha reliability of .87. The subscales demonstrated acceptable internal consistency and reasonable variability with Cronbach’s alpha ranging from .60 (writing subscale) to .73 (book reading subscale). The results indicated that, in general, the Head Start teachers agreed with the dimensions of the scale that pertained to oral language and book reading, but showed more variability around code-related and writing beliefs.
Other studies involving Head Start teachers’ beliefs about language and literacy practices (Hawken et al., 2005; O’Leary et al., 2010; Powell et al., 2009) emphasized specific language and literacy skills and strategies. A national survey of 273 Head Start teachers (Hawken et al., 2005) was conducted to assess their views on practices concerning emergent literacy. The researchers mailed surveys to a stratified, random sample of preschool teachers working in Head Start programs. The survey consisted of 10 pages of items based upon a review of emerging literacy research and included the skills outlined in the Head Start Child Outcomes Framework (2000). The results indicated that the Head Start teachers placed more of a focus on book knowledge/appreciation and print awareness skills than strategies to develop phonological awareness skills. All of the Head Start teachers agreed that literacy instruction should occur on a daily basis and a variety of skills should be used to teach literacy.

Two qualitative studies also incorporated Head Start teachers’ beliefs about language and literacy instruction. O’Leary et al. (2010) noted during 14 interviews with 137 Head Start teachers and teacher assistants that explicit phonological awareness activities were planned more frequently than vocabulary activities. However, the teachers only focused the phonological activities on letter knowledge and did not see phonological awareness as a continuum of developmental activities. Uncertainty in teaching vocabulary was also noted by the Head Start teachers in the study. Specifically, the Head Start teachers were not sure of the extent that vocabulary instruction should be
spontaneous or planned. In addition, the Head Start teachers “expressed uncertainties about researched-based practices in teaching letter-sound associations and novel words to children with limited English language skills” (O’Leary et al., 2010, p. 187). Other concerns involving ELLs and vocabulary instruction included securing active participation of the ELLs, trying specific strategies (i.e., gestures and saying a new word slowly) that did not work, and not knowing additional strategies to use in their classroom.

In a study of 40 lead and assistant teachers, Powell et al. (2009) found that Head Start teachers supported inclusion of literacy instruction for young children, but differed in their understanding (or perception) of how literacy instruction should be delivered. Some of the Head Start teachers indicated that literacy materials and activities should be provided to children when they are “ready.” Other Head Start teachers reported that they believed that all children should be engaged in literacy learning despite their level of readiness. In addition, many teachers thought that growth in other developmental domains (i.e., social-emotional) were requisites to progress in early literacy learning.

Rohs (2007) examined Head Start teachers’ efficacy beliefs and child outcomes in a dissertation study. Sixty-one Head Start teachers from a mid-western metropolitan area were asked to complete three surveys: Teachers’ Sense of Efficacy Scale (TES; Tschannen-Moran & Hoy, 2001), Teacher Beliefs Scale (TBS; Charlesworth, et al., 1993), and the Early Childhood Job satisfaction Survey (ECJSS; Jorde-Bloom, 1988). The participants were also observed in their classrooms for a total of 2 hours each with observers utilizing the Classroom Practices Inventory-KP (Vartuli, 1992) as a guide. The
findings of the study indicated no significant relationship between teacher efficacy beliefs and overall child outcomes. However, a low significant relationship was found between teacher efficacy and literacy. Rohs suggested that the recent increased focus on literacy in early childhood may have led Head Start teachers to have more exposure to professional development in literacy than in other domains.

In sum, the beliefs, perspectives, and views of teaching literacy by Head Start teachers in the reviewed studies (Hawken et al, 2005; Hindman & Wasik, 2008; O’Leary et al., 2010; Powell et al., 2009; Rohs, 2007) supported teaching early literacy, but reported that there were various ways to teach early literacy skills. Concerns were raised as to how language and literacy practices should be taught to ELLs (O’Leary et al., 2010).

**Early Childhood Teachers’ Beliefs and English Language Learners**

A few recent studies (Fumoto et al., 2007; Han, 2010; Kintner-Duffy, 2011) have focused attention on early childhood teachers’ beliefs concerning ELLs. Culture and social competence were the focus of Han’s (2010) study of White American kindergarten teachers’ beliefs. Ninety-five White American kindergarten teachers from five school districts in the southeast region of the United States were asked to complete the Child Vignette and Teachers’ Belief Questionnaire (CVTBQ) which was developed for the study. Six vignettes with a hypothetical kindergarten child were developed and followed-up with a question regarding the child’s social competencies. Six variables were held constant across the six vignettes: gender, the child’s socioeconomic status, physical
health, linguistic ability, academic ability, and family background. The child’s racial/cultural background, however, was varied across the six vignettes. Data analysis revealed that the teachers had limited understanding of young children’s social competence and culture from three different racial/cultural groups (i.e., African American, Hispanics and Asians). The teachers knew the most about the African American children and the least about the children from Asian backgrounds. Follow-up interviews with four of the teachers indicated that the major source of teachers’ cultural knowledge was from professional experience and was low-context. Low context, as defined by anthropologist, Edward T. Hall in his book, *Beyond Culture*, is when individual identity and personal interest are highly valued in a culture. The United States and Canada are examples of low-context cultures. In addition, the teachers’ beliefs about multicultural education revealed color-blind teaching (i.e., when teachers ignore their students’ race or ethnicities).

In a dissertation study, Kintner-Duffy (2011) examined the beliefs of preschool teachers regarding children from culturally diverse backgrounds. Forty-one preschool teachers completed a survey which combined questions from the Teacher Multicultural Attitudes Survey (TMAS; Ponterotto, Baluch, Greig, & Rivera, 1998), the Crosswalks Assessment of Knowledge Skills and Instructional Strategies (CAKSkIS; Maude et al, 2010), and the Early Intervention and Early Childhood Self-Assessment Checklist (EIEC; Goode, 2002). In addition, 10 of the teachers were observed in their classrooms using the Early Childhood Environment Rating Scale-Revised (ECERS-R; Harms, Clifford, &
Cryer, 1998), Early Childhood Environment Rating Scale-Extended (ECERS-E; Sylva, Siraj-Blatchford, & Taggart, 2003), and the Classroom Assessment Scoring System-PreK (CLASS-PreK; Pianta, LaParo, & Hamre, 2004). Correlation and regression analyses on observation and survey tools revealed no significant differences between preschool teachers’ beliefs and their daily practices to accommodate children from culturally diverse backgrounds. In other words, there seems to be no relationship between teachers’ beliefs regarding multicultural classrooms and their teaching practices.

Fumoto et al. (2007) investigated preschool teachers’ beliefs with a focus on student-teacher relationships. This study examined how ten early childhood teachers in England perceived their relationships with 120 students, of whom 41 children were ELLs. The purpose of the study was to determine how the teachers’ perceptions of their relationships with their students changed from the first term of the school year until the second term. The Student-Teacher Relationship Scale (STRS) which determined conflict, closeness, and dependency was employed to elicit the responses. The 28 item scale was based on a Likert-type format and was standardized in the United States. Ten early childhood educators completed the STRS for approximately 10 to 15 children in their settings. The children were only indirectly involved in the study. The results of the study indicated that, while the children who spoke the least amount of English scored lower on the STRS in terms of closeness, the differences were not significant by the end of the year. There was no significant main effect in terms of conflict, and the teachers’ perceptions of dependency were viewed as being influenced by the children’s levels of
The overall conclusions suggested that teachers can experience challenges with students who do not speak the same language as they do, and consequently, the children’s learning environment may be adversely affected.

In summary, there is a dearth of research on preschool teachers’ beliefs in relation to ELLs. In one study culture and social competence were the focus in consideration of White American kindergarten teachers’ beliefs (Han, 2010). Preschool teachers’ beliefs regarding multicultural classrooms were examined in relationship to classroom practices in another study (Kintner-Duffy, 2011). Only one study (Fumoto et al., 2007) investigated preschool teachers’ beliefs about ELLs, but the student-teacher relationship was the focus, not language and literacy development. No studies were identified that have investigated preschool teachers’ beliefs about language and literacy practices for ELLs.

**Measuring Teachers’ Language and Literacy Beliefs**

The primary instrument of gathering information about teachers’ language and literacy beliefs is the survey questionnaire. DeFord (1985) is credited with creating the first reliable instrument to measure teachers’ beliefs about reading instruction, the DeFord Theoretical Orientation to Reading Profile (TORP). Nearly all of the reviewed studies (Brown et al., 2008; Burgess et al., 2001; Charlesworth et al., 1991; Charlesworth et al., 1993; Fumoto et al., 2007; Han, 2010; Hawken et al, 2005; Hindman & Wasik, 2008; Kowalski et al., 2001; Shaughnessy & Sanger, 2005; Stipek & Byler, 1997; Vartuli, 1999) utilized either a commercially made survey or a survey developed...
specifically for a particular study. There are shortcomings with using surveys, however. The information on the survey is self-reported and respondents may indicate how they think they should respond as opposed to their real beliefs. Also, response bias may occur as the teachers who do respond are likely the teachers who are more committed to the profession, and therefore, all teachers’ beliefs may not be represented. Survey research designs are appropriate, however, when gathering information from a large cross-section sample over a wide geographic area.

**Survey Development**

The creation of a survey is a multi-step process. In order to create a valid and reliable instrument, it is necessary to consider the following aspects: survey mode (Dillman, Smyth, & Christian, 2009; Fowler, 2002; Scheuren, 2004), construct identification and item generation (DeVellis, 2003; Dillman et al., 2009; Fowler, 2002), question format (DeVellis, 2003; Dillman et al., 2009; Fitzpatrick, Sanders, & Worthen, 2004; Fowler, 2002; Scheuren, 2004), evaluation of items by a panel of experts (DeVellis, 2003), item organization (Dillman et al., 2009; Fowler, 2002), experimental pilot (DeVellis, 2003; Dillman et al., 2009; Fowler, 2002; Scheuren, 2004), preliminary analysis (DeVellis, 2003), and final administration and analysis (Dillman et al., 2009; Fowler, 2002). In the following subsections, these aspects will be reviewed.

**Survey Mode**

The survey mode needs to be determined prior to survey development. Surveys are classified by their mode (i.e., method of data collection). Several modes are
possible—in-person, telephone, mail, Internet, or mixed-mode (Dillman et al., 2009; Fowler, 2002). Each mode has its own advantages and disadvantages (Fowler, 2002). In-person interviews are used for a variety of reasons, especially when complex information is collected (Scheuren, 2004). However, complex sampling and high costs, along with lack of access to secure apartments and neighborhoods, make in-person interviews a less chosen option (Dillman et al., 2009). Telephone surveys allow researchers to have access to households quickly and easily; however, the use of cellular phones and the lack of tolerance for unsolicited phone calls is a challenge for telephone surveyors (Dillman et al., 2009). Mail surveys have relatively low cost and require minimal staff; however, obtaining good postal address lists is difficult (Dillman et al., 2009; Fowler, 2002).

The potential for Internet surveys is vast. The cost savings is tremendous and quick return of data is appealing (Dillman et al., 2009; Fowler, 2002). However, there are gaps with people who do not have Internet access or computer skills to complete surveys. Therefore, use of the Internet as a survey mode “has been largely limited to surveying specific populations of interest with high Internet access rates and skill levels…” (Dillman et al., 2009, p. 9). Computers and software, however, have led the way to mixed-mode designs.

Mixed-mode survey design allows surveyors to integrate systems to contact respondents, create questionnaires, track and manage data effectively, and analyze data from different modes more efficiently (Dillman et al., 2009). The significant limitation in
using a mixed-mode design is the introduction of measurement error. Measurement error can be due to different answers to the same questions being provided by respondents depending on the mode used to ask the question (Dillman et al., 2009). Therefore, while the use of mixed-mode surveys is important, cost, error, and management consequences need to be considered (Dillman et al., 2009).

In summary, the choice of survey mode is varied, ranging from in-person, telephone, mail, Internet, to mixed-mode. Strengths and weaknesses are apparent with each mode. Depending upon the intent of the survey, some strengths may outweigh the weaknesses. It is up to the researcher to choose the best mode for the task at hand.

**Construct Identification and Item Generation**

The first step in constructing a survey instrument is to clearly identify the constructs to be measured (DeVellis, 2003). A construct is the underlying phenomenon that a scale is intended to reflect (DeVellis, 2003). A scale reveals the levels of theoretical variables not readily observable by direct means. The survey is the instrument used to collect data. In order to derive the constructs underlying the survey instrument, it is necessary to conduct an extensive literature review. This literature review can also be the starting point for item generation, which is the next step in constructing an instrument. Numerous items based on the constructs to be measured need to be generated (DeVellis, 2003). Generally, a large item pool is recommended as this ensures against poor internal consistency (DeVellis, 2003). Internal consistency deals with the homogeneity of the scale’s items. Internal consistency is indicated by how strongly the
items correlate with each other. A large item pool allows for more choice between items so that the intended result can be achieved. Items from previous surveys on the same topic may be included as long as they are appropriate and well written questions (Dillman et al., 2009; Fowler, 2002). Once the constructs have been defined, care needs to be given to the actual process of drafting the questions.

Crafting quality question items depends on several characteristics: item length, reading level, multiple negatives, double barreled items, and ambiguous references (DeVellis, 2003). While this is not a comprehensive list of item characteristics, it does provide some guidance in writing good survey items. Although exceptionally lengthy items in a survey should be avoided, the item’s content must be understood by the respondent. Dillman et al. (2009) suggests the use of simple and familiar words. Therefore, unnecessary wordiness should be avoided (DeVellis, 2003). The reading level or reading difficulty of test items should be between the fifth and seventh grade levels which is an appropriate reading level for instruments to be used with the general public (DeVellis, 2003). The use of multiple negatives should also be avoided to maintain clarity. An example of a multiple negative would be “I am not in favor of the school board stopping the funding for after school programs.” Double-barreled items are questions that contain two or more ideas. Dillman et al. (2009) reminds surveyors to ask “one question at a time” (p. 81). Lastly, ambiguous references should be discouraged. Ambiguous references might include pronouns that are used without clearly indicating which person the pronoun was meant to refer.

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In summary, the first step in survey development is to clearly identify the constructs underlying the survey. The second step is to generate numerous items for the initial pool. As the items are being drafted, survey developers need to pay attention to certain characteristics such as item length, reading level, multiple negatives, double barreled items, and ambiguous references in order to craft strong items. Question format also becomes important as it will determine the type of responses that are given.

**Question Format**

Question format should be determined simultaneously with the generation of items so that there is compatibility between the items (DeVellis, 2003). There are two broad formats for survey questions: open-ended and close-ended (Dillman et al., 2009; Fowler, 2002; Scheuren, 2004). Open-ended questions provide respondents with a space to answer the question using their own words or numbers. Open-ended question formats are preferable when a surveyor does not want to influence the respondent’s answers and wishes to gather detailed information from the respondent (Dillman et al., 2009; Fowler, 2002). Numerical responses may be easier and yield more precise information in an open-ended format (Dillman et al, 2009). However, there are several limitations with open-ended question formats. Open-ended questions require respondents to spend more effort in their answers, and therefore, may be skipped. Coding answers to open-ended questions is time-consuming and may be more difficult to analyze as the responses vary (Dillman et al., 2009).
Close-ended or scalar questions provide respondents with a list of answers from which they must choose to answer the question (Dillman et al., 2009). Close-ended question formats are used when surveyors want respondents to choose an answer from a set of answer choices. Answers to close-ended questions can be analyzed quickly and easily. The scales used by surveyors, however, have an impact on how respondents interpret the questions (Dillman et al., 2009). Close-ended question formats use nominal or ordinal scales. Nominal scales ask respondents to select from categories which have no natural order, and more than one category may be selected. Ordinal scales provide an ordered set of answers and respondents must decide where their answer fits along the continuum (Dillman et al., 2009). The types of scale item formats are numerous, with the Likert scale being the most common (DeVellis, 2003). The Likert scale is used when the survey item is presented in a declarative sentence and response options vary according to degrees of agreement with or endorsement of the statement. Opinions, beliefs and attitudes are generally measured with a Likert scale (DeVellis, 2003; Fitzpatrick et al., 2004).

To summarize, question formats should be determined in conjunction with item generation. Two general types of question formats are possible: open-ended and closed-ended. Open-ended allow for a more detailed response. Close-ended question formats use numerous scales from which a respondent must chose an answer. The Likert scale is the most common item format (DeVellis, 2003).
Panel of Experts

The next step in survey development is to ask a group of experts to review the item pool. A panel of experts is chosen based on the members’ familiarity with the constructs being measured (DeVellis, 2003). The input from the reviewers strengthens the items’ content validity. Content validity concerns the extent to which a specific set of items reflects the content domain (DeVellis, 2003). The reviewers evaluate the items in terms of clarity and relevance, and make sure that items have not been missed (DeVellis, 2003). Experts reviewing items for clarity and conciseness can suggest alternate wording or ask for clarification of the words used. The panel of experts may also provide information on some aspect of the construct that was overlooked. The feedback from the panel of experts can then be incorporated into a revised list of items (DeVellis, 2003).

Item Organization

Item organization is the way in which the items are placed within a survey. Survey items are arranged to create an instrument most appropriate for the constructs being measured. The number of items is important to ensure that enough items are chosen to accurately measure the constructs, and yet not too many that would cause lack of interest or fatigue. The first question should be chosen with the utmost care (Dillman et al., 2009) since it is crucial in determining if the respondents will continue on with the survey. Other considerations of item organization include grouping related questions together (Dillman et al., 2009), placing sensitive or objectionable questions near the end of the survey (Dillman et al., 2009), and avoiding question order effects by paying
attention to the effects earlier questions might have on later questions (Dillman et al., 2009). Fowler (2002) also suggested that survey developers incorporate only a few forms of questions within a survey, allowing for less confusion in following the directions. After the items have been organized, a draft of the survey should be reviewed by the panel of experts and changes should be incorporated if necessary. It is this version of the survey that will be used in the experimental pilot study.

**Experimental Pilot Study**

Once a survey has an ordered set of questions and is nearly ready for use, a pilot study of the instrument should be completed (DeVellis, 2003; Dillman et al., 2009; Fowler, 2002; Scheuren, 2004). A pilot study is a smaller version of the intended final study and its purpose is to find out if the survey “works” (Scheuren, 2004, p. 25). The pilot study is conducted by sampling a large number of subjects that represent the population for which the survey was intended (DeVellis, 2003). Just how many subjects should be included in the sample is difficult to determine. Too few subjects in the sample may produce unstable patterns in the covariation among the items or may not represent the population for which the scale is intended (DeVellis, 2003). The sample needs to be large enough so that there is accurate internal consistency (DeVellis, 2003). After the pilot is administered, the respondents should be asked if the instructions and items were clear, and if there were any problems in answering the questions (Fowler, 2002). The length of time the survey takes sample respondents to complete is also crucial and may be
gauged during the pilot test (Fowler, 2002). Once the administration and feedback are completed, the data undergo preliminary analysis.

**Preliminary Analysis**

After the survey has been administered, the data are examined in terms of performance, exploratory factor analysis, and reliability (DeVellis, 2003). Items need to be evaluated in terms of performance (DeVellis, 2003). Three areas of scale performance are evaluated: item-scale correlations, item variances, and item means (DeVellis, 2003). Correlations among items indicate the reliability of the items. DeVellis (2003) notes, “The higher the correlations among items, the higher are the individual item reliabilities” (p. 91). Item variances should be relatively high for scale items (DeVellis, 2003). In other words, the sample population should be diverse, and therefore, the range of scores for items should also be diverse. Item means need to be close to the center of the range of scores. If the means are too near to one of the extremes, then the wording of the item may not be strong enough (DeVellis, 2003). In other words, it would be difficult to find someone who would disagree with an item that is not worded strongly.

An exploratory factor analysis is conducted to find out how many constructs or factors underlie a set of items (DeVellis, 2003). In order to determine the first factor, a correlation matrix is created for all of the items. Additional factors are extracted through the use of the correlation matrix. The decision for how many factors should be extracted is often based on two non-statistical guidelines: the eigenvalue rule and the scree test (DeVellis, 2003). The eigenvalue indicates the amount of information captured by a
factor. An eigenvalue of 1.0 represents the portion of information of a typical single item. Items with an eigenvalue of less than 1.0 should not be retained (DeVellis, 2003). The scree test is based on eigenvalues, but uses their relative values in association with successive factors. Eigenvalues are plotted on a vertical axis with the number of factors being plotted on the horizontal axis. Ideally, the progression of factors will show a point where information drops off. This drop off is called an elbow. The factors which lie below the elbow are eliminated. Factors above the elbow must then be analyzed in terms of a structure matrix based on their factor rotation. Factor rotation can either be orthogonal or oblique. Orthogonal rotation is used with factors that are statistically independent of each other. Oblique rotation is used when factors correlate (DeVellis, 2003).

In addition, the internal reliability of the scale needs to be calculated. Cronbach’s coefficient alpha, (or $\alpha$), is typically equated with internal consistency (DeVellis, 2003). The range for Cronbach’s alpha is from 0 to 1.0. The closer alpha approaches 0, the less the items correlate; conversely, the closer alpha approaches 1.0, the more the items correlate (DeVellis, 2003). DeVellis (2003) proposed his own range for the different levels of alpha declaring the ranges between .70 and .80 as “respectable” (p. 95) and between .80 and .90 as “very good” (p. 96). Scale items with low alpha may be dropped, depending on how poor the alpha and the number of test items (DeVellis, 2003).

In summary, the preliminary analysis of the scale items yields information about an item’s performance, underlying factors and reliability. Items are examined in terms of
item-scale correlations, item variances, and item means. Underlying factors are derived through an exploratory factor analysis. Cronbach’s reliability coefficient alpha is calculated to determine the instruments’ internal reliability consistency. After the analysis of the items, decisions can be made as to whether the items should be kept in the survey. The final version of the survey can then be administered.

**Final Administration and Analysis**

The final administration of the survey occurs after the pilot study and preliminary analysis. The population for this final administration should be large enough to reduce sampling error (Fowler, 2002). Determining the sample population number, however, is complex and varied depending on the survey design (Fowler, 2002). Once the sample is determined, implementation of the survey brings its own challenges. Dillman et al. (2009) proposed procedures for successful survey implementation including:

- personalization of all contacts with respondents,
- tokens of appreciation for survey completion,
- multiple and varied contacts with respondents,
- careful and strategic timing of contacts with respondents,
- visually interesting surveys,
- and clear survey instructions.

Organizing data, keeping track of returned surveys, and monitoring completion rates are also part of the final administration stage of survey development (Dillman et al., 2009).

Data analysis at this final stage includes the following: inter-item correlations, confirmatory factor analysis, and Cronbach’s coefficient alpha. An inter-item correlation is completed at this point to determine which items correlate highly with each other (DeVellis, 2003). Items belonging to the same subscale (factor) will have strong
correlations. Conversely, items not belonging to the same subscale (factor) will have weaker correlations. A confirmatory factor analysis is completed to determine if the factors from the exploratory analysis are still present (DeVellis, 2003). A structure matrix is again derived based on the type of factor rotation. Cronbach’s coefficient alpha is then computed for each of the subscales (factors).

The development of a survey instrument is a multi-step process that includes the selection of a survey mode, identification of constructs, item generation, question format, review by a panel of experts, item organization, pilot study, preliminary analysis, and final administration. The process is not lock-step; the components can be developed simultaneously. Careful attention is given to each step of the process in order to create a valid and reliable instrument. Hence, survey development is more than a number of questions thrown together; a well-developed survey is a complex creation of questions designed around specific constructs and is implemented with utmost care.

Chapter Summary

In summary, this chapter included a literature review in three areas: young ELLs and English language acquisition, early childhood teachers’ beliefs, and survey development. The acquisition of English by young ELLs was examined through the following categories: developmental stages of language acquisition, language transfer, target-deviant structures, factors that influence second language learning, early predictors of reading achievement for ELLs, representation of ELLs in special education, and assessment and cultural issues.
Studies including early childhood teachers’ beliefs were reviewed and discussed in terms of early childhood teachers’ beliefs about language and literacy practices, and early childhood teachers’ beliefs concerning ELLs. Developmentally appropriate practice (DAP) as determined by NAEYC dominated the research (Brown et al., 2008; Charlesworth et al., 1991; Charlesworth et al., 1993; Kowalski et al., 2001; Stipek & Byler, 1997; Vartuli, 1999) involving early childhood teachers’ beliefs about language and literacy practices. Overall, most early childhood teachers expressed beliefs that were in agreement with accepted language and literacy practices. The research on early childhood teachers’ beliefs concerning ELLs (Fumoto et al., 2007; Han, 2010) was sparse and focused on social competence and student-teacher relationships. Head Start teachers were the focus of several studies (Hawken et al, 2005; Hindman & Wasik, 2008; O’Leary et al., 2010; Powell et al., 2009). The Head Start teachers’ beliefs in the reviewed studies supported teaching early literacy and reported that there were various ways to teach early literacy skills.

Survey development was viewed as a series of steps that involved the selection of a survey mode, identification of constructs, item generation, question format, review by a panel of experts, item organization, pilot study, preliminary analysis, and final administration. These aspects of survey development should be addressed in order to obtain high quality responses. Validity and reliability are determined through careful survey development.
After an extensive review of the literature concerning young ELLs and language acquisition, teachers’ beliefs, and survey development, the researcher developed a survey to measure preschool teachers’ beliefs about language and literacy practices for ELLs. The next section, Chapter 3, discusses the method by which the researcher developed and implemented the Preschool Teachers’ Language and Literacy Beliefs (PTLLB) for English Language Learners (ELLs) Survey.
CHAPTER 3: Methods

The purpose of this study was to develop and validate a new scale to measure preschool teachers’ beliefs about language and literacy practices for ELLs. Based on the review of literature surrounding English language development for young ELLs, early childhood teachers’ beliefs, and survey development, a scale to measure practicing preschool teachers’ beliefs about language and literacy practices for ELLs was developed. Numerous reviewed studies included measures of early childhood teachers’ beliefs about language and literacy practices for teaching English to young children. However, no studies were identified that included measures of early childhood teachers’ beliefs about language and literacy practices specifically for ELLs. Therefore, this study proposed to address that gap by using a new instrument that measured practicing preschool teachers’ beliefs about language and literacy practices for ELLs.

This study was guided by the following research questions:

1. What items written for a self-reported instrument best reflect preschool teachers’ beliefs about language and literacy instructional practices for ELLs?
2. What level of reliability can be attained with this instrument?
3. What evidence of validity can be demonstrated?
4. What factors comprise preschool teachers’ beliefs about language and literacy practices for ELLs?
5. Is there a difference between teachers’ beliefs about language and literacy instructional practices for ELLs and teacher assistants’ beliefs about language and literacy instructional practices for ELLs?

Participants and Setting

The participants in this study were drawn from a pool of approximately 350-400 attendees of a state Head Start Association Conference held in late March 2012. Head Start teachers and teacher assistants were encouraged to participate in the survey. The survey was included in the conference welcome packet and explained during the opening session of the conference. Participants returned the completed survey at various times during the conference by placing them in a secure box at the information table where they received a bar of chocolate for their efforts. A paper version of the survey was decided upon as it would have been difficult to manage the security of computers for an on-line version of the survey during the conference.

Background on Head Start

The researcher chose to investigate Head Start teachers’ beliefs about language and literacy practices for ELLs. Established in 1965 as part of the War on Poverty, Head Start is a federal preschool program for at-risk students whose families’ incomes fall below the nationally determined poverty line. Head Start is a comprehensive child development program that serves children from ages 3 to 5. The program’s goal is to increase the school readiness of young children. Students exit the program when they reach school entry age. Head Start teachers, however, can teach within three different
scenarios: a public school, a community based center, or in a home-based situation. Head Start teachers within a public school system are required to be licensed teachers whereas teachers in a community based Head Start or home-based program may only have an associate degree. Assistant teachers in either classroom program will be required to obtain a Child Development Associate (CDA) by the year 2013. Therefore, there is variability in teacher and assistant teacher levels of education.

While originally designed as a program that focuses on the social-emotional domain of development, Head Start developed learning standards that reflect more of an emphasis on the cognitive domain of development during Congressional reauthorization in 1998 (Public Law 105-285). These learning standards included language development, literacy, mathematics, science, creative arts, social & emotional development, approaches to learning, and physical health & development. The Head Start Child Outcomes Framework was released in 2000, revised in 2003, and further revised in 2010 with a name change to *Head Start Child Development and Early Learning Framework* (U.S. Department of Health and Human Services, 2010). The Framework is designed to be used by Head Start programs in making curriculum and assessment decisions. Teacher assistants are also becoming more actively involved in the instructional process (Han & Neuharst-Pritchett, 2010) as the Head Start program changes to a more academic focus.

Head Start has seen changes in its population of children during the past decade. A large number of the Head Start students are now from families where English is not
their first language, and therefore the children are deemed English Language Learners (ELLs). Just recently, Head Start acknowledged that ELLs “represent a significant proportion of the children served in Head Start” (p. 2) and has devoted an entire domain of its *Head Start Child Development and Early Learning Framework* (U.S. Department of Health and Human Services, 2010) to English language development. Head Start teachers and teacher assistants are, therefore, appropriate participants for this study as they may or may not have the training needed to teach English to the young ELLs in their classrooms.

**Data Sources**

The primary data source of this investigation was the Preschool Teachers’ Language and Literacy Belief Survey (PTLLB) for ELLs (see Appendix A). The PTLLB is a survey with the following Likert-type responses: Strongly Disagree, Disagree, Agree, and Strongly Agree.

A demographic questionnaire was placed at the end of the survey and included questions about the following: gender, age, education, certification, program location, language of children in classroom, race/ethnicity, age, teaching experience, and type of Head Start program.

**Instrument**

The researcher developed the initial items for the Preschool Teachers’ Language and Literacy Beliefs (PTLLB) for English Language Learners (ELLs) Survey after an extensive literature review on research related to commonly accepted best practices.
concerning language and literacy instruction for preschool ELLs (Espinosa, 2010; Hardin et al., 2007; Klinger et al., 2006; Sousa, 2011; Tabors, 2008; Tabors & Snow, 2004; Vaughn et al., 2006; Xu, 2003). An initial draft of 42 survey items was created based on the recommended practices. A 12 item demographic section which described the survey population was included at the end of the survey. After obtaining George Mason University Human Subjects Review Board (HSRB) approval, a panel of three experts in early childhood and ESL was convened to review the survey items.

Several items needed to be edited for clarity. A consensus among the members of the panel of experts was reached and items were chosen to be included in the survey with some items being written in the negative. The panel discussed which items would be best written in the negative and then later reverse coded. Most of the reverse statements contained the more consistent negative version (DeVellis, 2003), which simply added the word “not.” Attention was given to determine what the first item should be on the survey. The first question was selected with care as it determined if the respondents would continue with the survey (Dillman et al., 2009). The remaining items were randomized and sent to the panel through e-mail for further revision. Once all revisions were completed the survey was sent to the George Mason University HSRB for final approval for administration.

**Procedures**

Copies of the survey were made and distributed at a state Head Start Association Conference held at the end of March 2012. The surveys, along with a flyer (see
Appendix B) explaining the survey, were placed in each attendee’s conference packet. A letter of consent was attached to the survey allowing the participants access to the researcher’s contact information (see Appendix C). A waiver of signed consent was granted by the George Mason University HSRB. Head Start teachers and teacher assistants were encouraged to complete the survey and place it in a secure box at the information booth where they received a bar of chocolate for their efforts. The teachers and teacher assistants had three days in which to complete the survey (March 27-29, 2012).

**Data Analysis**

Data was analyzed immediately after collection by reading respondents’ comments about the survey items. Statistical analyses were conducted using the Predictive Analytic Software (PASW) Statistics 18. Before any analyses were run, the researcher had 30% of the data checked for accuracy of entry by two additional researchers. Each researcher used a computer program which randomly selected 30% (n=30) of the data entries. These selected data entries were checked for accuracy against the original data from the participants. The data were also checked to be sure they were ready for analysis by using Bartlett’s test of sphericity, a Kaiser-Meyer-Olkin (KMO) test, and a Mahalanobis distance test for outliers. Each of these tests informed the researcher that the data met the requirements for an exploratory factor analyses. Then, four analyses were performed: an item-scale correlation to determine which items best correlate with each other, an exploratory factor analysis to determine the factors that
underlie the instrument, the computation of Cronbach’s coefficient alpha (α) to determine internal reliability consistency, and an independent-samples t-test on the items to check for differences in teachers’ and teacher assistants’ responses. The researcher summarized the results of each of the analyses and then summarized the four analyses in light of the research questions, drawing conclusions for the study. Table 1 shows how each of the research questions was addressed in the data analysis.

Table 1

*Summary of Data Collection and Data Analysis Strategies*

<table>
<thead>
<tr>
<th>Question</th>
<th>Data collection strategy</th>
<th>Data analysis Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>What items written for a self-reported instrument best reflect preschool teachers’ beliefs about language and literacy instructional practices for ELLs?</td>
<td>Scale</td>
<td>Inter-item Correlations, Exploratory Factor Analysis</td>
</tr>
<tr>
<td>What level of reliability can be attained with this instrument?</td>
<td>Scale</td>
<td>Cronbach’s coefficient alpha (α)</td>
</tr>
<tr>
<td>What evidence of validity can be demonstrated?</td>
<td>Scale</td>
<td>Panel of Experts, Inter-item Correlations</td>
</tr>
<tr>
<td>What factors comprise preschool teachers’ beliefs about language and literacy practices for ELLs?</td>
<td>Scale</td>
<td>Scree test, Exploratory Factor Analysis</td>
</tr>
<tr>
<td>How do teachers’ beliefs about language and literacy instructional practices for ELLs differ from teacher assistants’ beliefs about language and literacy instructional practices for ELLs?</td>
<td>Scale &amp; Survey</td>
<td>Independent-samples t-test</td>
</tr>
</tbody>
</table>
Summary

The development and validation of a new scale which measures teachers’ beliefs about language and literacy practices for ELLs was the focus of this study. The work of a panel of experts (n=3) provided the input for the scale construction and a group of Head Start teachers and teacher assistants (n=101) provided the data for analysis. Analyses yielded a reduced scale with three underlying factors. After initial scale validation, the data was analyzed to compare teachers’ responses with teacher assistants’ responses using the reduced scale.
CHAPTER 4: Results

This chapter presents the results of the data analysis for the PTTLB survey—a new scale which measures preschool teachers’ beliefs about language and literacy practices for ELLs. The results are organized around the study’s research questions. This study was guided by the following research questions:

1. What items written for a self-reported instrument best reflect preschool teachers’ beliefs about language and literacy instructional practices for ELLs?
2. What level of reliability can be attained with this instrument?
3. What evidence of validity can be demonstrated?
4. What factors comprise preschool teachers’ beliefs about language and literacy practices for ELLs?
5. How do teachers’ beliefs about language and literacy instructional practices for ELLs differ from teacher assistants’ beliefs about language and literacy instructional practices for ELLs?

In order to address Question 1, data were collected by administering the PTLLB survey and analyzing the inter-item correlations from the responses. An exploratory factor analysis was also conducted which resulted in a reduced scale, the Preschool Teachers’ Language and Literacy Beliefs-16 (PTLLB-16) Scale. Question 2 was answered through the computation of Cronbach’s alpha ($\alpha$) for the initial survey items.
and items on the reduced scale. Cronbach’s alpha (α) was also calculated for each of the factor subscales. The literature review and panel of experts’ feedback provided the evidence for Question 3. Question 4 was addressed using an exploratory factor analysis. Scores and demographic data from the PTLLB-16 provided the analysis for Question 5 in the form of an independent-samples t-test. The PTLLB-16 can be found in Appendix D.

**Scale Development Process**

The researcher developed the initial items for the Preschool Teachers’ Language and Literacy Beliefs (PTLLB) for English Language Learners (ELLs) Survey after an extensive literature review on research related to commonly accepted best practices concerning language and literacy instruction for preschool ELLs (Espinosa, 2010; Hardin et al, 2007; Klinger et. al., 2006; Tabors, 2008; Tabors & Snow, 2004; Vaughn et al., 2006; Xu, 2003) during a university research class. Forty-two items were generated for possible inclusion in the survey; with a total of 54 items potentially comprising the entire survey (12 demographic items were included at the end of the survey).

**Panel of Experts**

After receiving permission to collect data from the George Mason University Office of Research Subject Protections, a panel of three experts in early childhood and English as a Second Language (ESL) was convened to review the survey items. The experts were all women; the average age was 52.67 years and the average years of teaching experience in early childhood was 17.33 years. Two of the women had left the classroom and had an average of 15.5 years as coordinators of an early childhood
program. Two of the women have master of education degrees and the third woman has a master’s degree in ESL.

**Item Selection**

The panel of experts met for a two and a half hour session to review the items for content validity which is addressed in Question 3. Vocabulary of the items was discussed and items were edited for clarity (e.g., “explicit” became “intentional” and “mores” became “customs”). The panel also deliberated over the term “predictable books.” One panel member asked, “Does everyone know what predictable is?” Another panel member declared that it “is a state of the art word.” After further discussion, it was agreed that “predictable books” should become “books with a repeating word pattern.” The word “more” was removed from the item “In communicating with young ELLs, it is more appropriate if teachers start with what the child knows.” As one panel member asked, “More?—as compared to what?” The panel also discussed which items would be best written in the negative and then later reverse coded (e.g., “Teachers are not influenced by their own cultures). These negatively written items (or items not representing best practices) were a great concern to the panel. The panel members believed some items worked better than others written in the reverse. Most of the reverse statements contained the more consistent negative version (DeVellis, 2003) which simply added the word “not.” Several items were reworded back positively for a stronger effect (e.g., “Teachers do not need any additional training to meet the needs of ELLs” became “Teachers need additional training to meet the needs of ELLs”) as DeVellis noted many
examples of negatively worded items performed poorly. One item which contained the word “not” (i.e., “Assumptions should not be made about a child’s linguistic background”) was actually a best practice. A second item was changed to match this pattern (i.e., “Assumptions can be made about a child’s cultural background” became “Assumptions should not be made about a child’s cultural background”). Two questions were combined because they both had vocabulary as their focus. The panel of experts had to be careful when combining the questions so that the new question did not become double-barreled (DeVellis, 2003). One member suggested the vocabulary item should be “Intentional vocabulary instruction and continued review is critical for ELLs.” However, this made the item double-barreled with the use of the word “and.” The vocabulary item was reworded to be “Intentional vocabulary instruction with continued review is critical for ELLs.” Seven survey items were eliminated by the panel of experts. One question was thought to be unnecessary because it was what should be expected (i.e., “Teachers should provide a consistent routine with a predictable structure for ELLs”). Another item (i.e., “Emphasis on the sounds that make up words is part of literacy instruction for ELLs) was removed because the panel felt it was covered by another item (i.e., “Phonological awareness should be combined with reading activities for ELLs”). A few survey items were too difficult to explain clearly in a survey item without the item becoming too cumbersome (e.g., “Standardized tests accurately measure ELLs’ abilities”). One item was eliminated because it was thought that the typical practicing Head Start teacher or teacher assistant would not readily know the information presented
in the item (i.e., “Young ELLs should be expected to become native-like in their oral competence of English”). A 4-point Likert scale of responses was decided upon, ranging from strongly disagree to strongly agree. A neutral response was not included as the panel felt that the respondents should have an opinion concerning each item.

A few of the demographic questions were edited. The category “Child Development Associate Credential” (CDA) was added to the levels of education as this is a requirement for Head Start teacher assistants by the year 2013. The response “special education” was eliminated from the item asking about teacher certification as this was not a certification likely held by the Head Start teachers. The question asking about the regions of the United States was eliminated as the participants would only be from one state. The question “What languages do you use in your classroom?” became “What is the language of instruction in your classroom?” for added clarity. A question was added that asked teachers and teacher assistants to estimate the percentage of ELLs in their classrooms. An additional question asked respondents about the home languages of the children in their classrooms. This question was in direct response to the information all Head Start programs are required to provide on the yearly Program Information Report (PIR). A list of “the primary language of family at home” and examples of the languages were obtained from the 2011-2012 PIR Survey Form (Advance Copy, Version 1.1). Two questions asked teachers and teacher assistants specifically about their Head Start experience; the number of years taught in Head Start and the type of Head Start program.
Thirty-four items were selected for inclusion in the final version of the survey; with a total of 48 items comprising the entire survey (14 demographic items were included at the end). The meeting ended and the items were retyped without the eliminated items as well as the edits to some items.

**Item Organization**

The first question was selected with care as it would determine if the respondents would continue with the survey (Dillman et al., 2009). The question “It is beneficial to gather information about the student’s home language” was selected by the panel of experts as the first question as it seemed fairly benign. The rest of the items were randomized in order to prevent question order effects by respondents paying attention to the effects earlier questions might have on later questions (Dillman et al., 2009). The items were cut apart on separate slips of paper and put into a bag from which one item was randomly selected until all of the items were incorporated into the survey.

The survey was then sent to the panel via e-mail for additional editing and clarification. See Appendix A for the completed version of the PTLLB. The survey was then submitted to the George Mason University Human Subjects Review Board (HSRB) for final approval for administration.

**Scale and Survey Participants**

After being granted permission for data collection, copies of the survey were made and distributed at a state Head Start Association Conference held at the end of March 2012. A waiver of signed consent was granted by the George Mason University
HSRB. The surveys, along with a flier explaining the survey, were placed in each attendee’s conference packet. A letter of consent was attached to the survey allowing the participants access to the researcher’s contact information. Head Start teachers and teacher assistants were encouraged to complete the survey and place it in a secure box at the information booth where they received a bar of chocolate for their efforts. The respondents had three days in which to complete the survey (March 27-29, 2012).

One hundred and twenty three surveys were returned. After initial examination, only 101 surveys were included in this study because of missing information or because the respondents were not teachers or teacher assistants. Several surveys were incomplete with entire pages of information omitted. Surveys were also completed by parents, family service specialists, administrators, social workers, a bus driver, and mental health specialists. In several cases, notes were written on the surveys by the respondents, saying that they completed the survey even though they were not teachers, but felt that they had something to say. One parent wrote: “Thank you Head Start. I am so grateful to Head Start.” A family service specialist wrote: “Teachers need more training and support in this area. More feedback and suggestions should come back from the teachers and the parents from the program.”

A total of 101 teachers (n=78) and teacher assistants (n=23) completed the survey. Ninety-eight percent of the participants (n=99) were women and 2% were men (n=2). Fifty percent of the participants (n=50) were white, 34% (n=34) Black or African American, 9% (n=9) Hispanic, Latino, or Spanish, 6% (n=6) Asian/Pacific Islander, and
2 % (n=2) American Indian or Alaskan Native. Thirty-two percent (n=32) of the participants had earned Bachelor’s degree, 27% (n=27) Master’s degree, 12% (n=12) Associate’s degree, 10% (n=10) some graduate school, 8% (n=8) CDA, 7% (n=7) some college, 3% (n=3) high school graduate, and 2% (n=2) Doctoral degree. Thirty-nine percent (n=39) of the teachers were 50 years and up, 28% (n=28) 40-49 years of age, 23% (n=23) 30-39 years of age, and 11% (n=11) 18-29 years of age. The participants provided the information about their gender, job position, highest level of education, race/ethnicity, and age in the demographic section of the survey (see Table 2).

Table 2

Demographic Characteristics of Sample

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
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<td></td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Female</td>
<td>99</td>
<td>98</td>
</tr>
<tr>
<td>Job Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>78</td>
<td>77</td>
</tr>
<tr>
<td>Teacher Assistant</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Highest Level of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School Graduate</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Some College</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Child Development Associate Credential (CDA)</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Some Graduate School</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Black or African American</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Hispanic, Latino, or Spanish</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29 years of age</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>30-39 years of age</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>40-49 years of age</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>50 or more years of age</td>
<td>39</td>
<td>39</td>
</tr>
</tbody>
</table>

The teachers and teacher assistants were also asked about their job experiences. Forty-nine percent (n=49) of the participants had 5-15 years of teaching experience, 21% (n=21) 0-4 years teaching experience, 16% (n=16) 16-25 years of teaching experience, and 15% (n=15) had 26 or more years of teaching experience. Forty-four percent (n=44) of the participants had 5-15 years of Head Start teaching experience, 42% (n=42) 0-4 years of Head Start teaching experience, 10% (n=10) 16-25 years of Head Start teaching experience, and 15% (n=15) 26 or more years of Head Start teaching experience. Thirty-five percent (n=35) of the participants said they were in an urban community, 32% (n=32) in a suburban community, 31% (n=31) in a rural community, and 3% (n=3) had no response. One hundred percent (n=101) of the participants said the language of instruction was English, 31% (n=31) Spanish, and 3% (n=3) other. Thirty-five percent (n=35) of the participants said that they had over 50% of ELLs in their classrooms, 28% (n=28) 0-10% of ELLs in classroom, 12% (n=12) 11-20% of ELLs I classroom, 11% (n=11) 41-50% of ELLs in classroom, 7% (n=7) 21-30% of ELLs in classroom, 7% (n=7) 31-40% of ELLs in classroom, and 1% (n=1) had no response. The participants provided
information about their years in teaching, years teaching Head Start, their current teaching location, the language of instruction in their classrooms, and the percentage of ELLs in their classrooms in the demographic section of the PTTLB (see Table 3).

Table 3

*Job Experience of Sample*

<table>
<thead>
<tr>
<th>Years of Teaching Experience</th>
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<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 years</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>5-15 years</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>16-25 years</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>26 or more years</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years of Head Start Teaching Experience</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 years</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>5-15 years</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>16-25 years</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>26 or more years</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School Community</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Suburban</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Rural</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>No Response</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language of Instruction</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>101</td>
<td>101</td>
</tr>
<tr>
<td>Spanish</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of ELLs in Classroom</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10%</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>11-20%</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>21-30%</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>31-40%</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>41-50%</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>over 50%</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
The participants made few comments to the open-ended questions at the end of the survey. Most of the comments that were made were positive. One participant wrote: “The instructions were very clear. There were no problems answering the questions.” Another participant wrote: “The instructions were clear. I misread the first question, after that, I was more focused on the questions and answers.” Still another wrote: “Survey was good!” One participant questioned “urban versus suburban?”

**Items on the PTTLB**

The first research question addressed the items that best reflected preschool teachers’ beliefs about language and literacy instructional practices for ELLs. The first step in determining these items involved the use of an inter-item scale correlation. Statistical analyses were conducted using the Predictive Analytic Software (PASW) Statistics 18. The researcher hand entered the data into the software program. A Mahalanobis distance test for outliers was also conducted prior to analysis. Seven outliers were identified and eliminated from the data sample. The inter-item correlations revealed 12 items below 0.40. These twelve items were eliminated from further analysis as their low scores indicated that there was no meaningful relationship between the correlation coefficient of the items and the overall score on the scale. For example, item 9 “reading aloud to ELLs in English should be for a short duration,” had a correlation coefficient of 0.09, indicating that participants’ responses to this item were not meaningfully linked to their overall scores on the scale, so it was eliminated. Items 1, 2, 3, 4, 7, 8, 17, 18, 19, 20, and 26 were also eliminated. Twenty-two of the original 34
items were retained for further analyses. Of the remaining items, the highest correlation coefficient was 0.65. Additional reduction of items occurred during a factor analysis which is described in detail later in this chapter. After all analyses were completed, a total of 16 items were retained to comprise the PTLLB-16. The PTLLB-16 is included in Appendix D.

**Reliability of the PTLLB**

Question 2 addressed the internal reliability of the PTLLB. Internal reliability was calculated through Cronbach’s reliability coefficient alpha (α). Analysis of the PTLLB resulted in a Cronbach’s coefficient alpha (α) of 0.88. DeVellis (2003) describes this level as “very good” (p. 96). Additional analysis resulted in the reduced scale, PTTLB-16. The Cronbach’s alpha of this revised scale was 0.86 which was also considered very good. The PTTLB-16 was comprised of three factors which had Cronbach’s alphas of 0.80, 0.72, and 0.75 respectively. DeVellis (2003) would consider each of these alphas “respectable” (p. 95).

**Factors Underlying the PTLLB**

The fourth research question addressed the factors that comprised preschool teachers’ beliefs about language and literacy practices for ELLs. An exploratory factor analysis was conducted to find out how many constructs or factors underlie a set of items (DeVellis, 2003). Before the exploratory factor analysis was conducted, a Bartlett’s Test for Sphericity was used on the 22 remaining scale items of the PTLLB to determine if factoring was appropriate. The results of the Bartlett’s Test for Sphericity, $\chi^2 (234) =$
740.77, p<.001) was significant suggesting that the use of factor analysis was appropriate because the strength of the relationship among variables was strong. A Kaiser-Meyer-Olkin (KMO) test was also conducted to measure sampling adequacy. The KMO value (KMO=0.76) exceeded 0.60, also indicating that factoring of data was appropriate.

Eigen values and a scree plot were examined to determine the number of factors underling the PTLLB. The examination indicated that 2 or 3 factors were present. A principal components analysis extraction with a promax rotation was utilized as it was thought that the factors were somewhat correlated and this analysis would produce the best fit. Costello and Osborne (2005) describe the best fit as items having loadings above 0.30, no or few item crossloadings, and no factors with fewer than three items. Strong loaders are items which are 0.50 or higher (Costello & Osborne, 2005). The pattern matrix tables were examined as promax is an oblique rotation and it was determined that three factors were the best fit. Six more items were eliminated as they crossloaded (had values greater than 0.40 on more than one factor) or were low-loading (had values lower than 0.50). For example, item 10 had loadings of 0.27, 0.33, and 0.06 across the factors respectively, indicating that it was a weak item. Sixteen items remained after examination and indicated the presence of three factors which accounted for 44.6% of the scale’s total variance. The resulting scale is referred to as PTLLB-16. The items and their means, standard deviations and communalities are provided in Table 4.
Table 4

*Means, Standard Deviations and Communalities for 16 items on PTLLB*

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Storytelling is an important tool to use with ELLs.</td>
<td>3.4</td>
<td>.50</td>
<td>.53</td>
</tr>
<tr>
<td>12. Books with a repeating word pattern are essential for ELLs.</td>
<td>3.4</td>
<td>.58</td>
<td>.78</td>
</tr>
<tr>
<td>13. Information about cultural practices relevant to each</td>
<td>3.4</td>
<td>.60</td>
<td>.60</td>
</tr>
<tr>
<td>ELL family should be obtained.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Only read a book once to ELLs.*</td>
<td>3.7</td>
<td>.47</td>
<td>.46</td>
</tr>
<tr>
<td>16. A curriculum based on developmentally appropriate</td>
<td>3.3</td>
<td>.65</td>
<td>.50</td>
</tr>
<tr>
<td>practices is the beginning of literacy instruction for ELLs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Parents of ELLs should be encouraged to only use English with</td>
<td>3.4</td>
<td>.74</td>
<td>.38</td>
</tr>
<tr>
<td>their children.*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Repetition is an effective tool in helping ELLs to learn</td>
<td>3.5</td>
<td>.52</td>
<td>.58</td>
</tr>
<tr>
<td>English.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. The home language of the student should be represented</td>
<td>3.4</td>
<td>.58</td>
<td>.49</td>
</tr>
<tr>
<td>in the classroom literacy materials.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Books should be read to ELLs only in large groups.*</td>
<td>3.4</td>
<td>.54</td>
<td>.44</td>
</tr>
<tr>
<td>25. Assumptions should not be made about a child’s cultural</td>
<td>3.5</td>
<td>.75</td>
<td>.48</td>
</tr>
<tr>
<td>background.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Phonological awareness should be combined with</td>
<td>3.3</td>
<td>.59</td>
<td>.63</td>
</tr>
<tr>
<td>reading activities for ELLs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. ELLs should be assessed only in English.*</td>
<td>3.3</td>
<td>.69</td>
<td>.47</td>
</tr>
<tr>
<td>30. A language and literacy rich environment should be</td>
<td>3.6</td>
<td>.55</td>
<td>.40</td>
</tr>
<tr>
<td>provided for ELLs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Information about a child’s culture should be obtained</td>
<td>3.6</td>
<td>.63</td>
<td>.56</td>
</tr>
<tr>
<td>solely from the Internet.*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Making connections between vocabulary words and ELLs’ lives is</td>
<td>3.4</td>
<td>.55</td>
<td>.44</td>
</tr>
<tr>
<td>beneficial.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Written observations should be used in conjunction with</td>
<td>3.4</td>
<td>.59</td>
<td>.61</td>
</tr>
<tr>
<td>other assessments to determine the academic proficiency of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELLs.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Item reversed-scored
The sixteen items of the PTLLB-16 were distributed across the three factors with Factor 1 comprising seven items, Factor 2 consisting of five items and Factor 3 comprising four items. These three factors accounted for 44.6% of the total variance. Each factor had a Cronbach’s alpha of 0.70 or higher which DeVellis (2003) deems as respectable. The entire PTLLB-16 scale had a Cronbach’s alpha of 0.86. As expected, the three factors correlated with each other. The means, standard deviations and correlations of the factor subscales are provided in Table 5.

Table 5

*Means, Standard Deviations and Correlations of Factor Subscales*

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Classroom Curriculum and Instructional Strategies</td>
<td>3.4</td>
<td>.60</td>
<td>.360</td>
</tr>
<tr>
<td>Factor 2: Home Language and Culture</td>
<td>3.5</td>
<td>.63</td>
<td>.308</td>
</tr>
<tr>
<td>Factor 3: Early Literacy Strategies</td>
<td>3.4</td>
<td>.55</td>
<td>.477</td>
</tr>
</tbody>
</table>

The three factors that underlie preschool teachers’ beliefs about language and literacy practices for ELLs were: 1) classroom curriculum and instructional practices; 2) home language and culture; and 3) early literacy strategies. These results must be
interpreted with caution, however, as the results from this exploratory factor analysis cannot be considered definitive or predictive without further testing through a confirmatory factor analysis.

The first factor, classroom curriculum and instructional strategies, consists of seven scale items that relate to teachers’ classroom curriculum and instructional practices.

The possible scores of the first factor subscale ranged from 7 to 28. The items and their factor loadings can be found in Table 6.

Table 6

*Pattern Matrix Item Loadings for Factor 1: Classroom Curriculum and Instructional Strategies*

<table>
<thead>
<tr>
<th>Item</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. Assumptions should not be made about a child’s cultural background.</td>
<td>.77</td>
<td>.11</td>
<td>-.24</td>
</tr>
<tr>
<td>34. Written observations should be used in conjunction with other assessments to determine the academic proficiency of ELLs.</td>
<td>.75</td>
<td>-.17</td>
<td>.17</td>
</tr>
<tr>
<td>23. The home language of the student should be represented in the classroom literacy materials.</td>
<td>.63</td>
<td>.09</td>
<td>.03</td>
</tr>
<tr>
<td>32. Making connections between vocabulary words and ELLs’ lives is beneficial.</td>
<td>.61</td>
<td>-.04</td>
<td>.07</td>
</tr>
<tr>
<td>16. A curriculum based on developmentally appropriate practices is the beginning of literacy instruction for ELLs.</td>
<td>.60</td>
<td>.17</td>
<td>-.08</td>
</tr>
<tr>
<td>30. A language and literacy rich environment should be provided for ELLs.</td>
<td>.54</td>
<td>.03</td>
<td>.12</td>
</tr>
<tr>
<td>24. Books should be read to ELLs only in large groups.*</td>
<td>.52</td>
<td>.13</td>
<td>.11</td>
</tr>
</tbody>
</table>

*Item reversed-scored*
Some of the items that make up factor 1 refer to teachers’ instructional practices in the classroom. The classroom environment, curriculum and how teachers’ respond to ELLs were included in this factor. The item that teachers responded to most positively was item 25, “assumptions should not be made about a child’s cultural background.” This item had a mean score of 3.5 with a standard deviation of .75, and a factor loading of .77, the highest loading for this factor. The factor one subscale had a Cronbach’s coefficient alpha of 0.80.

The second factor, home language and culture, consists of five items. The possible scores for factor 2 subscale ranged from 5 to 20. These items and their loadings are provided in Table 7.

The five items in factor 2 referenced the use of the child’s home language and how cultural information about the child should be obtained. Three of the items referred to the use of the child’s home language with the child. Two of the items concerned the obtainment of information about the child’s home culture. Four of the five items were written in the negative. Since the items were written in the negative, they indicated that only English should be spoken to the ELL. In actuality, the home language is what should be spoken. The item that had the most positive response was one of the negatively written items, item 29, “ELLs should be assessed only in English.” This item had a mean value of 3.3 and a standard deviation of .69. Cronbach’s coefficient alpha was 0.72 for factor 2 subscale.
Table 7

*Pattern Matrix Item Loadings for Factor 2: Home Language and Culture*

<table>
<thead>
<tr>
<th>Item</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>29. ELLs should be assessed only in English.*</td>
<td>-.09</td>
<td>.66</td>
<td>.13</td>
</tr>
<tr>
<td>14. Only read a book once to ELLs.*</td>
<td>.06</td>
<td>.64</td>
<td>-.06</td>
</tr>
<tr>
<td>31. Information about a child’s culture should be obtained solely from the Internet.*</td>
<td>.14</td>
<td>.58</td>
<td>.04</td>
</tr>
<tr>
<td>21. Parents of ELLs should be encouraged to only use English with their children.*</td>
<td>.19</td>
<td>.55</td>
<td>-.15</td>
</tr>
<tr>
<td>13. Information about cultural practices relevant to each ELL family should be obtained.</td>
<td>.40</td>
<td>.51</td>
<td>.08</td>
</tr>
</tbody>
</table>

*Item reversed-scored*

The third factor, early literacy strategies, highlighted literacy strategies used with young ELLs. The possible scores on the factor 3 subscale ranged from 4 to 16. The items for the third factor and their loadings are provided in Table 8.

Table 8

*Pattern Matrix Item Loadings for Factor 3: Early Literacy Strategies*

<table>
<thead>
<tr>
<th>Item</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Books with a repeating word pattern are essential for ELLs.</td>
<td>-.12</td>
<td>.11</td>
<td>.84</td>
</tr>
<tr>
<td>22. Repetition is an effective tool in helping ELLs to learn English.</td>
<td>-.06</td>
<td>.14</td>
<td>.67</td>
</tr>
<tr>
<td>11. Storytelling is an important tool to use with ELLs.</td>
<td>.24</td>
<td>-.30</td>
<td>.65</td>
</tr>
<tr>
<td>27. Phonological awareness should be combined with reading activities for ELLs.</td>
<td>.34</td>
<td>-.29</td>
<td>.63</td>
</tr>
</tbody>
</table>
The item that respondents responded most favorably to was item 12, “books with a repeating word pattern are essential for ELLs.” This item had a mean score of 3.4 and a standard deviation of 0.58. The other items in factor 3 included the use of repetition, storytelling, and phonological awareness in literacy activities for young ELLs. Cronbach’s coefficient alpha for the factor 3 subscale was 0.75.

In summary the three factors found in the exploratory factor analysis were classroom curriculum and instructional practices, home language and culture, and early literacy strategies. The range of scores on the factor subscales were: factor 1 (7-28), factor 2 (5-20), and factor 3 (4-16). These factors should be interpreted cautiously as they were found in an exploratory factor analysis. Further research in the form of a confirmatory factor analysis should be conducted with a new and larger data set.

**Teacher and Teacher Assistant Responses**

Question five addressed the differences in language and literacy beliefs for ELLs between teachers and teacher assistants. In order to address this question, independent-samples *t*-tests were used to compare the participants’ responses in the study. The dependent variables were the PTLLB-16 score and the three factor subscores. There was a significant difference in the scores for teachers (M=56.1, SD=5.3) and teacher assistants (M=51.8, SD=4.6); (t (88) = 3.38, p=.001). These results suggest that teachers have significantly higher (more positive) language and literacy belief scores than teacher assistants. There was a similarly significant difference in the scores for all three factors as reported in Table 9.
Table 9

*Teachers’ Beliefs by Teaching Position*

<table>
<thead>
<tr>
<th>Teaching Position</th>
<th>Teacher (n=71)</th>
<th>Teacher Assistant (n=23)</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>PTLLB-16</td>
<td>56.1</td>
<td>5.3</td>
<td>51.8</td>
<td>4.6</td>
</tr>
<tr>
<td>Factor 1: Classroom Curriculum and Instructional Practices</td>
<td>24.5</td>
<td>2.8</td>
<td>22.9</td>
<td>2.7</td>
</tr>
<tr>
<td>Factor 2: Home Language and Culture</td>
<td>17.8</td>
<td>1.9</td>
<td>15.9</td>
<td>2.3</td>
</tr>
<tr>
<td>Factor 3: Early Literacy Strategies</td>
<td>13.8</td>
<td>1.7</td>
<td>13.0</td>
<td>1.2</td>
</tr>
</tbody>
</table>

**Summary**

The data from the administration of the PTLLB were analyzed in terms of items to be retained, reliability, validity, underlying factors, and differences in participants’ scores in terms of job position. After analysis, a total of sixteen items were retained to form a reduced scale, the PTLLB-16. Internal reliability was determined through the use of Cronbach’s alpha. The PTLLB-16 had a Cronbach’s alpha coefficient of 0.86 which is considered very good. An exploratory factor analysis was conducted and three underlying factors were revealed: classroom curriculum and instructional practices, home language and culture, and early literacy strategies. Differences in participants scores on the PTLLB-16 and three factor subscales were analyzed by using *t*-tests to determine if differences could be explained by teaching position—teachers and teacher assistants. Significant differences were found for both the overall scores of the PTLLB-16 and the
three factor subscales. Further discussion of these findings and implications for research and practice are provided in the following chapter.
CHAPTER 5: Conclusion, Discussion, and Implications

The purpose of this research study was to develop and validate a reliable instrument to measure preschool teachers’ beliefs about language and literacy practices for ELLs. A panel of experts (n=3) was convened to select items for the scale based on a literature review conducted by the researcher. Thirty-four items were chosen for the survey with an additional 14 demographic items included at the end of the survey. The survey was administered to participants at a state Head Start Association Conference, March 27-29, 2012. One hundred and twenty-three surveys were returned with only 101 used for analysis. An analysis of the responses resulted in a reduced scale of 16 items with three underlying factors which accounted for 44.6% of the total variance. Independent-samples t-tests were utilized to determine if differences in responses between teachers and teacher assistants could be explained. Statistical significance between teaching positions was found for the overall PTLLB-16 scores and the three factor subscale scores. The research questions guiding this study and the implications for future research and practice are discussed more fully in the subsequent sections of this chapter.

Research Questions
Research Question 1. What items written for a self-reported instrument best reflect preschool teachers’ beliefs about language and literacy instructional practices for ELLs?

Item evaluation is what DeVellis (2003) calls “the heart of the scale development process” (p. 90). Identifying the appropriate items for inclusion in a scale is a multi-step process. An initial examination of the items’ performance is used to determine if the scale items are highly inter-correlated. Twenty-two of items on the PTLLB correlated highly (0.40 or higher). That meant that 12 items had inter-item correlations lower than 0.40. These twelve items were eliminated from further analysis as their low scores indicated that there was no meaningful relationship between the correlation coefficient of the items and the overall score on the scale. An exploratory factor analysis further reduced the number of items to 16. Therefore, the items that best reflect teachers’ beliefs about language and literacy practices for ELLs are:

1. Storytelling is an important tool to use with ELLs.
2. Books with a repeating word pattern are essential for ELLs.
3. Information about cultural practices relevant to each ELL family should be obtained.
4. Read a book more than once to ELLs.*
5. A curriculum based on developmentally appropriate practices is the beginning of literacy instruction for ELLs.
6. Parents of ELLs should be encouraged to use English and their home language with their children.*
7. Repetition is an effective tool in helping ELLs to learn English.
8. The home language of the student should be represented in the classroom literacy materials.
9. Books should be read to ELLs in varied sized groups.*
10. Assumptions should not be made about a child’s cultural background.
11. Phonological awareness should be combined with reading activities for ELLs.
12. ELLs should be assessed in English and their home language.*
13. A language and literacy rich environment should be provided for ELLs.
14. Information about a child’s culture should be obtained from various sources.*
15. Making connections between vocabulary words and ELLs’ lives is beneficial.
16. Written observations should be used in conjunction with other assessments to determine the academic proficiency of ELLs.

* items rewritten in the positive

These 16 items capture the construct of teachers’ beliefs about language and literacy practices for ELLs, however, there were three underlying factors which need to
be discussed in order to fully understand the reason for item retention. These three factors will be further discussed under research question 4.

**Research Question 2.** What level of reliability can be attained with this instrument?

One issue with scale development is scale length. Scales need to be at a length where respondents are willing to use their time to complete the survey, but not too taxing that respondents are unwilling to complete the task. While brevity is preferred, the scale must also demonstrate acceptable reliability. Therefore, the length of the scale has an effect on reliability (DeVellis, 2003). Cronbach’s alpha for the original 34 items was 0.88, a “very good” rating according to DeVellis (2003). After exploratory factor analysis, the items were reduced to 16 and had a Cronbach’s coefficient alpha of 0.86 which was also considered very good. DeVellis suggests that a scale with a Cronbach’s alpha of 0.85 is within the appropriate guidelines for research instruments used with group data. So, by shortening the scale to 16 items, the reliability of the PTLLB was kept in the same range deemed as appropriate for research instruments. In addition, the shorter scale length may make it more appealing to respondents. Since the respondents completed the survey as time permitted within the three day event, it was impossible to determine the average amount of time the respondents needed to complete the survey. However, the new shortened version of the PTLLB might have enticed more people to respond to the survey.
The Cronbach’s alpha for each of the factor subscales was also calculated: Factor 1 subscale \( \alpha=0.80 \), Factor 2 subscale \( \alpha=0.72 \), and Factor 3 subscale \( \alpha=0.75 \). Each of the factor subscales had Cronbach’s alphas that were “respectable” (DeVellis, 2003, p. 95). Therefore, given the consistent reliability coefficient alphas, the PTLLB-16 is considered a reliable instrument.

**Research Question 3.** What evidence of validity can be demonstrated?

Validity allows the researcher to look at the individual scores from an instrument and find sense and meaning from them. Validity can be established through several different types: content, construct, and criterion-related. Content validity “is the extent to which the questions on the instrument and the scores from these questions are representative of all the possible questions a researcher could ask about the content or skills” (Creswell, 2005, p. 164). It is more difficult to measure beliefs however, “because it is difficult to determine exactly what the range of potential items is and when a sample of items is representative” (DeVellis, 2003, p. 50). Still, having a scale’s items reviewed by a panel of experts “can help to maximize item appropriateness” (DeVellis, 2003, p. 50). Content validity for the PTLLB was obtained through the extensive literature review conducted by the researcher and the selection of items by the panel of experts. The literature review included: young ELLs and English language acquisition, early childhood teachers’ beliefs, and survey development. The panel of experts had considerable experience in the field of early childhood education as well as with young
ELLs. Therefore, the PTLLB demonstrates content validity through the selection of items by a panel of experts.

Construct validity “is established by determining if the scores from an instrument are significant, meaningful, useful, and have a purpose” (Creswell, 2005, p. 165). One way to determine if scores are a good measure is through item correlation. Only items that correlated highly (0.40 or higher) were retained in the development of this scale. However, there is “no cutoff that defines construct validity” (DeVellis, 2003, p. 54). Construct validity, therefore, is further demonstrated through factor analysis as the three factors account for almost half of the variance in teachers’ beliefs about language and literacy practices for ELLs.

Criterion-related validity “determines whether the scores from an instrument are good predictors of some outcome (or criterion) they are expected to predict” (Creswell, 2005, p. 165). Criterion-related validity, also known as predictive validity, is demonstrated when a scale has “an empirical association with some criterion or ‘gold’ standard” (DeVellis, 2003, p. 50). Since the PTLLB is a newly devised scale, further research in this area needs to be completed and is discussed in the implications for future research section of this study.

**Research Question 4.** What factors comprise preschool teachers’ beliefs about language and literacy practices for ELLs?

An exploratory factor analysis was conducted for the PTLLB with the resultant reduced scale containing 16 items with three underlying factors. The factors were
labeled: classroom curriculum and instructional practices, home language and culture, and early literacy strategies. Further discussion of these three factors is necessary in order to fully understand preschool teachers’ beliefs about language and literacy practices for ELLs.

The first factor, classroom curriculum and instructional strategies, consists of seven scale items that relate to teachers’ classroom curriculum and instructional practices.

Factor 1: Classroom Curriculum and Instructional Strategies

5. A curriculum based on developmentally appropriate practices is the beginning of literacy instruction for ELLs.
8. The home language of the student should be represented in the classroom literacy materials.
9. Books should be read to ELLs in varied sized groups.*
10. Assumptions should not be made about a child’s cultural background.
13. A language and literacy rich environment should be provided for ELLs.
15. Making connections between vocabulary words and ELLs’ lives is beneficial.
16. Written observations should be used in conjunction with other assessments to determine the academic proficiency of ELLs.

*item rewritten in the positive
These seven items are all related as they suggest appropriate practices for teachers of ELLs within classroom situations. Recent research (Espinosa, 2010; Tabors, 2008) suggests that literacy instruction starts with an intentional curriculum based on developmentally appropriate early childhood literacy practices. The classroom environment is mentioned in Items 8 and 13. It appears that preschool teachers believe that the classroom should consist of language and literacy rich materials, especially materials including the home language of the ELLs. Research (Espinosa, 2010; Tabors, 2008; Xu, 2003) suggests the use a curriculum that brings the home language of ELLs into the classroom. The teachers’ responses also indicated that written classroom observations of ELLs should be included in the assessment process. Tabors (2008) suggests making anecdotal records that document the progress of ELLs in both English and their home languages as formal, standardized assessments do not always accurately measure ELLs’ abilities. In dealing with ELLs in the classroom, teachers’ responses revealed that assumptions should not be made about their cultural backgrounds. Tabors (2008) recommends that assumptions should not be made about a child’s cultural or linguistic background until a broad base of information is acquired. Teachers also indicated that making connections between vocabulary words and the ELL’s personal life was an appropriate classroom practice as well as reading to ELLs in varied sized groups (not only in a large group situation). Espinosa (2010) suggests giving ELLs opportunities to make connections between new vocabulary words and their own lives and reading books in small groups.
The second factor, home language and culture, consists of five items dealing with ELLs’ home languages and cultures.

Factor 2: Home Language and Culture

3. Information about cultural practices relevant to each ELL family should be obtained.

4. Read a book more than once to ELLs.*

6. Parents of ELLs should be encouraged to use English and their home language with their children.*

12. ELLs should be assessed in English and their home language.*

14. Information about a child’s culture should be obtained from various sources.*

*items rewritten in the positive

Almost all of these items (except Item 3) had been written in the negative and reversed scored. The negative items have been rewritten here for better understanding. Home languages of ELLs are acknowledged in Items 6 and 12. Both of those items originally were written to state that only English was to be used during assessment and by parents in the home. Rewritten, the items include the use of the home language with ELLs. Therefore, these results indicate that preschool teachers believe that an ELL’s home language should be used with the child for assessment and by the parents. Tabors and Snow (2004) suggest that parents should be encouraged to maintain their home language with their children. In addition, Tabors and Snow recommend that ways should
be found to assess ELLs in both of their languages. How information about ELLs’ home cultures is obtained is incorporated in Items 3 and 14. Results indicated that preschool teachers believe that information about an ELL’s home culture should be obtained from various sources and should include learning about cultural practices specifically relevant to each family. Tabors (2008) recommends using a variety of ways to obtain information about a child’s culture such as face-to-face communication, written communication in English, and written communication in the home language. Item 4 looks out of place initially, but further inspection indicates that books should be reread to ELLs which could include reading in the child’s home language.

The third factor, early literacy strategies, highlighted four literacy strategies used with young ELLs.

Factor 3: Early Literacy Strategies

1. Storytelling is an important tool to use with ELLs.
2. Books with a repeating word pattern are essential for ELLs.
7. Repetition is an effective tool in helping ELLs to learn English.
11. Phonological awareness should be combined with reading activities for ELLs.

Items 2 and 7 include the use of repetition. Books with repeating word patterns and using repetition to help ELLs learn English are two strategies that these preschool teachers believe are appropriate means of literacy instruction for ELLs. Research (Espinosa, 2010; Tabors, 2008; Xu, 2003) indicates that books should be chosen carefully.
for ELLs. Books that are predictable with repeating word patterns were recommended (Espinosa, 2010; Tabors, 2008; Xu, 2003). The two other early literacy strategies indicated as appropriate for ELLs are the use of storytelling and phonological awareness in combination with reading activities. Research (Tabors, 2008; Xu, 2003) suggests telling a story rather than reading it if it is difficult for ELLs to understand. Klinger et al. (2006) recommends combining phonological awareness with reading and English language activities for ELLs.

In sum, the exploratory factor analysis yielded three factors underlying the PTTLB-16. These factors included: classroom curriculum and instructional practices, home language and culture, and early literacy strategies. The items comprising each of these factors indicate the beliefs that the participant preschool teachers hold in terms of language and literacy practices with ELLs.

**Research Question 5.** How do teachers’ beliefs about language and literacy instructional practices for ELLs differ from teacher assistants’ beliefs about language and literacy instructional practices for ELLs?

Independent-samples t-tests were used to compare the participants’ responses in the study in terms of job position. There was a significant difference in the scores for teachers and teacher assistants for the overall PTLLB-16 scores as well as for each factor subscale scores. This suggests that teachers have significantly higher (more positive) language and literacy belief scores than teacher assistants. In other words, teachers may believe in language and literacy practices that are considered to be the most appropriate
for ELLs more strongly than teacher assistants. This finding is consistent with previous research. Han and Neuharth-Pritchett (2010) found that 35 lead teachers in a state-funded prekindergarten classroom were more likely to agree with developmentally appropriate practices than the 27 teacher assistants in the same program. Their reasons for this outcome suggested differences in education levels and cultural differences. Caution, however, needs to be taken in interpreting the results from this present study as the number of teachers (n=71) who responded to the PTLLB was three times greater than the number of responding teacher assistants (n=23). The discrepancy in the number of responses could be attributed to the fact that only teachers from individual programs were sent to the conference. It may be that in some state Head Start programs it is the responsibility of the teachers to return to their programs and share the information learned from the conference with the teacher assistants.

In addition, when examining the three factors revealed during the factor analysis in this current study, teacher assistants may not have been allowed to perform the roles suggested by the three factors. The first factor, classroom curriculum and instructional practices, consists of seven factors which suggest practices performed by classroom teachers. For example, scale item 5, “A curriculum based on developmentally appropriate practices is the beginning of literacy instruction for ELLs,” may not be determined by teacher assistants who may not have any input in curriculum selection. Factor two, home language and culture, consists of five items pertaining to ELLs’ home languages and cultures. Teacher assistants may not have the opportunity to suggest the
use of the practices indicated by the scale items to parents. Scale item 6, “Parents of ELLs should be encouraged to use English and their home language with their children,” is an example where teacher assistants may not have an opportunity to interact with the parents (perhaps during a home visit) and make this suggestion. The third factor, early literacy strategies, highlights four literacy strategies that should be used with ELLs. Teacher assistants may not be involved in the planning of early literacy strategies used with ELLs. For example, scale item 2, “Books with a repeating word pattern are essential for ELLs,” involves book selection. Teacher assistants may not be involved in the selection of books used with ELLs, but only carry out the tasks assigned to them by the classroom teacher.

**Limitations**

One of the limitations of this study was the selection of participants. A convenience sample was drawn from attendees of a state Head Start Association Conference. They may have elected to attend the conference on their own volition and might have been teachers and assistants who are more knowledgeable of current practices in the field of early childhood education. On the other hand, the conference attendees might have been sent to the conference as part of their own professional development and may not have knowledge of current practices. While the conference covered Head Start programs across the entire state, certain geographic areas might have had greater representation due to a more convenient access to the conference site. In addition, the results are only applicable to Head Start programs in one state and may not portray
teachers’ beliefs of Head Start programs in other states. Also, the researcher was not able to ask follow-up questions of the participants. Two open-ended questions were asked at the end of the survey which allowed the respondents an opportunity to provide some feedback about the survey. Few participants responded, however.

**Implications for Future Research**

The data analysis during the development and validation of the PTTLB-16 indicate that it is a valid and reliable instrument with three underlying factors. It is important to note, however, that these were just the beginning steps in the development of a new scale. A confirmatory factor analysis using larger samples should be next in the attempt for the PTLLB-16 to be used on a wide-scale basis. In addition, criterion-related validity for the PTLLB-16 should be explored. Also, additional research should be conducted to determine if preschool teachers’ beliefs about language and literacy practices for ELLs translate into actual classroom practices. Lastly, additional factors should be sought to contribute to the shared variance unaccounted for by the three factors revealed during this study.

The PTLLB-16 should be administered to a larger sample and a confirmatory factor analysis should be conducted. DeVellis (2003) states that the replication of a factor structure in a confirmatory factor analysis is, for the most part, based on the sample size used in the original analysis. In other words, the factor pattern from a large sample will be more stable than from a smaller sample. In this study, the sample size was
relatively small and therefore, it would increase the generalizability of the scale if the study was replicated with the same factor structure on a separate sample.

Criterion-related validity (also sometimes called predictive validity) “determines whether the scores from an instrument are good predictors of some outcome (or criterion) they are expected to predict” (Creswell, 2005, p. 165). Since the PTLLB-16 is a new scale, its validity would be strengthened if criterion-related validity could be demonstrated. The revised version (Hindman and Wasik, 2008) of the Preschool Teacher Literacy Beliefs Questionnaire (TBQ; Seefeldt, 2004) could be administered to a large sample of preschool teachers. If the sample’s scores on the TBQ correlated strongly with the PTLLB-16, then criterion-related validity of the PTLLB-16 would be established.

Additional research should be conducted to determine if preschool teachers’ beliefs about language and literacy practices for ELLs translate into actual classroom practices. Teachers’ beliefs are often researched in combination with actual classroom practices (Burgess, Lundgren, Lloyd, Pianta, 2001; Charlesworth et al., 1993; Fang, 1996; Isenber, 1990, Stipek & Byler, 1997; Vartuli, 1999). Researchers want to know if teachers “practice what they preach” (Stipek & Byler, 1997, p. 305). In general, teachers do indeed practice what they believe (Charlesworth et al., 1991; Charlesworth et al., 1993), especially in the earliest grades of preschool and kindergarten (Stipek & Byler, 1997; Vartuli, 1999). However, Kintner-Duffy (2011) found no relationship between teachers’ beliefs regarding multicultural classrooms and their teaching practices. It
would be important to see how the PTLLB-16 could be used in conjunction with classroom observations to further this field of research.

The three factors revealed during the factor analysis only accounted for 44.6% of the shared variance. Therefore, 55.4% or slightly over one half of the shared variance was due to something other than the three factors extracted in the data analysis. One reason for this might have been the small sample size. Additional factors would also have explained more of the variance. These other factors could possibly include teachers’ beliefs about efficacy for their students. Teachers’ sense of efficacy can be viewed as “the belief that they (teachers) can have a positive effect on student learning” (Woolfolk et al., 1990, p. 137). Since this study sought to investigate teachers’ beliefs about content (i.e., language and literacy practices), teachers’ beliefs about efficacy for their students were not measured. Rohs (2007) found a significant relationship between teacher efficacy and literacy. Preschool teachers’ beliefs about efficacy for their ELLs, therefore, should be examined in future research.

Implications for Practice

A more practical use of the PTLLB-16 would be to administer the survey to teachers and use the results for determining professional development activities. Preschool teachers do not necessarily receive instruction on research based language and literacy practices for ELLs. Hardin et al. (2007) suggested that more training is needed for those working with ELLs to learn how to meet the needs of culturally and linguistically diverse learners. Training in instructional practices that support second
language acquisition and take into account cultural practices was recommended (Hardin et al., 2007). Consequently, it is important to consider the question, How can professional development address issues concerning early educators’ beliefs about language and literacy practices for ELLs? Recent research (Winton & McCollum, 2008) indicated that professional development for in-service teachers should be “sustained over time, grounded in practice, linked to curriculum and student outcomes, collaborative, and interactive” (p. 8). The PTLLB-16 could be a starting point for professional development that includes Winton and McCollum’s attributes. Carlman (2004) suggested that enabling preschool teachers to gain insight into their own literacy practices would allow them “to choose professional development opportunities specific to their own needs” (p. 198). The results from the PTLLB-16 could provide a way to pinpoint those specific needs for preschool teachers and allow them to select personalized professional development experiences.

Meaningful professional development can only be established, however, if the program director supports the initiative. In relation to the participants of this study, the Head Start Director must be willing to have her teachers participate in professional development that is sustained over time, linked to curriculum, connected to children’s progress and reflects the Head Start Child Development and Early Learning Framework. Attendance at a single conference cannot provide the professional development needed to achieve marked progress with the young ELLs in Head Start. A closer inspection of the English language development domain of the Framework is a good place to start.
professional development for teachers of ELLs. Head Start teachers and teacher assistants are expected to use the Framework to guide curriculum and assessment decisions. The English language development domain of the Framework gives examples of behaviors that ELLs may demonstrate in the process of learning English. The PTLLB-16 provides specific instructional and early literacy strategies that would help produce those English language development behaviors. The PTLLB-16 could also be given to Head Start teachers to determine which of the language and literacy practices are already part of their beliefs and which language and literacy practices may need to be incorporated into their teaching.

In addition, teacher assistants should be included in the professional development process (Han & Neuharth-Pritchett, 2010) so that they may incorporate the same beliefs as the classroom teachers about language and literacy practices for ELLs into their instruction. Head Start teacher assistants’ roles are becoming more instruction based (Han & Neuharth-Pritchett, 2010) as Head Start has an increasing academic focus and it would benefit ELLs if their teachers and teacher assistants used similar instructional strategies. However, teacher assistants may need professional development designed to meet their unique needs, especially if the teacher assistants are ELLs themselves. In relation to this present study, Head Start teacher assistants were found to be less positive about language and literacy instructional strategies for ELLs. Professional development for Head Start assistant teachers that provided information about language and literacy practices for ELLs and promoted positive attitudes about reaching ELLs should be
established. If teacher assistants are not included in the professional development process, then the lead teachers should become familiar with adult learning principles and provide scaffolded learning opportunities for teacher assistants (Han & Neuharth-Pritchett, 2010). Understanding the role of teacher assistants should also become the role of future research as teacher assistants are becoming increasingly responsible for direct instruction with students, developing relationships with students and families, and student outcomes (Han & Neuharth-Pritchett, 2010).

Preschool teachers who teach in diverse classrooms may not have the training in differentiated instruction in order to meet the needs of all of the children in their classrooms. In her dissertation study, Rohde (2011) found that preschool teachers reported using practices and strategies that promoted early literacy, but did not differentiate instruction for all students in their inclusive classrooms, especially students with speech and language disabilities. Rohde suggested that the preschool teachers would benefit from professional development in differentiated instruction so that they could support early literacy instruction for all of their students. Perhaps this premise could be applied to participants in the current study so that the preschool teachers could differentiate early literacy instruction for the young ELLs in their classrooms. In this context, the PTLLB-16 could be used to assess preschool teachers’ beliefs with the results from the PTLLB-16 being used to indicate which early literacy practices should be incorporated into professional development for the early childhood teachers working with ELLs.
The PTLLB-16 could also be used in efforts to change teachers’ beliefs. Five studies of professional development for early childhood educators who worked with ELLs were reviewed by August and Calderón (2006). The focus of the studies was on literacy development. After reviewing the studies, August and Calderón (2006) determined that for effective professional development to occur, teachers needed to have ongoing meetings with those providing professional development, be presented with theory, have instructional strategies modeled, and be given opportunities to practice with feedback and support. Creating change in the teachers was a time-consuming process. The teachers in the reviewed studies were ESL, bilingual or special educations teachers. August and Calderón (2006) suggest that all teachers who teach ELLs be involved in the same professional development efforts since most ELLs are served by multiple school personnel. It was suggested that professional development should include three outcomes: change in teachers’ classroom practices, change in teachers’ beliefs and attitudes, and change in students’ learning outcomes (August & Calderón, 2006). The PTLLB-16 could be used as the starting point for conversations that lead teachers to examine what they believe are appropriate language and literacy practices for ELLs.

In conclusion, the purpose of this study was to develop and validate a reliable instrument to measure preschool teachers’ beliefs about language and literacy practices for ELLs. Reliability and validity of the PTLLB were demonstrated in various forms; however, additional research is necessary. If further evidence of reliability and validity can be demonstrated in future studies, then the PTLLB could be viewed as an important
instrument in measuring preschool teachers’ beliefs about language and literacy practices for ELLs. However, this study was only the first step in improving language and literacy instruction for the increasing numbers of young ELLs in our school systems.
APPENDIX A: PRESCHOOL TEACHERS’ LANGUAGE AND LITERACY BELIEFS SURVEY (PTLLB)

Please answer the following questions in terms of your beliefs about language and literacy instructional practices for English Language Learners (ELLs). There are no right or wrong answers. Thank you for your participation.

1. It is beneficial to gather information about the student’s home language.
   □ Strongly disagree □ Disagree □ Agree □ Strongly agree

2. Teachers are not influenced by their own cultures.
   □ Strongly disagree □ Disagree □ Agree □ Strongly agree

3. In communicating with young ELLs, it is appropriate if teachers start with what the child knows.
   □ Strongly disagree □ Disagree □ Agree □ Strongly agree

4. A focus on letter recognition is unnecessary for ELLs.
   □ Strongly disagree □ Disagree □ Agree □ Strongly agree

5. Intentional vocabulary instruction with continued review is critical for ELLs.
   □ Strongly disagree □ Disagree □ Agree □ Strongly agree

6. It is important to know in which language acquisition stage (home language, nonverbal, telegraphic/formulaic, productive) an ELL is demonstrating developmental skills.
   □ Strongly disagree □ Disagree □ Agree □ Strongly agree
7. Connections should be made between what ELLs know in their first language and applied to the second language.

- [ ] Strongly disagree  - [ ] Disagree  - [ ] Agree  - [ ] Strongly agree

8. Teachers need additional training to meet the needs of ELLs.

- [ ] Strongly disagree  - [ ] Disagree  - [ ] Agree  - [ ] Strongly agree

9. Reading aloud to ELLs in English should be for a short duration.

- [ ] Strongly disagree  - [ ] Disagree  - [ ] Agree  - [ ] Strongly agree

10. Reinforce what is being said by using gestures, actions, or facial expressions to support communication with ELLs.

- [ ] Strongly disagree  - [ ] Disagree  - [ ] Agree  - [ ] Strongly agree

11. Storytelling is an important tool to use with ELLs.

- [ ] Strongly disagree  - [ ] Disagree  - [ ] Agree  - [ ] Strongly agree

12. Books with a repeating word pattern are essential for ELLs.

- [ ] Strongly disagree  - [ ] Disagree  - [ ] Agree  - [ ] Strongly agree

13. Information about cultural practices relevant to each ELL family should be obtained.

- [ ] Strongly disagree  - [ ] Disagree  - [ ] Agree  - [ ] Strongly agree

14. Only read a book once to ELLs.

- [ ] Strongly disagree  - [ ] Disagree  - [ ] Agree  - [ ] Strongly agree

15. Cultural customs should be considered when assessing ELLs.

- [ ] Strongly disagree  - [ ] Disagree  - [ ] Agree  - [ ] Strongly agree
16. A curriculum based on developmentally appropriate practices is the beginning of literacy instruction for ELLs.
   □ Strongly disagree  □ Disagree  □ Agree  □ Strongly agree

17. Early support should be provided for ELLs who are not making progress.
   □ Strongly disagree  □ Disagree  □ Agree  □ Strongly agree

18. It is not necessary to rephrase words for ELLs.
   □ Strongly disagree  □ Disagree  □ Agree  □ Strongly agree

19. Parents of ELLs should be invited into the classroom to demonstrate a talent or share cultural practices.
   □ Strongly disagree  □ Disagree  □ Agree  □ Strongly agree

20. It is beneficial to partner ELLs with English-speaking children.
   □ Strongly disagree  □ Disagree  □ Agree  □ Strongly agree

21. Parents of ELLs should be encouraged to only use English with their children.
   □ Strongly disagree  □ Disagree  □ Agree  □ Strongly agree

22. Repetition is an effective tool in helping ELLs to learn English.
   □ Strongly disagree  □ Disagree  □ Agree  □ Strongly agree

23. The home language of the student should be represented in the classroom literacy materials.
   □ Strongly disagree  □ Disagree  □ Agree  □ Strongly agree

24. Books should be read to ELLs only in large groups.
   □ Strongly disagree  □ Disagree  □ Agree  □ Strongly agree

25. Assumptions should not be made about a child’s cultural background.
   □ Strongly disagree  □ Disagree  □ Agree  □ Strongly agree
26. Encourage ELLs to use English by giving them many opportunities to speak during instruction.
   □ Strongly disagree   □ Disagree   □ Agree   □ Strongly agree

27. Phonological awareness should be combined with reading activities for ELLs.
   □ Strongly disagree   □ Disagree   □ Agree   □ Strongly agree

28. Do not expand on what a young ELL has said.
   □ Strongly disagree   □ Disagree   □ Agree   □ Strongly agree

29. ELLs should be assessed only in English.
   □ Strongly disagree   □ Disagree   □ Agree   □ Strongly agree

30. A language and literacy rich environment should be provided for ELLs.
   □ Strongly disagree   □ Disagree   □ Agree   □ Strongly agree

31. Information about a child’s culture should be obtained solely from the Internet.
   □ Strongly disagree   □ Disagree   □ Agree   □ Strongly agree

32. Making connections between vocabulary words and ELLs’ lives is beneficial.
   □ Strongly disagree   □ Disagree   □ Agree   □ Strongly agree

33. Assumptions should not be made about a child’s linguistic background.
   □ Strongly disagree   □ Disagree   □ Agree   □ Strongly agree

34. Written observations should be used in conjunction with other assessments to determine the academic proficiency of ELLs.
   □ Strongly disagree   □ Disagree   □ Agree   □ Strongly agree
Please answer the following questions to provide information about your background and teaching experiences.

35. Are you?

☐ male
☐ female

36. What is your highest level of education?

☐ high school graduate
☐ some college
☐ Child Development Associate Credential (CDA)
☐ Associate’s degree
☐ Bachelor’s degree
☐ some graduate school
☐ Master’s Degree
☐ Doctoral Degree
☐ other

37. In what year did you receive your last degree?

_______________________

38. What certifications do you hold? (check all that apply)

☐ Elementary Education
☐ Early Childhood
☐ English as a Second Language (ESL)
☐ Reading/Literacy
☐ not applicable
☐ other

If other, specify which certification____________________________

39. How would you describe your community? (please choose one)

☐ urban
☐ suburban
☐ rural

40. What is the language of instruction in your classroom? (check all that apply)
41. What percentage of the students in your classroom would you deem as English Language Learners?

☐ 0-10%  ☐ 11-20%  ☐ 21-30%  ☐ 31-40%  ☐ 41-50%  ☐ over 50%

42. What are the home languages of the children in your classroom? (check all that apply)

☐ English
☐ Spanish
☐ Middle Eastern & South Asian Languages (e.g., Arabic, Hebrew, Hindi, Urdu, Bengali)
☐ East Asian Languages (e.g., Chinese, Vietnamese, Tagalog)
☐ African Languages (e.g., Swahili, Wolof)
☐ other
If other, specify language(s) ________________________________

43. What is your race/ethnicity?

☐ White
☐ Black or African American
☐ American Indian or Alaskan Native
☐ Asian/Pacific Islander
☐ Hispanic, Latino, or Spanish

44. What is your current age?

☐ 18-29 years of age
☐ 30-39 years of age
☐ 40-49 years of age
☐ 50 or more years of age

45. How many years of teaching have you completed?

☐ 0-4 years
☐ 5-15 years
☐ 16-25 years
☐ 26 or more years
46. How many years of teaching Head Start have you completed?

☐ 0-4 years  
☐ 5-15 years  
☐ 16-25 years  
☐ 26 or more years

47. Describe the type of program in which you work. (check all that apply)

☐ center-based child care  
☐ home-based child care  
☐ Full Day (5 days per week)  
☐ Full Day (4 days per week)  
☐ Part Day (5 days per week)  
☐ Part Day (4 days per week)

48. Are you?

☐ a teacher  
☐ a teacher assistant  
☐ neither

Thank you! You are finished with the survey!

Please add any comments that you would like to make about this survey. Were the instructions clear? Were there any problems in answering the questions? (Please be specific.)
Attention Teachers and Teacher Assistants!

Please complete the enclosed survey—the Preschool Teachers’ Language and Literacy Beliefs Survey (PTLLB)—and return it to the box at the information booth to receive a free chocolate bar!

(Please be sure to fill out both the front and back of all the pages!)
APPENDIX C: LETTER OF CONSENT

Thank you for participating in this study by completing this questionnaire. Before you begin, please read the informed consent below. If you agree to the conditions in the informed consent, please check the box that says, "I agree to participate in the study."

TITLE
The title of this analysis is "Preschool Teachers' Language and Literacy Beliefs Survey" (PTLLB).

RESEARCH PROCEDURES
This research is being conducted to analyze Preschool Teachers' Language and Literacy Beliefs for English Language Learners (ELLs). If you agree to participate, you will be asked to take 15-20 minutes of your valuable time to complete this survey.

RISKS
There are no foreseeable risks for participating in this analysis.

BENEFITS
There are no benefits to you as a participant other than the opportunity to share your opinions.

CONFIDENTIALITY
The data gathered from this survey will be kept confidential. Only the researcher will have access to your responses.

PARTICIPATION
Your participation is voluntary. If you decide not to participate or if you withdraw from this study, there is no penalty or loss of benefits to which you are otherwise entitled. There are no costs to you.

CONTACT
If you have questions about this survey, please contact Wendy Young, George Mason University Doctoral Student, at wendyyoung12@verizon.net or call 703-669-5582. Dr. C. Stephen White, Assistant Dean, Office of Accreditation and Program Improvement, is the Principal Investigator for this study. He may be contacted at cwhite1@gmu.edu or call 703-993-9380. You may contact the George Mason University Office of Research
Subject Protections at 703-993-4121 if you have any questions or comments regarding your rights as a participant in the research.

CONSENT
I have read this form and

☐ I agree to participate in this study.

☐ I do not agree to participate in this study. If you do not agree, then thank you. You are finished with this survey.
### APPENDIX D: REDUCED PRESCHOOL TEACHERS’ LANGUAGE AND LITERACY BELIEFS SURVEY (PTLLB-16)

<table>
<thead>
<tr>
<th>Old</th>
<th>New</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>1</td>
<td>Storytelling is an important tool to use with ELLs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>Books with a repeating word pattern are essential for ELLs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree</td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>Information about cultural practices relevant to each ELL family should be obtained.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree</td>
</tr>
<tr>
<td>14*</td>
<td>4*</td>
<td>Only read a book once to ELLs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree</td>
</tr>
<tr>
<td>16</td>
<td>5</td>
<td>A curriculum based on developmentally appropriate practices is the beginning of literacy instruction for ELLs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree</td>
</tr>
<tr>
<td>21*</td>
<td>6*</td>
<td>Parents of ELLs should be encouraged to only use English with their children.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree</td>
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<tr>
<td>22</td>
<td>7</td>
<td>Repetition is an effective tool in helping ELLs to learn English.</td>
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<tr>
<td></td>
<td></td>
<td>☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree</td>
</tr>
<tr>
<td>23</td>
<td>8</td>
<td>The home language of the student should be represented in the classroom literacy materials.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree</td>
</tr>
<tr>
<td>24*</td>
<td>9*</td>
<td>Books should be read to ELLs only in large groups.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree</td>
</tr>
<tr>
<td>25</td>
<td>10</td>
<td>Assumptions should not be made about a child’s cultural background.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree</td>
</tr>
<tr>
<td>27</td>
<td>11</td>
<td>Phonological awareness should be combined with reading activities for ELLs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree</td>
</tr>
<tr>
<td>29*</td>
<td>12*</td>
<td>ELLs should be assessed only in English.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree</td>
</tr>
<tr>
<td>30</td>
<td>13</td>
<td>A language and literacy rich environment should be provided for ELLs.</td>
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<td><strong>31</strong></td>
<td>14*</td>
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<td>Information about a child’s culture should be obtained solely from the Internet.</td>
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<td><strong>32</strong></td>
<td>15</td>
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<td>Making connections between vocabulary words and ELLs’ lives is beneficial.</td>
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<td><strong>34</strong></td>
<td>16</td>
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<tr>
<td>Written observations should be used in conjunction with other assessments to determine the academic proficiency of ELLs.</td>
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☐ Strongly disagree ☐ Disagree ☐ Agree ☐ Strongly Agree

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CURRICULUM VITAE

Wendy L. Orner Young was born and raised in Pottstown, Pennsylvania. She attended Millersville University where she met her husband, Douglas Young, while they were both doing their laundry in the basement of their dorm. After they got married, they lived in West Virginia, New Jersey, Rhode Island, and Virginia. Numerous educational opportunities arose during those moves, and Wendy obtained a gifted education certification from Rhode Island College and a Master of Science in Reading Education from Shenandoah University (Virginia). Wendy has taught first grade, gifted education (grades 2-6), and Head Start. When Wendy isn’t in a classroom, she can be found running 5K races, reading a book, or writing in her many journals that she began when she was 15 years old. And of course, she is still doing Doug’s laundry!