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DUAL LANGUAGE LEARNERS IN PRESCHOOL: A MULTI-CASE STUDY ON
HOW THE LANGUAGE ENVIRONMENT SUPPORTS LANGUAGE
DEVELOPMENT

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JANICE LOREEN KELLY

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DUAL LANGUAGE LEARNERS IN PRESCHOOL: A MULTI-CASE STUDY OF
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DEVELOPMENT

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BY

Dr. Vickie Lake, Chair

Dr. Chan Hellman

Dr. Libby Ethridge

Dr. Diane Horn

Dr. Curt Adams

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This work is dedicated to my husband, Mike. You have supported me in every step towards this goal. You have picked up the slack when I had due dates around the corner and understood when I had to say no to family events. Thank you for your love and support through this journey. I couldn't have made it without you! Thank you also to my parents for being an example of how to press on towards the goal, my sister for always encouraging me when I was near tears, and my children and grandchildren for providing a ray of sunshine on those really hard days. I am blessed to have such a wonderful family!

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Abstract

The increase of dual language learners in today's classrooms have caused serious implications when examining how the country educates children (McWayne, Melzi, Schick, Kennedy, & Mundt, 2013). Because of the cultural and linguistic differences it is essential to study teaching practices at the early childhood level. Examining the educational practices includes studying their language environment and how it supports DLLs' language development. This study is significant because there is little research on the language environment of DLLs (Atkins-Burnett, Sprachman, López, Caspe, and Fallin, 2011). The present study examined the language environment of dual language learners in four preschool classrooms. This qualitative case study used interviews, observations, and field notes. The participants included two groups, teachers and children. The six English speaking early childhood educators taught in classrooms based on an English-only model. There were 24 focal children, six from each class, who were Hispanic dual language learners. The overarching significant finding that emerged from this study was that of intentionality. In order to scaffold DLLs' learning and provide a rich language environment, teachers must be intentional in their practices. Being a good teacher does not guarantee that a teacher knows what is appropriate or effective for the DLLs in their class. A major implication for teacher education programs is to offer coursework to ensure preservice teachers have the appropriate training.

Key words: dual language learners, DLLs, early childhood, intentionality, third space

Chapter 1: Introduction

Background and Statement of the Problem

In the United States, the changing demographics create serious implications when examining how the country educates children (McWayne, Melzi, Schick, Kennedy, & Mundt, 2013). The cultural and linguistic diversity of young children are growing and providers of early education can expect to see continuing increases over time. The rising number of children in early childhood programs whose home language is other than English reflects this trend. These young children are dual language learners, or DLLs. They are learning both languages at the same time—learning to speak their native language at home while learning a new language, English, at school. Within this group, the Latinos are one of the fastest growing populations of children, so it is necessary to take a careful look at education for this group (Barrueco, López, Ong, & Lozano, 2011).

The *Research Brief* (Center for Early Care and Education Research-Dual Language Learners (CECER-DLL), 2011) discussed the fact that there are “gaps in the research evidence on the development and early care and education of dual language learners” (p. 1). Understanding the best education process for these children is part of the gap. Looking from a sociocultural viewpoint at how DLLs acquire the English language, it is important to examine, not only the language that is being used with them but, the language environment as a whole. Atkins-Burnett, Sprachman, López, Caspe, and Fallin (2011) state that there is little research on the language environment of DLLs. Layzer and Maree (2011) concur, “There is so little research in the specifics of what occurs in instructional contexts with DLLs that even

exploratory research is valuable” (p. 148). Most of the research done with DLLs is based on comparing types of environments such as monolingual and bilingual environments or research on the quality of the classroom by focusing on the lead teacher (Slavin & Cheung, 2005).

Searching for a definition for *language environment* proved challenging. Although many studies discussed language environment, it was not defined. Justice (2004) used a slightly different term, *language-rich classroom*, and defined it as “one in which children are exposed deliberately and recurrently to high-quality verbal input among peers and adults and in which adult-child verbal interactions are characterized by high levels of adult responsiveness” (p. 37). In addition, Roskos and Neuman (2002) discussed the importance of the physical space in a classroom, stating that it had a direct impact on the quantity and quality on a child’s oral language experiences and it mediated the teacher and child’s language use. In this study, a *language environment* includes verbal and non-verbal interactions between teacher-child and child-child, as well as the physical classroom space.

Purpose of the Study

The purpose of this study was to examine the language environments of DLLs and determine how their language acquisition was supported within a preschool classroom. Language, interactions, and environment were viewed through the lens of the sociocultural theory in order to examine what the language environment looked like for DLLs and how that supported their language acquisition in a preschool classroom.

Theoretical Framework

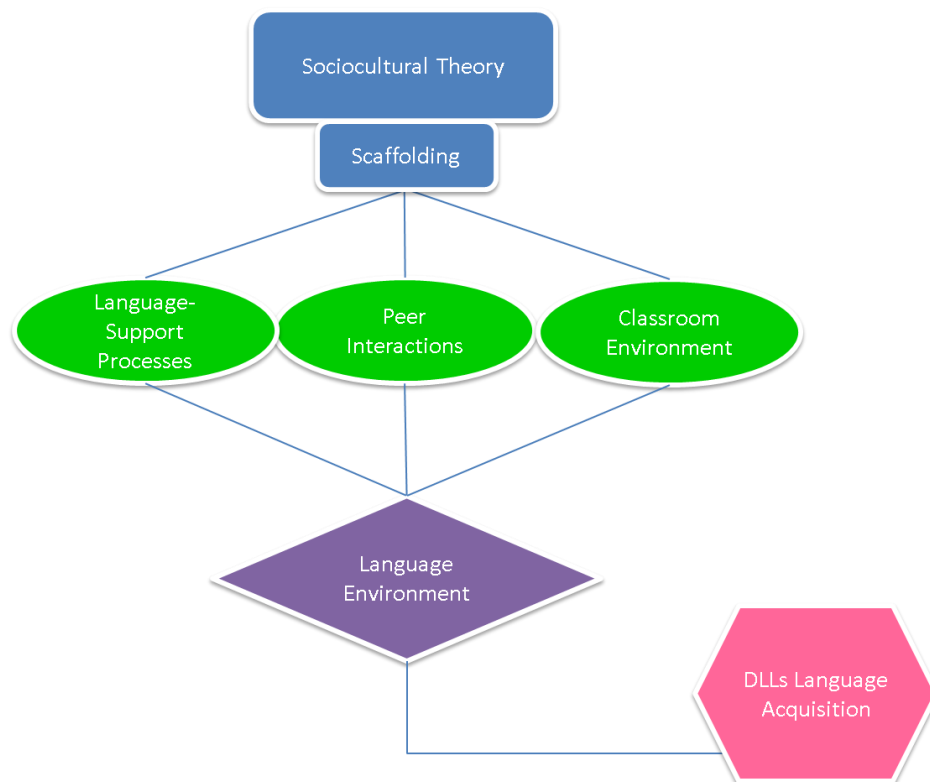
The theoretical framework for this study was the Sociocultural Theory, which in early childhood, considers the social, historical, and cultural dimensions of children's everyday activities to better understand children (Fleer, Anning, & Cullen, 2004). Scaffolding is derived from the sociocultural theory and encompasses language-support processes (LSPs), peer interactions, and classroom environment. Language-support processes that have been found to be particularly helpful in language acquisition are: child-oriented; interaction-promoting; and language-modeling (Bouchard et al., 2010). These are supports that a teacher uses with children. The child-oriented support is used by the teacher in order to have a conversation with a child. It is based on what the child is interested in, in order to sustain the communication. Interaction-promoting is what the teacher does in order to facilitate interactions between children. This may include partnering children for projects or providing activities that allow for interactions to take place. Language-modeling is used by the teacher to model the correct way to speak or to add vocabulary to the child's sentence. It is not about correcting the child but about modeling correct language usage.

Providing a social environment for peer interactions to take place is also part of the sociocultural theory (Vygotsky, 1978). Peer interactions also scaffold language development. The interaction may include a conversation, the use of new vocabulary, or how to work on a project. All of these instances provide an opportunity for language development. The classroom environment also plays into the scaffolding. How the environment is set up will determine the interactions that

take place. The environment should provide the child with meaning-making activities with others who may be more or less skilled linguistically (van Lier, 2000).

Language-support processes, peer interactions, and the classroom environment make up the language environment. By viewing them through the lens of the sociocultural theory, it provides a look at the language environment and how that environment supports the language acquisition of DLLs. This connection can be seen in Figure 1.

Figure 1. Theoretical Framework



The sociocultural theory was based on the idea that human activities take place in cultural contexts, are mediated by language and other symbol systems, and can be best understood when investigated in their historical development (John-Steiner & Mahn, 1996). Kozulin, Gindis, Ageyev, and Miller (2003) stated that

Vygotsky's sociocultural theory was based on the idea that cognitions and learning happen in the social and cultural realm and are not individual phenomena. Göncü and Gauvain (2011) explained, "Sociocultural approaches share the conviction that children's learning and development take place in historically situated activities that are mediated by their culture through intersubjective experiences in which they participate with the other members of their communities" (p. 123). Individual development has to be understood within the social context and cannot be separated from it. Cognitive development happens when children internalize ideas that they gained from participating in joint problem solving with more skilled partners. These more skilled partners bring their culture's intellectual tools to the problem solving, putting them in reach of the children (Rogoff, Mosier, Mistry, & Göncü, 1993).

Vygotsky (1978) developed the construct of the zone of proximal development (ZPD) in order to understand the functions that have not matured yet. The ZPD is the range of tasks that a child can accomplish, from those that a child can accomplish on his own to those that are too difficult for a child unless he receives help from someone that is more skilled. Although Vygotsky provided the idea of the ZPD, he did not give specific ideas of how the adult was to work with the child.

Bruner and his colleagues took Vygotsky's idea of the ZPD and addressed this problem by providing the idea of scaffolding (Wood, Bruner, & Ross, 1976). Scaffolding takes place by starting where the children are and then as the teacher helps them, their knowledge increases. Scaffolding is seen as an important strategy to promote language development for DLLs. Echevarría, Short, and Peterson (2012) explained that teachers use verbal scaffolding for DLLs by prompting, questioning,

paraphrasing, and elaborating in order to improve their language development.

Verbal scaffolding is only one type of scaffolding that can be used to help DLLs with language development. Interactions with other children also provide an opportunity for children to expand their language. This may be as simple as listening to another child speak or as complex as dialoguing with another child (Bouchard et al., 2010).

Vygotsky (1962) believed that language was not just a way for children to express their knowledge, but that it was an important tool for constructing knowledge. How, then, does this fit in today's classrooms? Trawick-Smith (2010) believes that "quiet classrooms where children just sit and listen is not optimal for learning from this view" (p. 53). The implication is that, in order to enhance thought and speech, a teacher needs to use language as well as encourage children to use language. This leads to the question of what a language environment requires in order to support language development.

Definition of Terms

Dual Language Learners—Children, 5 years old and younger, who are learning two languages simultaneously. They are still learning their home language while learning another language (English) at school (Espinosa, 2010).

Language Environment—The environment in which verbal and non-verbal interactions between teacher-child and child-child take place.

Scaffolding—Assisting a student by breaking down a task, redirecting their focus, modeling, and by providing students with strategies to problem-solve (Wood, Bruner, & Ross, 1976).

Zone of Proximal Development (ZPD)—“The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86).

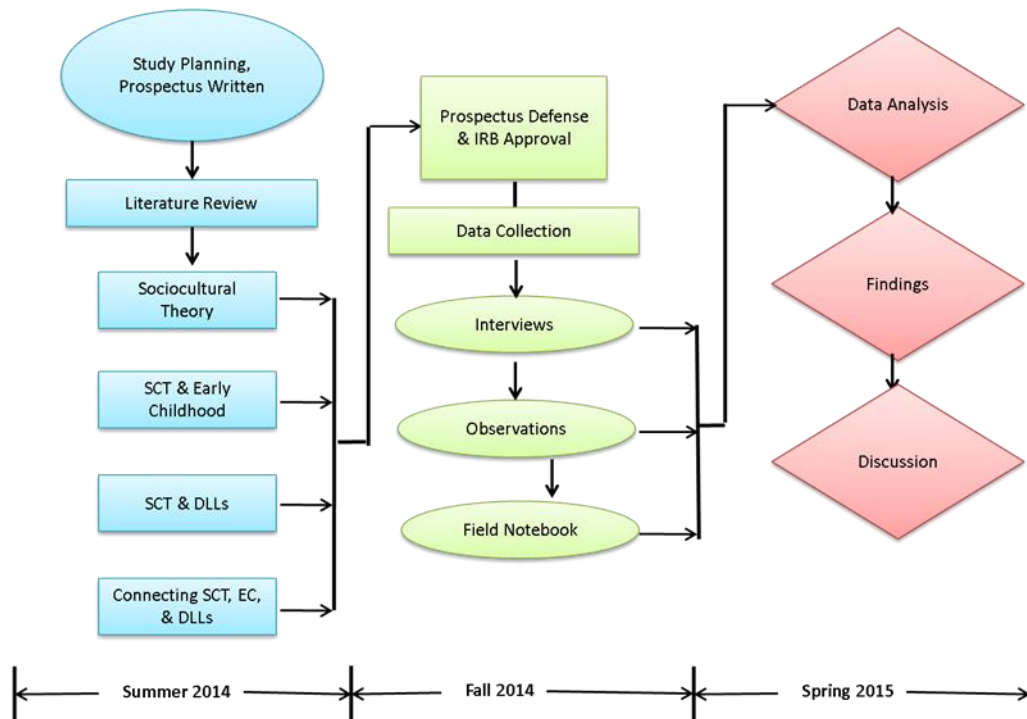
Research Questions

What does the language environment of DLLs in quality preschool classrooms look like and how is their language acquisition supported?

1. How do teachers use language-support practices (LSP) with DLLs?
2. How do peer interactions with DLLs support their language acquisition?
3. How does the classroom environment create opportunities for a DLL’s language acquisition?

Organization of the Study

Figure 2. Organization of the Study



This study is divided into five chapters. Chapter 1 gives a brief overview of the research problem, including the research questions and the purpose of the study. This discussion is provided as a means to situate the study within the national discourse on educating dual language learners in U.S. preschool classrooms.

Chapter 2 is a review of the literature to help situate the study within the theoretical framework of sociocultural theory. Connecting sociocultural theory and early childhood education is done through examining the literature on language development and the importance of play. In addition, sociocultural theory is discussed in context of dual language learners and the necessary scaffolding that is needed for their language development.

Chapter 3 describes the research methodology. The qualitative research design for this study was a case study (Yin, 2009) approach to explore the language environment of DLLs. The data for the study was collected using interviews, observations, and the field notebook. The observations took place in four classrooms located in two early childhood centers. The four classrooms were observed twice a week for 1.5 hours each time. Six focus children from each class were specifically observed, as were the teachers. Each of the teachers were interviewed at the beginning of the study and then again at the end of the study.

In addition to describing the data collection, Chapter 3 provides an explanation of how the data was analyzed using within-case analysis and cross-case analysis. A detailed description of the research site and participants is given in order for readers to understand the context in which this study took place. Also provided in

this chapter is a data collection matrix of the research questions, data sources, and analysis plan.

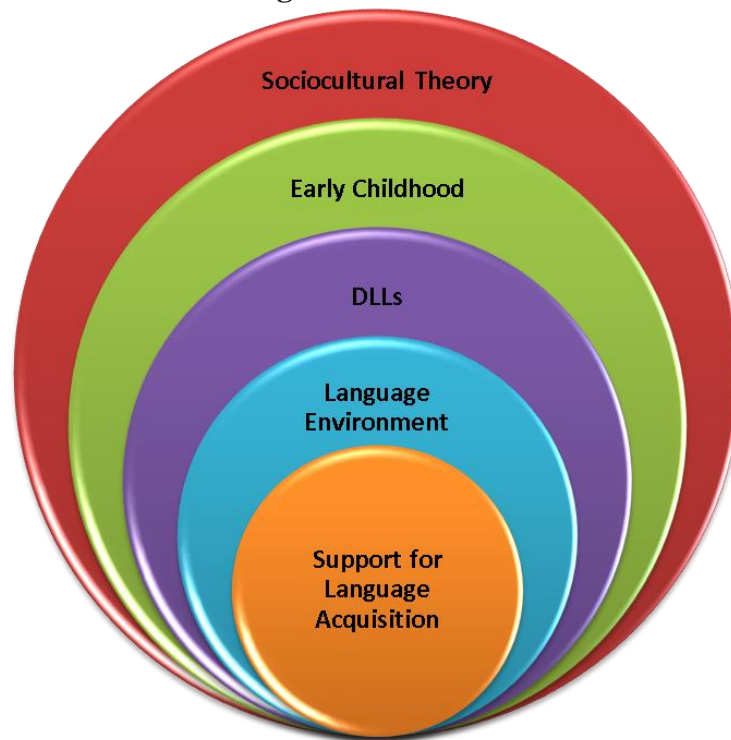
Chapter 4 presents and interprets the findings generated by the data analysis regarding the Language-Support Practices (LSPs) that teachers used with DLLs, the peer interactions that took place within the classroom, and how the classroom setup effected the language environment of DLLs. The findings are used to answer each of the research questions.

Finally, Chapter 5 situates the research findings within the context of the literature. Also discussed are practical implications drawn from this work as well as limitations to the study. This chapter concludes by providing potential research directions for future work as indicated by the research findings.

Chapter 2: Literature Review

The organization of this literature review will begin with an overview of the sociocultural theory. It will then go in to how early childhood fits within the sociocultural theory, focusing on language development and the importance of play. The next section will look at dual language learners, which are still part of early childhood, and how they fit within the sociocultural theory. That will lead to the conclusion, which combines these areas and leads us to see what support DLLs need in order to succeed in their language acquisition.

Figure 3. Literature Review Diagram



Sociocultural Theory

Similarities and differences can be seen when looking at children's learning and development across different cultures. When these similarities and differences are looked at through the lens of sociocultural theory, it allows for a more accurate

picture of a child's development. Comparing children in different cultures, using a universal postulation regarding child development and learning, can give skewed results if their culture is not considered (Göncü & Gauvain, 2011).

The sociocultural approach to learning and development was brought to the forefront by Lev Vygotsky in the 1920s and 1930s. He provided a rich framework regarding the connection between a child's development and their culture (Göncü & Gauvain, 2011). There are three core themes that run throughout Vygotsky's sociocultural theory (Dimitriadis & Kamberelis, 2006; Wertsch, 1991). The first theme is that individual development, including higher mental functioning, has its roots in social sources. Vygotsky (1978) emphasized the importance of social interaction in development. Vygotsky saw each function of the cultural development of the child show up twice. The first time was in the social realm, in relationships between people. The second time was in the psychological realm. When a child first learns a task, it is with others that have more experience. Then, as the child takes on more responsibility, he understands the task and can accomplish it on his own.

The second theme of Vygotsky's was that human action is mediated by tools and signs, or semiotics (John-Steiner & Mahn, 1996). Semiotic mediation is essential for all facets of knowledge. John-Steiner and Mahn (1996) listed several examples of Vygotsky's semiotic mechanisms which included: "language; various systems of counting; mnemonic techniques; algebraic symbol systems; works of art; writing; schemes, diagrams, maps and mechanical drawings; all sorts of conventional signs and so on" (p. 193). Bodrova and Leong (2007) explained that these semiotic mechanisms are tools that help solve problems or are instruments that facilitate an

action. These tools are fundamental to the acquisition of knowledge (John-Steiner & Mahn, 1996). The tools and signs available in a culture are relevant to how the members organize their perceptions and actions (Wertsch, 1985).

Vygotsky's third theme was a genetic or developmental method (Wertsch, 1991). He believed that in regards to human development, biology only accounts for very basic elements. The development of higher-level cognitive processes such as language, memory, and abstract thinking, can almost be entirely accounted for by the social environment. Vygotsky (1978) asserted that learning leads development and is mediated through social and cultural contexts.

Each of Vygotsky's three themes wound through all of his research. One major area of his research was the relationship between thought and language (Dimitriadis & Kamberelis, 2006). Vygotsky (1962) believed that thought and speech were both used to plan and carry out actions. Overall, language was used to traverse social situations, develop concepts, and regulate thinking. However the connection between thought and language was more involved than simply thinking and speaking. Vygotsky believed that the thought and language of children between birth and 2 years old, varied in function, depending on the child's development. In the beginning, children learn about their world by nonverbal exploration. Then they use crying, laughing, social responses to convey their feelings. At some point, thought becomes verbal and speech becomes intellectual. Once children can communicate their thoughts, feelings, and plans, then their communication is transformed into inner speech and verbal thinking. Vygotsky theorized that speech was not just the expression of thought but that thought is changed as it is transformed

into speech. This is important in understanding Vygotsky's premise that the development of conceptual thinking can be traced to the internalization of language.

Conceptual development was another area of interest for Vygotsky (1962). He defined conceptual development as the development of the functional use of semiotic tools. It is used as a way to focus attention, select specific features, and analyze and synthesize tool use. Conceptual development was seen as a constant and dynamic process. Concepts were an active part of the intellectual process, constantly engaged in serving communication, understanding, and problem solving. Young children acquire semiotic tools through the interaction with their caregivers. Vygotsky gave the example of how a child learns to use a spoon by watching and interacting with the caregiver. The concepts that preschool children develop were seen as happening spontaneously with relationship to others through everyday activities (John-Steiner, 2007). This idea allowed a child's learning and development to be understood in the context of social and cultural activities.

Zone of proximal development

The most well-known of Vygotsky's research is the *zone of proximal development* (ZPD) (Dimitriadis & Kamberelis, 2006). The ZPD has three key components. First, the ZPD is built on the premise of a dyad and not an individual. This is because there is a combined effort of the participants involved in the dialogue. The second component is that both of the participants play an active role. The third component is that the interaction between the two parties is organized in an active, logical manner (Vygotsky, 1978).

Vygotsky (1978) defined the ZPD as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86). In other words, it is the range of tasks that are too difficult for a child to accomplish on his own but that can be achieved with the help of the assistance of someone that is more skilled.

With Vygotsky’s life being cut short due to illness, he did not have much time to develop his theory. However, his ideas have been expanded by others who have developed Vygotsky’s theoretical concepts into more concrete ideas (Minick, Stone, & Forman, 1993). Minick et al. (1993) explain some of the changes that took place. They believed, a richer picture of the sociocultural theory began to appear in the writings of English-speaking authors. Furthermore, there was more access to the work of other Russian publications. These two pieces allowed for a better understanding of sociocultural theory for the American researchers. In addition, the efforts to relate this theory to the study of cognition in a social context instigated the developing of a relationship between cognition and more distinguished understandings of sociocultural and linguistic theory.

Jerome Bruner was known for his contribution to the cognitive revolution, moving away from behaviorist models and towards an exploration of the mind in use (Dimitriadis & Kamberelis, 2006). Over a period of 50 years, his view on learning changed from a cognitivist view to a position that explains learning primarily in terms of acquisition of meaning through negotiation (van Oers, 2004). Bruner focused on the importance of meaning-making being more important than the task

itself (Bruner, 1996). The importance of cultural socialization and how it necessitates making meaning in context was discussed in his book, *Acts of Meaning* (Bruner, 1990).

Scaffolding

Bruner was one of a group of American researchers who used Vygotsky's theories to explore how children learn through collaborative interaction with adults (Minick et al., 1993). This work has provided tangible examples of how to operationalize certain important concepts within sociocultural theory. One of these ideas was in regards to the ZPD. Although Vygotsky called for teaching in the ZPD when adults introduced new concepts, he was not specific in how they were to collaborate with children in the ZPD (Bodrova & Leong, 2007; Bruner, 1996).

Bruner and his colleagues addressed this issue by offering the idea of *scaffolding* (Göncü & Gauvain, 2011; Wood, Bruner, & Ross, 1976). Scaffolding offers support until it is no longer needed. It is assisting a student by breaking down a task, redirecting their focus, modeling, and by providing students with strategies to problem-solve (Wood et al., 1976). The student is given one part of the task to carry out. They are guided by questions and directed by gestures from the more-knowledgeable partner. Gradually the student takes on more and more until the student shares the same organizational plan as the once-more-knowledgeable partner (Bruner, 1978).

In order to more fully understand the concept of scaffolding, Wood et al. (1976) examined the tutoring process. They studied the relationships between the child and the adult, with the adult being the expert who helps the child, whose

knowledge is less than the expert's knowledge. The researchers concluded that teaching was more involved than just the teacher modeling or the child imitating. The social context is important to learning and needs to be considered as well. The process of scaffolding includes the social context because it considers not only the learner but also the one who is more knowledgeable. Bruner defined scaffolding as "referring to the steps taken to reduce the degrees of freedom in carrying out some task so that the child can concentrate on the difficult skill she is in the process of acquiring" (1978, p. 254). Scaffolding is a process that allows a child to go beyond his understanding by involving a more *expert* other. It involves helpful, structured interaction between an adult and a child for the purpose of helping the child achieve a specific goal.

Guided participation

Barbara Rogoff is seen as a fellow advocate of sociocultural studies by many (Cole & Engeström, 1994). One of Rogoff's contributions to sociocultural theory was to explore the idea of a community of learners versus models of learning that are based on one-sided notions of learning. She believed that learning occurs while people participate in shared activities with others and all participants have active but often unequal roles in sociocultural activity (Rogoff, 1994). Rogoff extended the idea of learning through interaction by developing the theory of cognitive apprenticeships. Cognitive apprenticeships allow children to learn by taking part in activities of their culture group. Children work with adults to learn and complete tasks. As they are gradually exposed to more complicated tasks, they become confident to complete the tasks independently (Rogoff, 1995). An example can be

seen when a mother and child cook together. At first, the child learns how to accomplish simple tasks. The more the pair work together, the more the child is able to undertake complicated tasks. Eventually, the child becomes confident in their ability and is able to cook on her own.

An important part of cognitive apprenticeships is what Rogoff (1990) terms *guided participation*. Guided participation, an expansion of Vygotsky's ZPD, refers to the processes that people are involved in as they communicate and coordinate efforts while taking part in culturally valued activity (Rogoff, 1995). It emphasizes routine, implied communication, and arrangements between children and their partners. Importance is put on the child's active role of observer and participator in the social activity of their caregiver or partner. In guided participation, an expert works with children in three stages. First, they work together in order to structure an activity. Next they construct bridges between what the child knows and what the child is expected to learn. Finally, the expert transfers responsibility for solving the problem to the child and the child has the opportunity to work on the problem alone (Göncü & Gauvain, 2011; Rogoff et al., 1993).

It is important to note that guided participation can take place in different systems of communication which reflect different cultural priorities of caregivers and children. It is not school specific but encompasses the many different aspects of children's lives. Since this is not specific to one culture or one institution, it allows for variations across different situations and cultures (Göncü & Gauvain, 2011).

Minick et al. (1993) reviewed the changes made to the sociocultural theory over the years and noted that with the application of sociocultural theory to education

research, they saw a new, enhanced theory beginning to emerge. There was a shift in the educational and psychological research that moved beyond seeing language, cognition, and social interaction, as universal and studying them out of context. It is moving to a theory that “highlights the rich interconnections between cultural institutions, social practices, semiotic mediation, interpersonal relationships, and the developing mind” (Minick et al., 1993, p. 6). This calls for a reconceptualization of the mind and its development within a social context. This shift allows for a more comprehensive understanding of how development occurs for each child.

Sociocultural Theory in Early Childhood Education

In early childhood, sociocultural theory considers the social, historical, and cultural dimensions of children’s everyday activities to better understand children (Fleer et al., 2004). Sociocultural theory is related to two important areas in early childhood education: language development and play. For preschool children, language is still being developed and the time children spend in playing allows opportunity for development, especially in the realm of language (Copple & Bredekamp, 2009).

Language development

Vygotsky believed that language and thinking begin as separate processes that eventually merge (Vygotsky, 1962). He saw them as two processes that were developmentally woven together. Language and thinking must connect in order for intellectual development to occur. Vygotsky indicated that words without meaning were not really words but were just an empty sound. Word meaning was a unity of both processes, language and thought (Vygotsky, 1978). Trawick-Smith (2010)

gave the example of a toddler playing with a rattle. As the toddler shakes the rattle, he begins to associate the sound of the rattle with verbal labels such as *noise*, *rattle*, or *loud*. When children relate language and thought like this, it causes them to think in more complex ways.

During the preschool years children are involved in verbal thought (Trawick-Smith, 2010). Verbal thought is the process of integrating language and thinking. This type of thought allows for the development of complex concepts. For example, when a child can use words such as *small* or *smallest* and *big* and *biggest*, to describe size, their understanding of the concept of size is enhanced.

In conjunction with verbal thought, young children use *private speech*. Vygotsky used this to refer to language that children use to plan, guide, and regulate their behavior (Vygotsky, 1962). It directs children's attention and helps them organize their thoughts and understanding (Trawick-Smith, 2010). Vygotsky considered private speech to be an important tool during the early years (Wertsch, 2007). During private speech, young children often speak audibly to themselves. This private speech may incorporate naming objects or narrating their actions in order to problem solve. An example is a young child working on a puzzle. This child might say, "Which pieces should I do first? Maybe the purple ones should be first. Now I think I need the green ones. That one doesn't fit. Maybe it goes over there" (Santrock, 2014). Vygotsky believed that the more difficult the problem the more frequent the child will use private speech.

Language supports can also be used with children to assist their language development (Bouchard et al., 2010). Language-support practices (LSPs) that are

developmentally appropriate and are based on responsive teacher-child relationships, support children's language acquisition (Burchinal et al., 2008). Studies have found that three specific supports were more likely to encourage the development of a child's language skills (Girolametto & Weitzman, 2002; Girolametto, Weitzman, & Greenberg, 2006; Longtin & Fabus, 2008; O'Toole & Kirkpatrick, 2007). These language-support practices (LSP) include: child-oriented; interaction-promoting; and language-modelling (Bouchard et al., 2010). The first LSP, a child-oriented process, is used in order to begin and sustain a shared conversation between teacher and child (Justice, 2004). It begins with creating opportunities for interactions between the teacher and child, based on the child's interests. Examples for teachers include listening to the child until he has finished his thoughts; following the child's lead, whether verbal or nonverbal; or participating in a game with the child while maintaining a non-dominant presence.

With the second LSP, interaction-promoting, the teacher encourages social interactions between children. This may include setting up the children in groups in order to encourage speaking; the teacher asking open-ended questions in order to begin a discussion; or simply helping children to learn how to take turns. It also includes imitating and confirming (Bouchard et al., 2010).

The third LSP is language-modeling. These responses give children examples of correct linguistic forms, content, and uses and can be done by expanding on a child's vocabulary by introducing new words or adding new words to the child's sentence (Justice, 2004). Language modeling can also be done by restating a word that was incorrectly pronounced or used. For example if a child said, "I don't

want no paper”, the teacher could then restate the sentence with proper wording, “I see, you don’t want any paper, do you?” Another type of language modeling is to extend the conversation with a child by asking questions, commenting, or introducing new ideas into the conversation (Bouchard et al., 2010). When teachers use these LSPs they limit their directiveness and increase their responsiveness to children’s language development (Justice, 2004). In addition, when children communicate with teachers who use these LSPs, their language increases in complexity and improves overall (Girolametto & Weitzman, 2002).

The Importance of Play

There is a vast body of research on the importance of play and on skills children learn through play (Bodrova & Leong, 2001, 2007; Caldera et al., 1999; Center of the Developing Child, 2007; Copple & Bredekamp, 2009; Frost, Wortham, & Reifel, 2012; Rushton, Juola-Rushton, & Larkin, 2010; Rushton & Larkin, 2001). This research shows that if given time, an enriched environment, and a supportive teacher who allows for exploration and discovery, children have the ability to construct their own knowledge. Children learn as they play (Stegelin, 2005). Areas of learning include physical, cognitive, and social/emotional development. Even with all the research, play is still a difficult concept to define (Frost et al., 2012). For the purpose of this study, the definition of play was “an active, spontaneous, process-oriented, pleasurable activity that often has elements of make-believe and that can also include games, as long as the children are free to modify the rules as they see fit” (Silver, 1999, p. 68).

Within the sociocultural theory, play is seen as a significant or *leading* activity (Frost et al., 2012; Göncü & Gauvain, 2011; Vygotsky, 1967). Vygotsky believed that there are certain leading activities that are the main source for children's development. During early childhood, the leading activity is imaginative play (Göncü & Gauvain, 2011). He proposed that imaginative play was important in order for children to acquire social and cognitive competence. This type of play allows children to act out situations that are separate from reality. In order to do this, children have to begin by initiating an imaginary situation, developing the rules of the play, and then follow the rules. Vygotsky (1967) gives the example of a child imagining herself as a mother and her doll as her child. Within this play, the child must abide by the rules of maternal behavior.

Imaginative play that is planned out helps children make decisions between different courses of action (Creasey, Jarvis, & Berk, 1998). In addition, it causes children to have to control their impulses and follow the rules of the play. Vygotsky believed that imaginative play episodes that were designed by children, would follow social rules and help children understand the social norms of their culture (Frost et al., 2012).

For Vygotsky (1967) imaginative play serves as the zone of proximal development for children. It allows them to be able to function beyond their actual developmental level in two ways. The first way is in regards to rules of the play as a support for the child (Göncü & Gauvain, 2011). For example, after making a trip to the doctor's office, the child wants to be a doctor. Because this desire is not possible today, the child turns to play. The child recreates the experience which allows her to

process her understanding. During this play, she develops an understanding the role and the rules that are associated with it.

The second way that play allows children to operate in a level higher than their actual developmental level is it allows children to separate meaning from objects. In other words, a child can substitute one object for another. A child using a block as a car is able to separate the meaning of car from the actual object. It adds to the development of *word meaning*. The word is no longer a label that the child uses but is now a word with meaning (Göncü & Gauvain, 2011).

Dual Language Learners and Sociocultural Theory

Sociocultural theory holds particular importance for understanding the development and early education of DLLs (García & García, 2012). This population brings to the educational arena a culture and language that are not the norm in the United States. These children come to school with not only a different language but they also come from different social contexts.

Teachers of DLLs find the sociocultural theoretical framework supportive because it sees learning as an interaction between individuals within a social context. It takes their culture and history into account (García & García, 2012). This is in contrast to other theories that describe child development but do so based on one cultural context. For example, Goethals and Whiting (1957) postulated that child development theories remain ethnocentric unless they can be validated universally. They continued on, stating that when theories are constructed within a specific cultural context they have a built in bias that is often left unexamined. This can be seen in theories or data coming from communities of middle-class populations

(Göncü & Gauvain, 2011). When this data is used to describe optimal development and then used as a basis for comparison of children from other communities that are not considered middle-class, it can lead to interpretations of deficits. This diagnosis of deficits then precludes findings that may instead, relate to differences in language, culture, or social contexts. Sociocultural theory takes a child's language and background into account and looks at the child within their social context.

Language Acquisition

García and García (2012) discussed DLLs and the need for a rich language environment for them. They provided three important milieus for teaching and learning that intertwine and if followed, can give a better understanding of the relationship between language, cognition, and culture. The three milieus were 1) individual instruction that is detailed and specific to the learner; 2) concern for the social organization of classrooms; 3) respect for the cultural and linguistic qualities of students, peers, and teachers. Therefore, it is helpful to look at linguistic, cognitive, and social character of a child's development as innately interconnected. As DLLs' language improves, they begin to grasp more understanding of social contexts and continue to develop their thinking skills.

One way that DLLs improve their language acquisition is through private speech. Saville-Troike (2012) studied children learning a second language in order to determine the use of private speech. Children used both their first language (L1) and their second language (L2) while using private speech. Saville-Troike found that private speech provided evidence that even when the children were not interacting with each other, they were engaging with what they heard, and then practicing to

build up their competence. They were not merely passively assimilating their new language.

Children learning their L2 may use private speech as a means of internalizing the linguistic features that are available in their situation (Lantolf & Thorne, 2007). Saville-Troike (1998) gave several examples of this phenomenon. A five year old Japanese child, learning English as her L2: “I finished. I am finished, I have finished, I’m finished” (p. 584). In another example documenting private speech was a Chinese child imitating the teacher’s language:

Teacher: You guys go brush your teeth. And wipe your hands on the towel.

Child: Wipe your hand. Wipe your teeth (p. 584).

In this example, the child was not responding to the teacher but was using private speech to work out the meaning of what the teacher said.

Dixon et al. (2012) posited that sociocultural theory has brought changes to L2 learning. They believed that focusing attention on the social and cultural dimensions of languages has changed the role of the teacher, as well as the strategies and goals for L2 learning. Through the lens of sociocultural theory, the purpose of L2 learning is more than acquisition of linguistic forms. It is now directed at assisting individual learners in how to find ways of effectively communicating in different circumstances. In addition, the emphasis of sociocultural theory’s interaction between DLLs and their environment changes the traditional teacher’s focus on correct language to that of appropriate language.

Environment

It is important to examine the classroom environment in order to determine the message it gives to children, especially to DLLs. The environment aids the comfort level of children who do not speak English by providing clues as to what is expected of them and gives guidance as to where they should be (Barone & Xu, 2008). The setup of the classroom provides predictability for children. They know what types of activities will happen in which areas: large group time is in the open area on the carpet; small group time happens at the table; centers are for groups of children to interact. This predictability allows children to focus on learning.

To the child who is actively participating in his learning, the environment provides a wide range of opportunities for learning. This linguistic world which is accessible to the child, is “full of demands and requirements, opportunities and limitations, rejections and invitations, emblems and constraints—in short, affordances” (Shotter & Newson, 1982, p. 34). From the pedagogical perspective, it is important to provide the child with an environment that engages him in meaning-making activities with others who may be more or less skilled linguistically (van Lier, 2000).

Zuengler and Miller (2006) discussed studies which have found the classrooms that were arranged in order to have high levels of classroom participation, promoted language learning. However, they did not give specific ideas for changing classroom practices in order to obtain this goal. The classrooms will not be changed by outside solutions, but will be changed by the nurturing practices that take place within the classroom (Hall, 2000). Having a specific set of guidelines

is not be what encourages language learning. Learning is encouraged by examining classroom practices and seeing how those affect the students' participation. The sociocultural theory brings to focus the local contexts and may give rise to an understanding on how to create a classroom environment that DLLs need.

One of the areas that seems to cause problems for DLLs is the disconnect between home and school cultures. Both Pianta and Walsh (1996) and Reese and Gallimore (2002) found that discontinuity between family and school caused difficulty for many children. Because the family and school environments may be very different, children may find it difficult to try to navigate not only a new language but also a new environment and culture.

Researchers are turning to the *third space theory* to help students make connections between the two cultures that they are living in. Bhabha (2004) held that there are two cultural spaces. One represents the majority and the oppression of the minority group. The other was what the minority groups actually see as their culture.

Although Bhabha originally saw third space as an area of political resistance, Moje et al. (2004) extended Bhabha's notion of third space into classrooms by stating,

Teachers and students bring different instructional, home, and community knowledge bases and discourses to bear on classroom texts. The potential for competing discourses and knowledge is especially high in classrooms where students come from backgrounds and experiences different from those of their peers or their teachers. (p. 41)

An important factor of this third space is that it is able to be part of both individual spaces. There is a new space that is created that is still part of both of the

individual spaces, however this third space allows the creator of the third space to temporarily disengage from already-existing boundaries and examine them with a new viewpoint. Cook (2005) describes third space as the effort to explain and solve the strains that occur when different cultural and institutional identities come into contact.

Examples of using third space in the classroom include those mentioned in the studies done by Levy (2008) and Gutiérrez, Baquedano-López, and Turner (1997). Levy (2008) used the third space lens to gain an understanding between home and school. It was used to determine the changes of children's perceptions of reading by integrating different information from home and school. Third space, in this respect, was used as a tool to grasp new conceptual understandings. Gutiérrez et al. (1997) used third space to develop a space where learning takes priority over teaching; instruction is intentionally local, dependent, situated, and strategic; and the literacy curriculum is informed by current knowledge about language learning and language.

Within the sociocultural theory the focus is on a child's language, culture, and cognition (Scott & Palincsar, 2009). In today's classrooms, many times those pieces of the child are not taken into consideration. Classrooms tend to have a one-size-fits-all approach. If educators paid attention to creating these third spaces in school, then more attention would be given to including students' prior knowledge and experience, in addition to the literacy practices in the curriculum (Scott & Palincsar, 2009). This would allow DLL children to actually learn and possibly close the extensive achievement gap between them and their English-speaking peers.

Summary

As can be seen through this chapter, the sociocultural lens is useful for early childhood education as well as being an appropriate framework for DLLs.

Synthesizing these three areas, sociocultural theory, early childhood, and DLLs, can be done by looking at young DLLs in early childhood. These children, although coming to school with little to no English, have been exposed to and developed through their social, cultural, and linguistic background. It is important to understand that they are not arriving in a classroom without any knowledge (Castro, García, & Markos, 2013).

There are specific instances where the sociocultural theory applies to the language acquisition of DLLs. It can be seen in play episodes; peer interactions; using the ZPD and scaffolding their language; providing environments that support language acquisition; and creating a third space where these children feel comfortable bringing their background to the educational setting. Roskos and Christie (2007) discussed the benefits of imaginative play and how it supports their language and literacy. Cheatham and Ro (2010) expounded on this idea by suggesting scaffolding during play. A teacher involved in children's play, either by observation or by participation, can sustain the play longer, add depth to the play, as well as help DLLs develop their vocabulary and communication by putting words with their actions.

In addition, providing a classroom with language opportunities is key for DLLs' language to develop (Trawick-Smith, 2010). Not only should the teacher use language but the children should also be using language, with the teacher, their

peers, and in private speech. This is a prime opportunity for using language-support practices to help strengthen the language development and increase the vocabulary for them. Having a language-rich environment provides opportunities for DLLs to integrate their language and thinking which leads to more complex concepts.

The concept of third space in early childhood for DLLs is more simple than what Bhabha (2004) originally proposed. With young children coming into a classroom that is different from home, it is important to accept who they are, where they are from, and how they learn. Providing a space, whether physical or conceptual, where they can come and be themselves is important. An example is Levy (2008) using third space for children to make sense of the different reading practices and expectation between the school and their home. One concern in her study was that the children were giving up their own constructions of reading and replacing them with what they believed was in keeping with the concepts of the school. Providing the third space for DLLs allows them to experience the school's concepts but still hold onto their own cultural, social, and linguistic processes.

Using the sociocultural theory as a framework for dual language learners provides support for their home life: culture, language, history. It allows them to hold on to who they are and how they experience life. It makes their learning meaningful because it directly relates to them. Encouraging children to bring their experiences to the classroom and then providing the language support needed goes a long way in helping them develop in a positive environment. Understanding the language environments of DLLs and determining how their language acquisition is

supported within the classroom is the next step in understanding how better to sustain their language development.

Chapter 3: Methodology

Children's language is a predictor of their later academic success (Center for Early Care and Education Research-Dual Language Learners (CECER-DLL), 2011; Passe, 2013). With the lack of research in DLLs' education as well as the little that is known about the language environments for DLLs (Atkins-Burnett et al., 2011), there is a need to understand what is required in the classroom in order for this population to succeed. Looking at ways to support their language acquisition will be beneficial to teachers of this group of children as well as add to the limited research on the language environment of DLLs.

The purpose of this study was to examine the language environment in which DLLs were developing their language and how their development was supported. The lens that this study was viewed through was the sociocultural theory which, in early childhood, considers the social, historical, and cultural dimensions of children's everyday activities to better understand children (Fleer et al., 2004).

The overarching question was: What does the language environment of DLLs, in preschool classrooms, look like and how is their language acquisition supported?

1. How do teachers use language-support practices (LSPs) with DLLs?
2. How do peer interactions support DLLs' language acquisition?
3. How does the classroom environment create opportunities for a DLL's language acquisition?

Research Design

The qualitative research design for this study was a case study (Yin, 2009) approach to explore the language environment of DLLs. Yin states that a case study

is “an empirical inquiry that investigates a contemporary phenomenon in depth and within its real life context, especially when the boundaries between phenomenon and context are not clearly evident” (p. 18).

This case study investigated the phenomenon of DLLs language environments. The question for this study focused on what the language environment looked like for DLLs and how it supported language acquisition for them. It was based on the question of *how*, which is one of the preferred investigative inquiries within case study design (Yin, 2009). Richards and Morse (2013) stipulated that case study research is done in order to understand how those being studied experience their world.

Creswell (2003) described case study as “an in-depth exploration of a bounded system (e.g., an activity, event, process, or individuals) based on extensive data collection. ‘Bounded’ indicates that the case is separated out for research in terms of time, place, or some physical boundaries” (p. 485). Kelly (2013) used a case study approach in his research on how prekindergarten teachers facilitate learning for DLLs. The in-depth exploration in Kelly’s study was done through interviews, observations, and field notes. The bounded system was the children in three prekindergarten classrooms.

The current study met the criterion of a case study as well. Data was collected from interviews with the teachers, my field notes, as well as classroom observations in order to have extensive data to explore the bounded system, which were the classrooms of preschoolers.

Setting

The sampling was a purposeful selection (Richards & Morse, 2013) because the participants had the knowledge and characteristics that were necessary for this study. Each classroom was a 3 or 4 year old, high quality, preschool classroom. High quality was determined by NAEYC accreditation, as well as having a high rating with the quality initiative of the state. In addition, each class had dual language learners.

The classrooms in this study were in three early childhood centers managed by a community-based agency that focused on educating students from low-income families. Classroom 1 and 2 were from Center A, Classroom 3 was Center B, and Classroom 4 was from Center B. The goal of these centers was to provide high quality childcare services and education in order to give students the opportunity to be successful. The students enrolled in the centers were from the surrounding neighborhoods, which had a high population of Hispanic families.

The classes that were observed were preschool classrooms: two were 3-year-old classrooms and two were 4-year-old classrooms. The classes were based on an English-only model. This type of model uses English for all instruction and has limited support for the child's home language (Espinosa, 2010). The support provided may include: assistants or other staff may provide some support in the home language through translations; some multilingual materials available; and active family involvement practices. This was congruent with the classrooms in this study, as all four had these supports in place.

Each of the classrooms was arranged in learning centers per NAEYC

accreditation guidelines. The learning centers were: blocks, dramatic play, writing, listening, reading, art, table toys, sensory table, computer, and science. Each center was designated by shelving units and allowed the students easy access to the materials. Every learning center was labeled both in English and Spanish. In addition, there was a whole group area, designated by a large rug. Small groups were set up at the tables. These tables were also used for breakfast and lunch. One of the areas in every classroom was a *safe place*. This was an area that a child could go to if they needed some time alone or needed some time to regroup before participating in the classroom activities.

The walls in each classroom were different but had similar items on them. They had student work as well as academic information, such as colors, alphabet, and numbers. The students' names were on a wall with their picture. There were also sentence strips in front of the whole group area. These were used to write the day of the week and who was missing from class that day. One of the classrooms also had a chart that the weather of each day was recorded.

There were several differences in Classroom 2's environment that made it unique. Like the other classrooms, each center was labeled with English and Spanish, but the center also included a picture of a child, one from the class, playing in the center. The small group area was different because the tables were marked with colored paper and a number hanging above them. The colors and numbers represented the assigned groups that the students were in. This was the only class in which the students were in assigned small groups. Another difference was that this classroom had decorations that were pertinent to some of the students' culture.

These decorations included strings of Mexican Papel Picado banners, which were hanging above the room and piñatas, which the students had made.

Classroom 2 was also the only classroom to have the tables situated in such a way that they made one table in a U-shape. This allowed the students and teachers to all sit at one table during mealtimes. Like the other three classrooms, meals were served family style, but eating did not begin until everybody was seated. Another difference in this classroom was that the students helped set the table; it was one of the classroom jobs. The child helped put the plates, silverware packets, and milk and juice at each chair.

In order to assist parents, the four classrooms each had a bulletin board with essential information including the class schedule, newsletter, parent announcements, and fire/tornado/intruder procedures listed. All information was written in both English and in Spanish. The classrooms also had lending libraries so the parents could borrow books to take home to read to their children. The books were in both languages.

The classrooms each had a set of bathrooms that were shared with the adjacent room. A sink for washing hands and brushing teeth was also in the class. All items that the students needed for self-help were at their level. This included the paper towel dispenser, the soap dispenser, as well as their individual toothbrushes.

The schedules of the classes were all similar as well. Besides non-instructional times, such as eating and cleaning up, each class had specific times for whole group, small group, centers and outside. Whole group time ranged from ten to fifteen minutes and happened several times during the day, which provided a total of

30-40 minutes per day. Small group time happened once a day and lasted between 10 and 20 minutes. Center time consisted of a large block of time in all classrooms and was approximately 50 minutes. Outside time was approximately 30 minutes and happened twice per day, once in the morning and once in the afternoon. If the weather was not conducive to going outside, then the time was spent in centers or in an indoor gross motor space. There was very little time in which the students were not engaged in some t of communication. Even in the large group time, the students were singing, doing finger rhymes, and answering questions.

Participants

In each of the classes, the lead teacher(s) had a bachelor’s degree and the assistant teacher had an associate’s degree. In Classroom 1 there were two co-teachers. In Classrooms 2, 3 and 4, there was one lead teacher and one assistant teacher, however the assistant teacher in Classroom 4 did not consent to participate in the study. The teachers were monolingual, native English speakers. Although Sandy identified herself as Latina because of her family’s heritage, she did not speak Spanish. Each teacher had limited education and professional development in regards to DLLs. All names of teachers and children have been changed to pseudonyms.

Table 1. Classroom Dynamics

Center	Classroom	Age Group	Teacher(s)/ Assistant Teacher	# of years teaching	# of years at school	# of students	# of DLLs
Center A	1	3 yr old	Marsha (Co-Lead)	7	2	17	9
			Susan (Co-Lead)	1	1		
	2	4 yr old	Sandy (Lead)	1	1	20	9
			Bethany (Assistant)	7 wks	7 wks		
Center B	3	3 yr old	Rachel (Lead)	8	3	17	7
			Angela (Assistant)	2	1		
Center C	4	4 yr old	Hannah (Lead)	3	1	20	13

Classroom 1

Teachers. Classroom 1 had two co-teachers, Marsha and Susan. Marsha's bachelor's degree was in the Health Science field. After working in that field for several years, she went back to school and earned her alternative certification. Not only was she certified to teach in areas related to her original degree, including physical education, health, and safety, she also became certified in early childhood education. In addition, she had a Master's degree in physical education and kinesiology. Marsha had taught for seven years, mostly in preschool classrooms. This was her second year in this particular classroom. Most of her classes had a DLL population. In fact, the Spanish words that she had learned were from working with them and their families.

Susan had a teaching degree and was licensed to teach preschool through fifth grade. She came to this agency after earning her certification from a program that helps individuals with degrees become alternatively certified. Although she had previous experience working with students, this was her first year teaching full-time and at this center. Susan took Spanish classes in college so she knew some of the fundamentals of the language, including basic vocabulary. However, she was not proficient enough to have a lengthy conversation.

Students. Classroom 1 was a 3-year-old classroom, so at the time of the study the students were between 3 and 4 years old. The class had 15 students including 7 DLLs. Marsha and Susan were asked to choose six DLL students who attended regularly to be the focal students for this study. As seen in Table 1, all but two students had older siblings at home. Most families' home language was

Spanish. However, those students with older siblings knew some English when they entered Marsha and Susan’s classroom.

Table 2. Classroom 1 Students

Child	English Level	Gender	Age in Months	Home Language(s)	Older Siblings	Years in Program
Cari	High	F	48	Spanish	Y	1
Bettina	High	F	52	Spanish	Y	2
Orlando	Medium	M	46	Spanish	Y	2
Felippe	Medium	M	43	Spanish	Y	1
Edwardo	Low	M	46	Spanish	N	1
Alejandro	Low	M	47	Spanish	N	2

Classroom 2

Teacher. The teacher in this class was Sandy. She had two degrees, one in Creative Writing and one in Fine Arts and Communication. She was in the process of getting her teaching certificate. This was her first year teaching young children. However, she had previously tutored adults who were in the process of learning English and trying to pass their Test of English as a Foreign Language (TOEFL), a standardized test for English proficiency for non-native English speakers. Sandy was familiar with Spanish because she had grown up around it as a child. Her parents both spoke it but she never learned. However, she was taking Spanish classes in order to be able to communicate with her students and their families.

At the beginning of the study Sandy had an assistant that had been in the class since the beginning of the year, however, he left and she had a new assistant, Bethany, for the remainder of the study. Bethany had been at the center for 7 weeks, had an associate’s degree in Humanities, and was working on her bachelor’s degree

in early childhood education. This was her first experience working with children, besides her own child. She became familiar with the center when her son began attending. She developed an interest in working with children and decided to go back to school.

Students. This classroom was a 4-year-old classroom. The class had 20 students including 9 DLLs. Sandy chose the six DLLs to be the focal students for her classroom. Table 2 shows four of the students had been in the program for the previous two years; two recently entered the program who spoke no English and, at the end of data collection, still had low levels of English proficiency. In addition, it should be noted that two of the families spoke Spanish and some English in the home.

Table 3. Classroom 2 Students

Child	English Level	Gender	Age in Months	Home Language(s)	Older Siblings	Years in Program
Kasandra	H	F	58.9	Spanish & English	Y	3
Faron	H	M	59.5	Spanish	Y	3
Anna Marie	M	F	63.4	Spanish	N	3
Vicente	M	M	57.8	Spanish	Y	3
Xavier	L	M	59.3	Spanish	Y	1
Yoana	L	F	56	Spanish & English	N	1

Classroom 3

Teachers. Hannah, the lead teacher in Classroom 3, had two associates, and one bachelor’s degree in human growth and development. Her work with young

children had been in several different centers as a teacher and center director. She has worked for this program for ten years and been at this center for three.

Angela was the assistant in the classroom, although Hannah was quick to point out that she considered Angela as her co-teacher. Angela had her associate’s degree, her CDA, and was working on her bachelor’s degree in Sociology. She started working with young children in a classroom environment when she was in high school and had been at this center for one year.

Students. Classroom 3 had a total of 17 students; seven of them were DLLs whose home language was Spanish. The six focal students all had at least one parent who spoke English to some degree. This group was also different than the other classes because this was their first year in the program.

Table 4. Classroom 3 Students

Child	English Level	Gender	Age in Months	Home Language(s)	Older Siblings	Years in Program
Ana	H	F	46	Spanish & English	Y	1
Alberto	H	M	44	Spanish & English	N	1
Aiden	M	M	47	Spanish & English	Y	1
Bridgette	M	F	46	Spanish & English	N	1
Benita	L	F	48	Spanish & English	Y	1
Carla	L	F	51	Spanish & English	Y	1

Classroom 4

Teachers. Hannah worked as an assistant teacher for three years in another program before earning her Bachelor degree in early childhood education. This was her first year as a certified teacher and to teach in this program. Hannah’s only experiences working with DLLs happened during her field placements while getting

her degree. She had very limited Spanish vocabulary, which consisted of the words that she picked up from her students or specific words that were needed in a classroom environment.

Students. This was a 4-year-old classroom as well. Hannah had 20 students, 13 who were DLLs. Of those 13, 12 spoke Spanish and one spoke Arabic. Table 5 shows the six focal students that Hannah chose. It is interesting to note that the two low English proficiency students were new to the program and did not have siblings at home.

Table 5. Classroom 4 Students

Child	English Level	Gender	Age in Months	Home Language(s)	Older Siblings	Years in Program
Belle	H	F	65	Spanish	Y	2
Hernando	H	M	59	Spanish	Y	2
Jaime	M	M	65	Spanish	N	3
Alanzo	M	M	58	Spanish	Y	4
Patricia	L	F	55	Spanish	N	1
Rafael	L	M	61	Spanish	N	1

Procedures

At the beginning of the study, the community-based agency was contacted to request implementing the study in four of their preschool classrooms. After the IRB application was approved for the study, the agency was contacted again. One of the center directors became the contact for the study and after she gave the information

to her staff and asked for volunteers, two classrooms were obtained. The director then contacted two other directors at different sites and each one had a classroom teacher volunteer. As the research, I approached the teachers, explained the study to them, and attained their written consent. The parents of the students in the classes were given an information sheet about the study along with a consent form in order for their child to participate in the study. Both the information sheet and the consent form were given to the parents in the language they preferred, English or Spanish.

Each teacher was asked to rate their DLLs on English proficiency: one being low to no English, two being moderate English, and three being a high proficiency. From this list, two students from each category, who had a good attendance record, were chosen as the focal students for the study. Interviews

Interviews

Data collection included two semi-structured interviews (see Appendix A) with each teacher. The first interview took place at the beginning of the study with the second interview at the end of the study. Each interview took place during nap time in the teacher's class. The first interview lasted approximately 60 minutes and the second interview was approximately 30 minutes. Both interviews were recorded with a small digital recorder. The interview questions included the following topics: background of teaching young children; background of teaching non-English speaking children; the differences and similarities working with DLLs in regards to their language; the roles of the teacher, peers, and the environment of the language environment of the DLLs. Each interview recording was transcribed. Transcriptions were done by me in order to increase the familiarity with the data. The transcript

was then emailed to each teacher for member checking in order to insure accuracy (Bazeley, 2013). Corrections and additions were made by two of the teachers. The adjusted transcription was uploaded into NVIVO and coded.

Observations

I observed each class for 1.5 hours twice a week, for six weeks, for a total of 18 hours. One day the observation was done during the first part of the morning, the other observation was during the second part of the morning. This allowed for a more complete view of what happened between arrival and lunch time.

Observations included notes regarding the physical classroom space as well as the schedule that was used in the classroom. Teachers were observed to see how they interacted with DLLs, the language that was used, as well as the language supports that were used. Peer interactions were observed between the focal students and those who interacted with them.

The timetable for this study was determined by looking at other studies. For example, a study by Bluiett (2009) examined sociodramatic play and language development in preschool children. Her observations were over the period of 6 weeks, 3 times per week for 2.5 hours. Additionally, Smith (2008) completed a study on scaffolding children's musical play. She observed for 9 weeks, 3 mornings per week. Piker (2013) engaged in the third study referenced for time of data collection. Piker researched the influence of play on second language learning. Because it was an ethnographic study, it occurred over the period of the entire school year. However, the observations occurred twice a week for 3 hours per day.

As can be seen in the Table 6, there was a variety in the number of weeks that

observations took place. However, the average length of time for the observations done on a weekly basis was seven weeks. The average number of days per week was 2.5. The average number of hours that was observed each day was about two. These averages provided the basis for the current study.

Table 6. Related Studies

Study	Weeks	Days	Hours
Farnsworth, M., 2010	10	3	1
Frank, 2004	16 wks	12 times total	3
Bluiett, 2009	6	3	2.5
Smith, 2008	9	3	mornings
Hallam, Fouts, Bargreen, & Caudle, 2009	4	4	2-2.5
Renick, S. 2009	6		1

My role as the researcher was as a nonparticipant observer (Richards & Morse, 2013). This allowed me to enter the classroom to observe events, activities, and interactions with the goal of obtaining an understanding of a phenomenon, such as the language environment of DLLs, in its natural context. Observations were documented on a laptop. These observations were part of the field notebook (Richards & Morse, 2013). Not only were the situations described, comments of children and teachers written down, but descriptions of the classroom environments were also documented in the field notebook in order to gain a better understanding of what was happening in the classroom.

Observations began with a quick scan of the classroom in order to determine what each focal student was involved in as well as the overall activity in the classroom. During the quick scan, one focal student was chosen to be observed.

This child was chosen based on her interaction with the teacher, her peers, or the environment. Each child was observed for approximately ten minutes. Then another quick scan was done and another child chosen. This continued until all focal students had been observed for at least ten minutes. Observations were documented in the observation guide (Appendix D).

Field Notebook

The daily observations were transferred from the observation guide into a word document, which became part of the field notebook. As the notes from the observations were read, additional notes were added to clarify and expand on the observations. In addition, the field notebook held my reflective thoughts, ideas, and questions (Glesne, 2011).

Each of the research questions is listed in the chart below. The chart shows where the data came from, procedures, as well as the way the data was analyzed.

Table 7. Data

Questions	Data Sources	Procedure	Level 1 Data Analysis	Level 2 Data Analysis	Level 3 Data Analysis
1. How do teachers use language-support practices (LSP) with DLLs?	*Interview *Observations *Field Notebook	<i>Semi-structured Interview</i> : 2 individual interviews pre and post, with each teacher. <i>Observations</i> : 1.5 hours in each class twice a week for 7 weeks. Documented on small laptop.	Starter codes: *Child oriented *Interaction-promoting *Language modeling	<i>Within-case Comparative Analysis</i> *Examine each classroom individually. *Compare data from different perspectives:	<i>Cross-case Analysis</i> *Compare classes to see if patterns found in comparative analysis hold true across all classes or are only specific to one. *The categories or themes that are identified will be connected back to each classroom in order to validate the categories. *Data will be shown in matrix.
2. How do peer interactions support DLLs' language acquisition?		Focus on 6 children from each class. Observe child for 10-15 minutes, document, then do a quick scan observation and note what is happening. Continue with next child. <i>Field Notebook</i> : Researcher's thoughts, ideas, questions will all be recorded electronically.	Starter codes: *Language use *Interactions	interviews, observations, fieldnotebook. *Significant phrases, sentences, or paragraphs that pertain to the language environment of the DLLs will be identified. *Data will be shown in matrix.	
3. How does the classroom environment create opportunities for a DLL's language acquisition?			Starter codes: *Room arrangement *Connection w/ home *3rd space		

Data Analysis

Data analysis began the same way for all the data from the interviews, observations, and field notebook. The data was analyzed qualitatively and grouped into selected categories. The analysis was done based on the theoretical framework, specifically looking for scaffolding that was done by the teacher, the peers, and the environment. The objective of the analysis was to gain insight into the language environment of DLLs; more explicitly, to see how teachers used LSPs, how peers influenced language, and what role the environment played in order to help DLLs' English language acquisition.

Level 1 Analysis

The first phase of analysis was to immerse myself in the data (Ayres, Kavanaugh, & Knafl, 2003). This included reading through the interviews and field notebook. This immersion process was done in order to acquire a feeling for the language environment of the DLLs.

Next, all data were coded according to the starter codes found in the literature (Bazeley, 2013). The starter codes for the first research question included the three language-support practices: child-oriented, interaction-promoting, language-modeling. The codes for the second research question were: language use and interactions. The third question's starter codes were: room arrangement, connection with home, and 3rd space. The data were coded using NVIVO software where each category, language-support practice, peer interaction, and the environment were described and themes drawn from it. In addition, an audit trail was maintained by

keeping records of decisions made on coding or memos regarding coding in order to explain and justify why decisions were made and how conclusions were reached.

Level 2 Analysis

The next stage was to do a within-case comparative analysis (Bazeley, 2013). When looking at several cases, the researcher needs to examine each individual case in its own context. An interpretation of the data needs to be developed that reflects the experience of each case and can then be applied equally well across all of the cases (Ayres et al., 2003). Therefore, my within-case analysis looked at each classroom individually by examining all forms of the data: interviews, observations, and the field notebook. Data were analyzed through the lens of the sociocultural theory, looking at the scaffolding that takes place with LSPs, peer interactions, and through the classroom environment. Significant phrases, sentences, or paragraphs that pertained to the language environment of the DLLs were identified and inferences made and compared allowing me to describe the aspects of the language environment, such as the language-support practices, peer interactions, and the environment.

Level 3 Analysis

The third level of analyses was a cross-case analysis. This was done to see if the patterns that were found within-cases held true across cases (Bazeley, 2013). The purpose of the cross-case analysis was to compare the language environment of all classrooms and identify categories or themes that are common among them (Ayres et al., 2003). Using NVIVO software, a case-based matrix was developed using brief summaries from each classroom. Then the categories or themes that were

identified were connected back to each classroom in order to validate the categories. The cross-case analysis allowed for a deeper understanding and increased generalizability (Bazeley, 2013).

Trustworthiness

Trustworthiness is a term used in qualitative research (Lincoln & Guba, 1985). It is the characteristic that helps to ensure the validity, reliability, and objectivity of the study. The terms used for trustworthiness correspond to terms that are used in quantitative research. In order to establish trustworthiness for this study, four criteria were met. They were 1) credibility (internal validity), 2) transferability (external validity/generalizability), 3) dependability (reliability), and 4) confirmability (objectivity).

- Credibility was met through three strategies. The first was prolonged engagement. The observations spanned 1.5 hours, twice per week, for 6 weeks. This timetable allowed time for trust to build up. The second was triangulation of the three sources of data. The data from the interviews, observations, and field notes was triangulated in order to establish validity in the study. This was done by analyzing the data from each and comparing the inferences that were drawn to see if there were similarities. The third was member checking. After the interviews with the teachers were completed, they were transcribed. Each teacher was given a copy of her/his transcript to review. Any discrepancies or additions were corrected before coding began.

- The next criterion for trustworthiness was transferability. Information that was given in order for transferability judgments to be made was the thick description of the setting, participants, as well as examples of what was seen in the classroom regarding the language environment of the DLLs. This description allows readers to determine if the findings from this study are transferable to other studies.
- Dependability was acquired through the reporting of the processes in the study. Each process within this study was thoroughly reported in order for another researcher to be able to duplicate the study. However, it is important to note that the same results may not be obtained due to the changing dynamics of the teacher, students, as well as changes within the facility.
- Confirmability was verifying that the researcher's biases were addressed, and making sure that the results did not reflect those biases but were based on the experiences and ideas of the participants (Miles & Huberman, 1994). In addition, a detailed methodological description allows others to determine how far the data emerging from it may be accepted. A detailed description of the methodology, as well as an audit trail was documented. Two diagrams gave the details. The first was the data-oriented approach. This diagram showed how the data were collected and processed. The second diagram was the theoretical audit trail. This diagram gave an overview of the whole project.

Summary

As the lack of research shows, there is a need to understand the language environment of DLLs in order to determine how best to support their language development (Atkins-Burnett et al., 2011). As such, language supports used by the teacher, peer interaction, and the physical classroom space were studied in order to see how the language development of DLLs was supported. The four classrooms used provided data from teacher interviews, observations, and the field notebook. The goal of the analysis was to afford a deeper understanding of how to support the language development of DLLs and to add to the limited research that is available.

Chapter 4: Findings and Discussion

This chapter provides an account of the Language-Support Practices (LSPs) that teachers used with DLLs, the peer interactions that took place within the classroom, and how the classroom setup effected the language environment of DLLs. Each question is answered by providing the findings that connect specifically to the question.

How Do Teachers Use LSPs With DLLs?

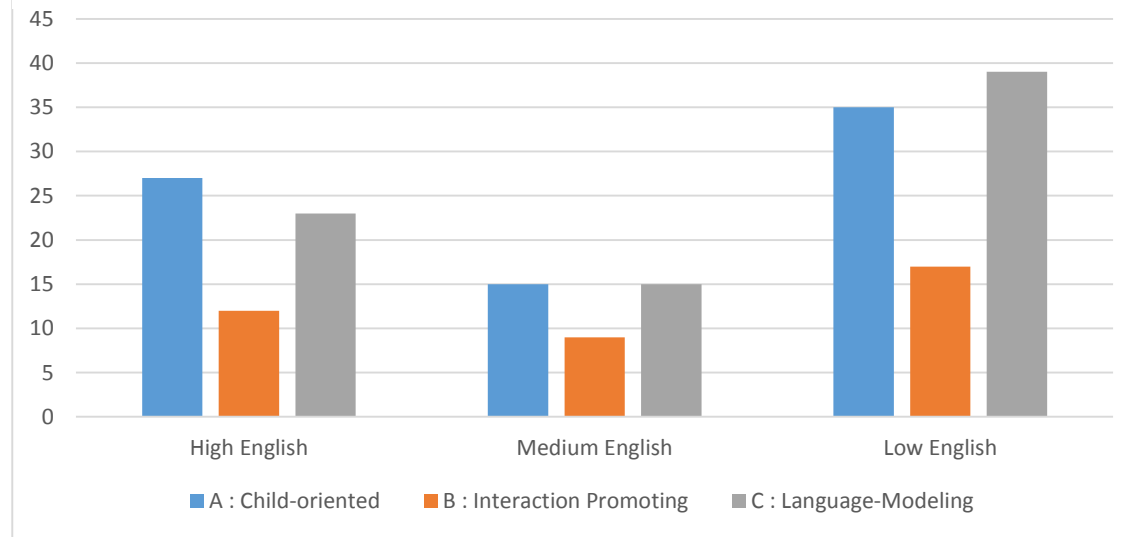
The three LSPs that have been found to more likely encourage the development of a child's language skills were child-oriented process, interaction-promoting, and language modeling (Girolametto & Weitzman, 2002; Girolametto et al., 2006; Longtin & Fabus, 2008; O'Toole & Kirkpatrick, 2007). Each was examined in order to see if and how teachers used them with the DLLs in their classes. When looking at the three LSPs and how they were specifically used with the 24 focus students, there were differences between the groups.

The most noticeable difference was with the students who fell into the medium English proficiency group. This group had less LSPs used with them than both the high and low English groups (See Figure 4). The teachers worked with the high and low English groups in their ZPD to provide necessary scaffolding, but that was not the case for the middle group. The scaffolding for the middle group was limited.

There were some differences between the classrooms. These differences can be seen in Figure 5. The teachers' backgrounds, training, and experiences may explain the individual differences between the classes. For example, Classrooms 1,

2, and 3 each had two teachers that consented to being observed, however Classroom 4 only had the lead teacher’s participation, which possibly limited the data. In Classroom 2, the teacher had extensive training in language modeling, although not

Figure 4. LSPs by English Level



specifically for DLLs, but used language-modeling almost exclusively with the students who had a low English level. This may have been because of her experience working with individual adults who were learning English. She had practiced with adult English language learners and then applied what she had learned with them, to the DLLs with little English.

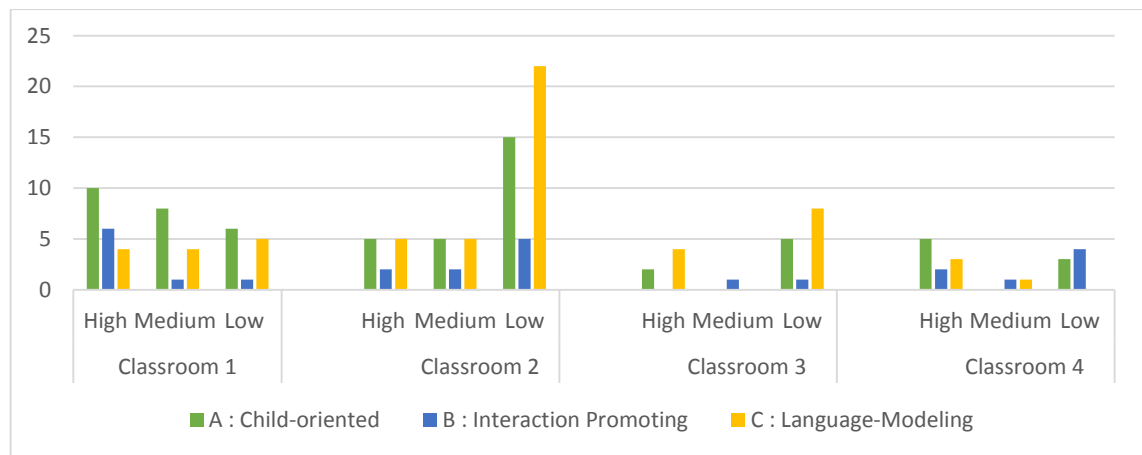
In Classrooms 2 and 3, there was a day when each of the lead teachers was absent and the assistants were the acting lead teacher. During those two observations, no LSPs were observed. The assistant teacher’s language was more directive and almost no language scaffolding was seen. This finding supports Girolametto, Weitzman, and Greenberg (2003) study that states teachers with more language training tend to be more responsive when interacting with students. Those

without the training tend to be more directive in interactions with students. The assistants did not have the same type or amount of training as the lead teachers.

Child-oriented

The child-oriented LSP begins with creating opportunities for interactions between the teacher and child, based on the child’s interests. This may include listening to the child until he has finished his thoughts; following the child’s lead, whether verbal or nonverbal; or participating in a game with the child while maintaining a non-dominate presence (Justice, 2004). While this LSP was seen in all four classrooms, the amounts differed greatly. Looking at Figure 5, these differences can be seen not only between the classrooms but also the different amounts between the English proficiency levels.

Figure 5. LSPs by Classroom and English Level



Interactions and sustained conversations with the DLLs with low English proficiency seemed to be challenging. In her interview, Marsha explained the struggle she sometimes had following conversation with DLLs who had limited English. She described it as a puzzle:

A child will start off saying something to us in English and we're like, we're with you, we're with you, then all the sudden it's back in Spanish and we're like, I got nothing. We got like 3 words from that. So then we try and piece it together—we started talking about horses so maybe that's what they were talking about.

To follow a child's lead in the conversation, the teacher has to be able to understand where the conversation is going. Sandy talked about how using the Project Approach with DLLs helped her support their language development. Project Approach allows students to engage in an in-depth investigation about a topic (Helm & Katz, 2012) by providing them with opportunities to document their experiences, reflect on them, and then share their ideas with others (Coppie & Bredekamp, 2009). Sandy gave an example from the project the class did on buildings. One of the activities was to use the cardboard boxes to create a building. One boy (L) was very engaged in his creation so she went over to talk to him about it. Sandy shared:

I'm like, "Tell me about your building." I pointed to the box and said, "What's that?" He says, "This is car. Car goes in here." I'm like, "Oh, that's a garage, and that's the door." Then he points to the tape [connects the door to the garage]. I say, "That's a hinge, because it goes like this."

Working on projects not only provided an opportunity for students to engage in something that interested them but also offered opportunities for teachers to engage students in order to begin conversations and encourage them to use language (Coppie & Bredekamp, 2009).

Interaction-promoting

The purpose of the interaction-promoting LSP is to encourage social interactions between students including setting up the students in groups in order to encourage speaking; the teacher asking open-ended questions in order to begin a

discussion; or simply helping students to learn how to take turns (Bouchard et al., 2010). Surprisingly, the interaction-promoting LSP was one of the lowest processes used in all of the classrooms and in almost all English levels. While all the teachers understood the importance of peer interaction,

Peer interaction is critical for DLLs. They need to see and hear their peers using English to encourage the use of the language. Peer scaffolding helps DLLs gain confidence and reinforces proper use of English. (Hannah)

none of them could elaborate on how they incorporated peer interactions into their classes. Hannah said, “We don’t really have a problem with them interacting.” Other teacher comments included, “we are a family,” or “we don’t have problems with kids playing together.” Marsha and Susan understood that peer interactions were important and in order to allow them to happen, they discussed how they set up the centers so that more than one child could be in the center. However, when asked if they promoted peer interactions, they could not explain what they did.

From the observations, I could see that there were multiple opportunities for peer interactions, however, teacher facilitated peer interactions were rarely seen. In these classrooms the teachers did not purposefully facilitate peer interactions. In fact, Marsha said,

I don’t feel like, we don’t purposefully do a whole lot of that. We do some things, like pair them up to do certain things, but I feel like they, especially at this age, they pair up pretty well.

This concurs with Girolametto and Weitzman (2007) findings that although the research is available on the importance of facilitating peer interactions, it is not being implemented in classrooms.

While the teachers did not discuss what they did to promote peer interaction among DLLs, they engaged the students in songs, rhymes, and activities during whole group time. These activities had built-in opportunities to help students interact with their peers; however, the teachers did not choose the activities based on developing peer interactions. Classrooms 1 and 2 sang many songs that had students interacting with each other. They also had certain rhymes that they repeated, which allowed students to be acknowledged by their peers. In Classroom 3, Rachel had the students do pair-share. She said, "Look at your friend and tell them what you did last night." Then she asked them to share out to the group. In Classroom 4, Hannah had the students pair-up and share a dry erase board and marker. They worked together to draw a picture and then share what they drew with the class. As stated earlier, all of the teachers used a variety of active engagement strategies with their children that supported their positive classroom environment, however interaction-promotion LSPs are intentional strategies implemented to scaffold language (Bouchard et al., 2010), and the teachers did not utilize these strategies for this purpose.

Another opportunity for interaction-promoting techniques was during meal times. The tables were set up in a way that allowed for small group interactions. In three of the classrooms the tables were small and arranged separately, which allowed for small groups of students to eat at each table. The fourth classroom had the tables arranged in a U-shape that provided an opportunity for the class to sit together but still interact in small groups. Classrooms 3 and 4 were especially conducive to this type of LSP as their breakfast was served later than the other two classrooms, so all the students sat down together to eat. The other two classes had breakfast early and

there were still students arriving during breakfast so there were more interruptions to the conversations. In all four classes, the teachers ate with the students and conversations flowed freely. All students participated in these mealtime conversations using both Spanish and English.

What was rarely seen was purposefully pairing students by their English proficiency. In fact, the only example observed took place in Classroom 3 and those pairings did not work out well. The class was divided in half to make two small groups of eight students. In Rachel's group she paired English speaking students with her DLLs for a patterning exercise but provided no explanation of why they were paired or what was expected. There was very little language between the partners. In most pairs the English speaking child hurried through the activity and wanted to leave the table, while the DLL sat looking confused. One interaction that showed the confusion and frustration happened between Victoria (L) and Michael, who was an English speaker. Hannah put a card in front of them with a pattern of different colors of bears. The students were to match the plastic bears with the pattern on the card, then continue the pattern. Michael matched and extended the pattern and then turned to his neighbor to discuss something. Victoria looked at the bears and turned them around so they were all facing one way. Hannah saw the completed card and gave them another card to work on. Michael was still engaged with his neighbor so Victoria put all the bears on the card and, while they faced the same direction, she did not match and extend the pattern. Michael looked at the card and rearranged the bears in the correct pattern but did not have them facing all the

same way. Victoria looked very angry and said, “Don’t!” As she began arranging the bears, the time for this activity was up and they had to put the bears away.

Although the students were purposely paired together in order to provide peer language scaffolding, this did not happen. The DLLs with little English did not understand the purpose of the activity. Although the English speakers could do the activity, there was little conversation and almost no collaboration. This lack of peer language interaction concurs with prior research regarding children in general, that suggests that there are fewer social interactions and conversations between students in highly structured, teacher-directed activities (Booren, Downer, & Vitiello, 2012; Girolametto, Weitzman, & van Lieshout, 2000). Pairing students is supported by research that states that group size impacts the ability of peers to scaffold DLLs’ language development. However, the research states that it is more than group size, it is also about the type of activity (Bouchard et al., 2010; Girolametto & Weitzman, 2002; Pellegrino & Scopesi, 1990). Rachel used pairs, but the activity did not support language scaffolding, so no language scaffolding occurred.

Language-modeling

Language-modeling provides students with examples of correct linguistic forms, content, and uses by expanding a child’s vocabulary through introducing new words or adding new words to the child’s sentence (Justice, 2004). Language-modeling was seen in all four classrooms to varying degrees and was the most used LSP with DLLs with low English proficiency.

How language-modeling was used by the teachers differed between the DLLs based on their level of English proficiency. The students in the medium and low

groups received mostly language extension such as when they pointed or spoke one word, the teachers responded with a sentence. For example, Carla walked over to Rachel and said, “Miss Ramsey.” She held up her finger and had a very sad face. Rachel asked what happened and Carla pointed to her chair and then to the table. Rachel said, “Use your words.” Carla replied “Chair, table.” Rachel responded by expanding on Carla’s vocabulary, “You pinched your finger between the table and chair?” In this way, Rachel extended Carla’s nonverbal language into words.

Another example was observed with Sandy, a teacher who was very capable using language-modeling. Xavier brought a set of bongos that had been damaged to Sandy who looked at the ripped bongos and asked Xavier, “What’s the problem?” Xavier responded with a single word, “Ripped.” Sandy then asked him, “How can we solve this problem?” Xavier thought for a minute and then said, “Tape.” Sandy acknowledged his solution but added words to form a complete sentence, “We need to get some tape to fix it.” These examples show how simplified language models provided scaffolding for each child’s language development. Tabors (2008) uses the term *expanding and extending* to explain this phenomenon. The teacher uses the child’s word and then develops verbal constructions to expand and develop the child’s language.

Although language-modeling was used in the same way for the DLLs in the medium and low groups, there were fewer instances of language-modeling with DLLs in the medium group. This was probably due to the students’ increased level of English proficiency; medium DLLs do not need as much support with forming correct sentences as low DLLs. For example, during the whole group time, Hannah

discussed whose birthday was in each month. Alanzo (M) said, “My birthday April.” Hannah responded, “That’s right, your birthday is in April.” She had to add very little to his sentence to complete it. However, she could have used this opportunity to expand and extend his vocabulary by giving an additional sentence with new vocabulary (Tabors, 2008).

For DLLs in the high group, the teachers tended to focus more on connecting the language to the correct concept. This was seen with Faron (H) and Sandy during centers.

Faron yelled: “Miss Sandy, can you help me?”

Sandy sat down and asked: “What do you need help with?”

Faron did not answer but he handed her a game piece.

Sandy responded: “Oh, you want me to play?”

Faron: “Yes.”

Sandy explained: “When you said you wanted help I thought you had a problem. If you want me to play then you need to say, Miss Sandy, do you want to play the game with me?”

Another example of language-modeling for a DLL in the high proficiency group happened at breakfast one morning. Hannah made a comment about being a grandma. Alberto (H) looked perplexed and said, “You not grandma. You Miss Ramsey!” Hannah explained what a grandma was and that she could be both a grandma and Miss Ramsey. This interaction not only provided a new word, *grandma*, for Alberto, but it also helped him understand that Miss Ramsey could be more than just his teacher.

In the interviews, Hannah explained how she and Angela encouraged language development with their DLLs. “When a child doesn't have the verbiage necessary for a particular situation we help them. We give them the words to use.” Hannah discussed what she believed was important for language development, stating that, “It’s very important to just talk, talk, talk, and expose them to the vocabulary through read-alouds, through everyday activities, through conversation at breakfast and at lunch; the more words they hear the more words they will pick up.” All the teachers seemed to have an understanding of language-modeling. However, Wasik and Hindman (2011) contend that teachers who do not have specific training in this area do not spend much time engaging in these types of interactions. This can be seen in Classroom 2 where the lead teacher had extensive training in language-modeling and in showed in the observations.

There were several findings in this section. The first was that the training and experience of the teachers impacted the amount and type of LSPs that they used. The second finding was that the interaction-promoting LSP was the least used LSP. Although the teachers knew the importance of peer interactions, they were unsure how they should promote it and did not intentionally use it as a language scaffolding strategy. The third finding was that there was a difference in how language-modeling was used with the high, medium, and low groups. The teachers use the expanding and extending technique for the low English proficiency group. With the high and medium groups, the teachers focused more on expanding and extending the conversation and not the structure of the sentence.

Each of these classes were in NAEYC accredited centers, with degreed teachers. Although what they were doing for the whole class was considered good teaching, the DLLs did not all receive the same types or amounts of support. Specifically, interaction-promoting LSP was lacking in all classes for all three groups of DLLs. The teachers may have understood the importance of promoting peer interactions but they did not understand what they needed to do to ensure those interactions were taking place. This is an important factor to consider when viewed from the sociocultural theory perspective. Vygotsky (1978) believed that the social environment played a major part in language development. Without the opportunity for intentional social interactions, DLLs will have a much more difficult time acquiring English.

How Do Peer Interactions Support DLLs' Language Acquisition?

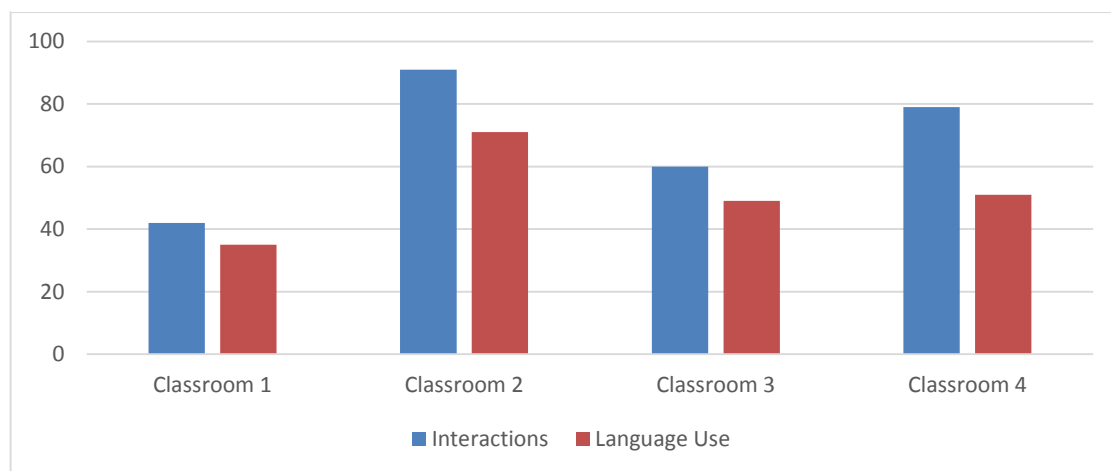
Although LSPs and the environment may also involve peer interactions, the findings in this section are only examining what happened between students. As anticipated, some peer interactions did support the DLLs' language acquisition. For example, Vicente (M) pointed out colors in a book and said them out loud to Anna Marie (M). He named some in English and some in Spanish. He pointed to one and said, "rojo," which is the Spanish word for red. Anna Marie responded, "No! Is pink. No is red." This exchange illustrates Vygotsky's (1978) belief that learning takes place in relationships between people. When children interact with others who have more experience and knowledge, including their peers, learning takes place. These relationships provide the foundation to their learning (Smidt, 2009). Additionally, the activity was structured to promote language scaffolding and, not surprisingly, it

occurred (Bouchard et al., 2010; Girolametto & Weitzman, 2002; Pellegrino & Scopesi, 1990).

Language Use

The language that was heard between all the students, not just the focal students, was both Spanish and English. Figure 6 shows the number of interactions that occurred for the six focal students in each class. Within those interactions, the number of times that language was used is also shown. All instances of language were simply recorded as language used, there was no distinction regarding whether it was Spanish or English. Language was involved in most interactions between the students, which demonstrates that peer interactions offer an opportunity for language use and development.

Figure 6. Peer Interactions by Classroom



When the students spoke to their peers they used the vocabulary they had learned in class, even when speaking Spanish. For example, the centers served pancakes for breakfast fairly regularly. The students knew the word *pancake* in English but not in Spanish. When playing with the playdough, two girls spoke in Spanish about making pancakes but used the English word *pancake* in their Spanish

conversation. They only knew the English word; they did not know what the Spanish word for pancake was. On another occasion, Hailey (L) and Carla (L) were arguing about the ball of playdough they were using because it had blue and yellow mixed together. The girls argued in Spanish about which color it was, but used the words *yellow* and *blue* in English. The entire conversation was in Spanish except when they used the words for colors; those words were in English.

Mixing words from one language when using another language is referred to as code-mixing (Paradis, Genesee, & Crago, 2011). Méndez, Crais, Castro, and Kainz (2015) discussed this phenomenon, suggesting that the vocabulary words that preschool DLLs learn in one language do not necessarily transfer over into their native language. Hindman and Wasik (2015) suggested the reason was because the adults in the DLLs' life do not provide opportunities for them to connect the two languages. This suggests that more explicit efforts may need to be incorporated by all adults, including teachers, in order to link words in both languages for DLLs.

Another aspect of language use between peers was the phenomenon of switching between languages depending on who was part of the conversation. There were multiple instances of DLL students, mostly in the high proficiency group, who spoke in English then switched to Spanish, or vice versa, depending on the languages and levels of the students involved. This was seen when Hernando (H) and Alanzo (M) were racing marbles down a ramp with a boy who only spoke English. Alanzo dropped his marble and yelled, "I win! I win!" The boys were only speaking in English. When the English-speaking boy left, the conversation switched to Spanish and I heard "otra vez, otra vez." A little later the English-speaking boy returned and

the boys switched back to English. This aspect of switching between languages was something that all the teachers mentioned in their interviews. They were amazed how the students, mostly those who were highly proficient in English, knew what language to use depending on who they were speaking to. Sandy stated it this way:

We have those kids, like Kasandra and Faron who know both languages and they know WHO knows what language in the classroom. So if Faron looks to Yoana (L), he'll say it in Spanish. He just knows. I think that's so amazing. They are the helpers in the class.

Hannah also mentioned this in her interview when I asked her about the language that she heard the students speaking:

The ones [DLLs] that can speak really good English, but speak Spanish also, will speak in Spanish to the kids that don't know as much English. They will speak in Spanish because they know that the other one doesn't speak English that good. It's really interesting.

Switching between languages was discussed by Grosjean (2001) as the language behavior of someone who is bilingual. A bilingual individual has to determine which language to use based on who he is talking to. While this decision is based on many factors, it is usually done unconsciously. Switching between languages was seen in all four classrooms with the focus students who had high English proficiency. They flowed easily between the two languages and instinctively knew which language to use with their peers, which allowed communication to happen regardless of the language of the students involved.

Peer Scaffolding

There were many instances of scaffolding that took place between peers. English and a mix of English and Spanish were used in peer scaffolding. One example occurred during a free choice activity during center time. Cari (H) was

reading a flip book the teachers had made. She and Orlando (M) were looking at the pictures. Orlando named the picture and letter on each page. Cari responded by telling him the sound of the letter. When they turned to the page with a frog, Orlando said, "It's frog, F." Cari then responded, "Yes and it says /fff/." They continued to read the whole flip book several times with Orlando naming the pictures and letters and Cari telling him the sounds. In this way, Cari scaffolded the literacy learning of her less experienced peer, Orlando. This scaffolding took place in English.

Another example of scaffolding, in both English and Spanish, happened at breakfast. Two girls, Benita (L) and Cari (L), discussed the breakfast they were eating. They were watching a boy, Alberto (H), put his egg, sausage, and cheese on top of his English muffin. The two girls watched him and then began conversing in Spanish. The discussion was about the sandwich Alberto had made. Benita (L) looked at her muffin and asked Alberto in Spanish if it was a *torta*, which is a Spanish food similar to a sandwich. Alberto replied in English, "It's a sandwich." The girls both repeated the word sandwich and proceeded to make their own sandwiches. Not only did they learn a new vocabulary word, but they also learned a new way to eat their breakfast. This interaction provided meaning for the new vocabulary connecting the new word, sandwich, with the actual object. Vygotsky (1978) believed that words without meaning were just empty sounds and not really words at all.

Participating in positive and successful peer relationships at the preschool level is a complex task and requires many different skill sets (Girolametto &

Weitzman, 2007). Language is one of the skill sets needed. Rafael (L), who spoke little English, was building in the block area and made a very elaborate structure. He put the fire truck in the garage area that was built into the structure. Another boy, who spoke only English, came over and asked Rafael what he had made. Rafael said, “It, it, it castle!” The boy began laughing and told him the fire truck did not belong in a castle. Rafael jumped up and said, “No! No is castle. It umm... it fire station!” The other boy said, “Oh. That’s good.” This scaffolding led to Rafael beaming. He went to find his teacher, Hannah, and told her, “I did fire station!” with an emphasis on the words fire station, and then pointed to it.

The peer interaction scaffolded his language and he felt successful as evident by his demeanor and use of his new vocabulary. This peer interaction could not have happened if the atmosphere in the room had not been one of respect for one another. Garcia and Garcia (2012) discuss the importance of having a respect for the culture and language of the students in the class. The quality of the center or school that children are in also influences the development of peer interaction skills. However, as was discussed in the prior section on LSPs and as Girolametto and Weitzman (2007) caution, just providing opportunities for peer interaction may not be enough.

There were four findings for this section. The first finding was that language, either English or Spanish, was used in most peer interactions. The second finding was that the English words that DLLs learned in the classroom did not necessarily transfer over to Spanish. The next finding was that high and medium level DLLs switched between languages depending on who they are talking to and what the setting was. The last finding was that peer interactions supported DLLs’ language

acquisition. These findings answered the question of how peer interactions support DLLs' language acquisition. As can be seen with the examples given, there were many instances of language use within the peer interactions that allowed the DLLs opportunities to engage in the language of their choice. In other words, they could use the language that they were most comfortable with. Often, the DLLs English language was scaffolded by more experienced peers, thus demonstrating the sociocultural theory and Vygotsky's (1978) belief that community plays a fundamental role in the process of making meaning.

How Does the Classroom Environment Create Opportunities for DLLs' Language Acquisition?

It is important for DLLs to be in an environment where they feel comfortable, capable, and can be engaged (Tabors, 2008). The classrooms were all set up in ways that allowed students to access what they needed. For example, the art materials were at the students' level and were available without having to ask a teacher. When a child wanted to draw or use playdough, the materials were accessible to them, so it allowed them to function in the classroom without being dependent on someone else. The classroom routines also aided in this self-sufficiency. Since each day followed a routine, students knew what to expect. For example, when it was time to come together for the morning meeting, certain music was played or one of the teachers began to sing a song as a signal to the students that it was time to come to the carpet. Even the students who spoke little English understood the signal and routine for what they were supposed to do.

In the interviews, when the teachers were asked about how they set up the classroom and if they had thought about the DLLs language development, most of them commented on how they set up the environment in terms of noise level or incorporating a change from the previous year. However, Susan commented that,

I think we try to set it up or believe it is set up in a way that there is a lot of room for multiple kids to get in each area so like nothing was really confined to where we couldn't have that many kids there to try and encourage that peer interaction during center time.

She and Marsha purposely set up their centers in order for students to interact with one another. The smaller areas in the classrooms, which were defined by shelving units, had space for only a few students. Roskos and Neuman (2002) noted that these smaller areas encouraged students to collaborate and use more language.

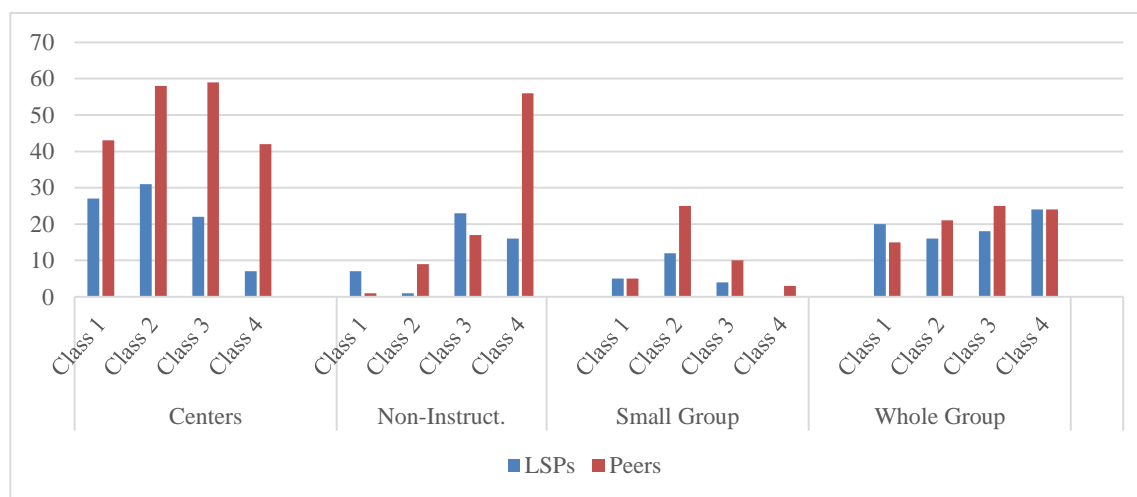
When Hannah was asked how she considered DLLs when setting up the classroom, she listed labeling the centers and supplies in English and Spanish, as well as having books in both languages. These two strategies were seen in all four classrooms. The Spanish labels were highlighted or in a different color in order for the students to know that those were the Spanish words. However, if the Spanish word was not taught or used, then it had no meaning for the students. For example, the science center was labeled Science and Ciencia. The students knew that it was the science center, but if the word ciencia was not also used, they did not know the word and did not connect the two.

Vocabulary labels that DLLs learn in one language may not transfer over into their native language (Méndez et al., 2015). This may be because there were not opportunities for DLLs to have the two languages connected for them (Hindman & Wasik, 2015), therefore, the words had no meaning (Vygotsky, 1978). Intentionally

making the connections for DLLs between their two languages is extremely important and is supported by research that shows that the first language (L1) is essential to the child’s cognitive and linguistic development (Genesee, 2008). DLLs coming into school have knowledge and vocabulary that teachers should build upon by connecting English language to the DLLs’ first language.

Large blocks of time for centers and outdoor play were on the schedules of all four classrooms. These blocks of time allowed for peer interactions to happen naturally. During the center time, the students were actively engaged in activities such as dramatic play, block play, art projects, puzzles, and computer activities. Many interactions were seen, as Figure 9 shows, and these interactions provided opportunities for them to use their language, whether English or Spanish. An environment that provides students with activities that engage them in meaning-making with others who may be more or less skilled linguistically is important for peer scaffolding (van Lier, 2000).

Figure 7. LSPs, Peer Interaction, and Activity by Classroom



However, there were differences in which centers the DLLs played in. The DLLs whose English level was either high or medium tended to play in the more social centers: dramatic play and blocks. These centers allowed for extensive sociodramatic play, which is associated with increased language skills (Rubin, Bukowski, & Parker, 2006). Garvey (1990) stated that participating in sociodramatic play places a high demand on children's linguistic abilities, so this type of play may discourage children without a strong grasp of English to choose that center. Tabors (2008) suggested that DLLs with limited English may prefer to play in centers such as puzzles, playdough, or tabletop toys because they can play alone or next to other children, and then decide whether they want to interact with them. This held true in the classrooms that were observed. The DLLs in the low English proficiency level tended to begin in art, writing, reading, and table toys; all centers focusing on individual activities.

Depending on the activity they were involved in, there were also differences in which language the DLLs chose to use. Spanish was spoken a great deal during center time and non-instructional activities. However, during small group or whole group, answers and discussion were in English, reinforcing that even young students understand that English is the dominant language of the school environment (Gutiérrez-Clellen, Simon-CCerejido, & Leone, 2009). For example, in whole group the class discussed the weather and why they could not go outside that day. One girl commented, "There is, is, is snow, um, mucho snow." She knew most of the words in English and felt comfortable sharing. However, DLLs with low English proficiency almost never answered; they remained quiet. Even at the library when

the bilingual librarian read a book in Spanish and asked the students questions in Spanish, the DLLs who answered did so in English.

Connection to Home Culture

There was very little in the classrooms that connected to the DLLs' home culture, besides Spanish being used or having books in Spanish. There were connections to the students themselves such as their names with their pictures on their cubbies, on the Word Walls, and where their art was displayed. Sandy's classroom had the Mexican flags, called *Papel Picado*, and the piñata's that the students had made hanging up. She was the only teacher who talked about the importance of connecting with the students' home culture.

I try to have the classroom be a reflection of where they come from even if not all of them identify as Latino. I want the kids to be enriched in their culture and be able to talk in both English and Spanish. (Sandy)

In the final interview I talked to Susan and Marsha about the importance of connecting the students' culture in the classroom environment. They both agreed that it was important and realized they had nothing in the classroom that connected to the DLLs' culture. After brainstorming ways that they could bring in the student's culture, they came up with several ideas, one of which would be fairly easy to implement. Their idea was to ask the families to bring in empty food containers from home that the students could use in the dramatic play area. This idea would not only begin to make connections for the students, but it would also give the parents another opportunity to participate in the classroom.

An example of one activity that connected to the students' home was done in Classroom 4 with Hannah. The class had a backpack pet, a teddy bear called

Bubbles, and each weekend a student took the backpack home. The backpack held the teddy bear, journal, photo album, and a checklist of what was in the bag. The child and parent worked together and wrote down all the things that Bubbles did over the weekend in order to provide the class a glimpse into each child's home life.

One of the students who brought the backpack home was Rafael (L). His parents only spoke Spanish, so when they wrote in the journal it was in Spanish. When Hannah opened the journal and saw that it was in Spanish, she told the students that she would read it out loud in Spanish, but since she only understood a little Spanish, they would have to tell her what it said. When I talked to her about this in the final interview she told me that about five or six families had written in the journal in Spanish. In the past, she had someone available who was bilingual who would read it to the students.

The backpack pet allowed a connection to be made to the child's culture. Through the journal, the students could see and/or hear what happened in the other students' homes, what they did, ate, and who they were with. It also gave the parents the opportunity to feel connected to the school. This connection between home and school benefits students and creates a more positive environment for their learning and success (Pianta & Walsh, 1996; Reese & Gallimore, 2002).

Summary

This chapter discussed the language environments of DLLs and how their language acquisition was supported within a preschool classroom. Language support processes, peer interactions, and environment were viewed through the lens of the

sociocultural theory in order to examine what the language environment looked like for DLLs and how they supported their language acquisition.

Each of the three areas that made up the language environment, LSPs used by the teachers, peer interactions, and the environment, all provided avenues for the scaffolding of the DLLs' language development. Of the three areas, the teachers seemed to have a good grasp on the environment and the role it played in the classroom. The teachers understood the importance of centers, materials, and routines.

The other two areas, LSPs and peer interactions, both had areas that could be improved on. The teachers were not intentional when using the LSPs so there was a difference in the amounts and types that were used with the different groups. In addition, the peer interactions, although allowed for, were not deliberately set up to help scaffold the DLLs language.

Chapter 5: Conclusion

The changing demographics of young children in the United States is causing a transformation in how we educate children (McWayne et al., 2013). In all educational settings, there is an increase in the number of students whose home language is other than English with Latinos being the fastest growing population (Barrueco et al., 2011). This study examined the language environments of DLLs in four preschool classrooms because of the lack of research regarding the language environment of DLLs (Atkins-Burnett et al., 2011).

Significant Findings

The overarching significant finding that emerged from this study was that of intentionality. Good teaching is not enough for DLLs (Lake & Pappamihiel, 2003). In order to scaffold DLLs' learning and provide a rich language environment, teachers must be intentional in their practices. It is important to note that although the theoretical framework for this study was sociocultural theory, it did not provide a basis for the significant finding. The third space theory was added which allowed for a better understanding of teacher intentionality.

One way teachers can be more intentional is to create an environment that supports the *third space*. Thompson (2009) described third space as a shared space in which teachers and children work together to create a place in which both are fully acknowledged and engaged. Moje et al. (2004) discussed third space as a “navigational space” which gives students a way to successfully navigate their way “in different discourse communities” (p. 44).

Being intentional or creating third spaces might have allowed these teachers to effectively provide a rich language environment for their DLLs. More specifically, teachers need to know the language proficiency of all the DLLs in their classrooms in order to be intentional about meeting their needs; how to intentionally plan peer interactions that scaffold language; and how to intentionally plan for guided participations when working with small groups.

Language Proficiency

As the findings illustrate, it is important for teachers to determine the English proficiency levels of DLLs in order to assure that they meet the needs of children in each of the three groups: low, medium, and high. None of the teachers observed reached the DLLs in the middle group. Therefore, understanding where each child is and having a plan for him, would help teachers stay focused on the needs of their children (Chen & Shire, 2011), which is especially important for DLLs in the medium English proficiency group. Epstein (2007) describes being an intentional teacher as one who has specific outcomes or goals in order to support children's development and learning. Although she was not specifically talking about DLLs, the point holds true for them. Without this intentionality, teachers may overlook the children who need this support.

An example of a missed opportunity to use third space was an activity that happened in Classroom 2, with Sandy and Bethany. Sandy told a familiar story to the children in English. As she narrated the story she used felt pieces on a felt board to represent the story. At the end of the activity, the felt pieces and flannel board were put in one of the centers so that the students could practice retelling the story.

During one of the whole group times, children were given an opportunity to retell the story to the class using the felt pieces. I asked Sandy if they were given the option to tell the story in English or Spanish. She had not thought about that. The storytelling activity, when only done in English, leaves out the DLLs who are not as proficient in English. However, providing the opportunity for them to bring a story from home and tell it in their native language provides a third space or a navigational space (Moje et al., 2004). It would allow them to cross over and participate in the storytelling and be successful in this discourse community. This activity would provide a space in which both the child and the teacher are acknowledged and engaged.

Peer Interactions

Additionally, in order for teachers to create a third space, they need to be more intentional about planning for peer interactions and the types of activities that actually promote language scaffolding. The findings show that having students work in pairs without the appropriate activity does not scaffold English for DLLs. Activities that are strictly teacher directed do not allow for peer scaffolding to take place. However, activities that incorporate collaboration with peers, such as project work, afford the opportunity for scaffolding to take place. Teacher's need to understand the importance of peer interactions, how to pair students up, and what types of activities promote language scaffolding in order to have a rich language environment for the DLLs in their classroom. Appropriate pairing of students and activities would create a third space for both DLLs and English speakers by providing them with the opportunity to bring their knowledge, including their

cultural background and language, to the activity. When the third space is created, it allows both students to be engaged and their contribution to be acknowledged (Thompson, 2009).

Guided Participation

Teachers also need to be intentional when working with students small groups in order to create a third space. Small group time provides an excellent opportunity to use guided participation (Rogoff, 1995). Guide participation is the process in which people are involved in as they communicate and coordinate endeavors in taking part in culturally valued activity. It emphasizes routine, inferred communication, and arrangements between children and their teacher. It is important that the child has an active role of observer and participator in the social activity with their teacher. In the classroom, teachers could use this strategy in order to work with the students to structure an activity, construct bridges between what the student knows and what the student is expected to learn, and then the teacher would transfer responsibility for solving the problem to the student and the student would have the opportunity to work on the problem alone (Göncü & Gauvain, 2011; Rogoff et al., 1993).

An example of how teachers could use guided participation in the classroom was with the sorting activity seen in several of the classes. The teachers could have taken a small group of children and guided them through the process of sorting the plastic bears into the correct colored bowls. Once the students understood the activity, the teacher and students could have worked together to sort the bears. Finally, the students would be given the opportunity to sort on their own with help as

needed from the teacher. Guided participation changes the dynamics of the small group activity from being teacher directed, with little interaction, to an activity that is guided by the teacher. It encourages student involvement and facilitates language interactions. Guided participation provides a third space which gives DLLs a way to successfully navigate their way within the group.

After spending so much time in each classroom, it is my belief that these teachers would have created third spaces and been much more intentional about providing a rich language environment for DLLs if they had known how to do it. Intentional teacher scaffolding is necessary in order to help DLLs be successful in their language acquisition. Being a good teacher for students who are native English speakers does not directly transfer to being a good teacher for DLLs (Lake & Pappahimiel, 2003).

Implications

Just like teachers need to be intentional in their practice, so do teacher educators. As stated above, being a good teacher does not guarantee that a teacher knows what is appropriate or effective for the DLLs in their class. Teacher educators have the responsibility to prepare preservice teachers to go into the classroom and meet students at their level. In order to do this, they need to have the appropriate tools. Understanding that good teaching is not enough and that additional training for DLLs is necessary for their academic success is one reason that many states, which have inclusive classrooms, now require teachers to be ESOL (English to Speakers of Other Languages) or ELL (English Language Learner) certified. For the states that do not have this requirement, it becomes important for the teacher

education programs to offer coursework to ensure preservice teachers have the appropriate training.

Part of the intentionality needs to be helping preservice teachers understand their part in peer interactions. Teacher education programs need to offer opportunities for preservice teacher to engage in peer interactions in the college level classroom. This would allow the preservice teachers to experience it themselves. Also, the teacher education programs need to give preservice teachers opportunities to do field placements in classrooms with teachers who are intentional in peer interactions. To support the teachers who are already in the field, teacher educators could provide professional development on scaffolding and intentionality with peer interactions.

A common strategy that teacher educators can model for preservice teachers, is pairing DLLs with an English speaker (Hirschler, 1994; Tabors, 2008). This is most effective when the DLLs are at least at the medium to high level, as lack of English impedes the peer interactions between DLLs and English speakers. In order to effectively pair low DLLs with English speakers with the intention of promoting language scaffolding, Hirschler (1994) states that specific strategies must be taught to the English speaking students, even 3-, 4-, and 5-year-olds. The five strategies taught to the students were:

- Initiation—approach the DLLs, make eye contact, and then ask the DLL to play with them
- Linguistics—speak slowly and to enunciate
- Reinitiation—if met with a nonresponse, then repeat the initiation

- Request clarification—request clarification if they did not understand the DLL’s response
- Recast or expand—reword communication if DLL does not understand

The advantages to teaching English speaking students how to interact with DLLs is two-fold. It provides additional supports for language scaffolding during peer interactions, plus it gives the English speaking students additional communication tools.

Recommendations for Future Research

One of the questions that emerged during this study was if there was a difference in scaffolding in classrooms with a large population of DLLs versus a classroom that only had a few. At the time of this study, no research was found regarding this concept. Areas for future research would be to compare the language environments of these two types of classrooms in order to determine if different types of scaffolding or strategies are needed.

As research on using third space in early childhood classrooms is limited, this would be another direction for research. In fact, (Moje et al., 2004) state that more research needs to be conducted on third space as “a space wherein every day and academic knowledges and discourses are challenged and new knowledges are generated” (p 44). Although there have been studies on third space in early childhood, (Cook, 2005; Gutiérrez et al., 1997; Levy, 2008; Thompson, 2009) little was found in regards to the language environment of DLLs.

Another possible area for future research would be to examine classrooms where the teachers are ESOL trained/endorsed or certified. Comparing those classrooms to the classrooms that do not have teachers who are ESOL trained or certified would provide additional information regarding the language environment of DLLs.

Limitations

There were several limitations of this study. The school settings were not representative of all preschools; therefore the findings may not be generalizable to other schools or regions. In addition not every DLL was observed due to concentrating on specific DLLs. This may also limit the generalizability of the findings for other DLLs.

A second limitation of the study was limited participation of the teachers. In Classroom 4, only the lead teacher consented to participate. The assistant teacher did not participate. The other three classrooms had a teacher and a co-teacher or assistant who provided data for both the interviews and the observations. Limiting the data to only one teacher in the classroom may have altered the results to some degree.

Of the four classrooms, three had lead or co-teachers who were in their first year as lead teachers. Because first year teachers are still working on their strategies, routines, and classroom management, they may have had a more difficult time working on being intentional (Rivkin, Hanushek, & Kain, 2005). Therefore, this may also be a limitation of the study.

The fact that all four classrooms had a population of approximately 50% DLLs may also limit the study's generalizability. Because of the large number of DLLs, the teachers had to focus on their needs to some degree. The results of this study may have looked quite different had there been only a few DLLs in each class. One or two DLLs in a class may be more likely to go unnoticed.

References

- Atkins-Burnett, S., Sprachman, S., López, M., Caspe, M., & Fallin, K. (2011). The Language Interaction Snapshot (LISn): A new observational measure for assessing language interactions in linguistically diverse early childhood programs. In C. Howes, J. T. Downer, & R. C. Pianta (Eds.), *Dual language learners in the early childhood classroom* (pp. 117-146). Baltimore: Paul H. Brookes Company.
- Ayres, L., Kavanaugh, K., & Knafl, K. (2003). Within-case and across-case approaches to qualitative data analysis. *Qualitative Health Research*, 13(6), 871-883.
- Barrueco, S., López, M., Ong, C., & Lozano, P. (2011). *Assessing Spanish-English bilingual preschoolers: A guide to best approaches and measures*. Baltimore, Md.: Paul H. Brookes Pub. Co.
- Bazeley, P. (2013). *Qualitative data analysis: Practical strategies*. Los Angeles, CA: Sage Publications Ltd.
- Bhabha, H. K. (2004). *The location of culture* (2nd ed.). New York: Routledge.
- Bodrova, E., & Leong, D. (2001). Tools of the Mind: A case study of implementing the Vygotskian approach in American early childhood and primary classrooms. Innodata nonographs 7. Retrieved from: <http://www.ibe.unesco.org/publications/innodata/inno07.pdf>
- Bodrova, E., & Leong, D. (2007). *Tools of the mind: The Vygotskian approach to early childhood education*. Upper Saddle River, NJ: Pearson.
- Booren, L., Downer, J. T., & Vitiello, V. (2012). Observations of children's interactions with teachers, peers, and tasks across preschool classroom activity settings. *Early Education and Development*, 23, 517-538.
- Bouchard, C., Bigras, N., Cantin, G., Coutu, S., Blain-Brière, B., Eryasa, J., . . . Brunson, L. (2010). Early childhood educators' use of language-support practices with 4-year-old children in child care centers. *Early Childhood Education Journal*, 37(5), 371-379. doi: 10.1007/s10643-009-0355-7
- Bruner, J. (1978). The role of dialogue in language acquisition. In A. Sinclair, R. Jarvella, & W. Levelt (Eds.), *The child's conception of language* (pp. 241-256). New York: Springer-Verlag.
- Bruner, J. (1990). *Acts of meaning*. Cambridge, Mass.: Harvard University Press.
- Bruner, J. (1996). *The culture of education*. Cambridge: Harvard University Press.

- Burchinal, M., Howes, C., Pianta, R., Bryant, D., Early, D., Clifford, R., & Barbarin, O. (2008). Predicting child outcomes at the end of kindergarten from the quality of pre-kindergarten teacher-child interactions and instruction. *Applied Developmental Science, 12*(3), 140-153. doi: 10.1080/10888690802199418
- Caldera, Y. M., Culp, A. M., O'Brien, M., Truglio, R. T., Alvarez, M., & Huston, A. C. (1999). Children's play preferences, construction play with blocks, and visual-spatial skills: Are they related? *International Journal of Behavioral Development, 23*(4), 855-872.
- Castro, D. C., García, E., & Markos, A. (2013). Dual language learners: Research informing policy. Chapel Hill: The University of North Carolina, Frank Porter Graham Child Development Institute, Center for Early Care and Education--Dual Language Learners.
- Center for Early Care and Education Research-Dual Language Learners (CECER-DLL). (2011). Research brief #3. Considerations for future research with young dual language learners (pp. 5). Chapel Hill.
- Center of the Developing Child. (2007). *The Science of Early Childhood Development*. Harvard: National Scientific Council on the Developing Child.
- Cheatham, G. A., & Ro, Y. E. (2010). Young English Learners' Interlanguage as a Context for Language and Early Literacy Development. *Young Children, 65*(4), 18-23.
- Chen, J. J., & Shire, S. H. (2011). Strategic teaching: Fostering communication skills in diverse young learners. *Young Children, 66*(2), 20-27.
- Cole, M., & Engeström, Y. (1994). Introduction. *Mind, Culture, and Activity, 1*(4), 201.
- Cook, M. (2005). 'A place of their own': Creating a classroom 'third space' to support a continuum of text construction between home and school. *Literacy, 39*(2), 85-90.
- Copple, C., & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8* (3rd ed.). Washington D.C.: National Association for the Education of Young Children.
- Creasey, G. L., Jarvis, P. A., & Berk, L. (1998). Play and social competence. In O. N. Saracho & B. Spodek (Eds.), *Multiple perspectives on play in early childhood education* (pp. 116-143). Albany: State University of New York Press.

- Creswell, J. W. (2003). *Research design : Qualitative, quantitative, and mixed method approaches*. Thousand Oaks, CA: Sage Publications.
- Dimitriadis, G., & Kamberelis, G. (2006). *Theory for education*. New York: Routledge Taylor & Francis Group.
- Dixon, L., Zhao, J., Shin, J., Wu, S., Su, J., Burgess-Brigham, R., . . . Snow, C. (2012). What we know about second language acquisition: A synthesis from four perspectives. *Review of Educational Research*, 82(1), 5-60.
- Echevarría, J., Short, D., & Peterson, C. (2012). *Using the SIOP model with pre-k and kindergarten English learners*. Boston: Pearson.
- Epstein, A. (2007). *The intentional teacher: Choosing the best strategies for young children's learning*. Washington, DC: National Association for the Education of Young Children.
- Espinosa, L. (2010). Classroom teaching and instruction "best practices" for young English language learners. In E. García & E. Frede (Eds.), *Young English Language Learners: Current Research and Emerging Directions for Practice and Policy* (pp. 143-164). New York: Teacher's College Press.
- Fleer, M., Anning, A., & Cullen, J. (2004). A framework for conceptualising early childhood education. In A. Anning, J. Cullen, & M. Fleer (Eds.), *Early childhood education: Society and culture* (pp. 175-190). London: Sage Publications.
- Frost, J. L., Wortham, S. C., & Reifel, S. (2012). *Play and child development* (4th ed.). Boston: Pearson Education.
- García, E., & García, E. (2012). *Understanding the language development and early education of Hispanic children*. New York: Teachers College Press.
- Garvey, C. (1990). *Play*. MA: Harvard University Press.
- Genesee, F. (2008). Early dual language learning. *Zero to Three*, 29(1), 17-23.
- Girolametto, L., & Weitzman, E. (2002). Responsiveness of child care providers in interactions with toddlers and preschoolers. *Language, Speech & Hearing Services in Schools*, 33(4), 268-281.
- Girolametto, L., & Weitzman, E. (2007). Promoting peer interaction skills: Professional development for early childhood educators and preschool teachers. *Topics in Language Disorders*, 27(2), 93-110.

- Girolametto, L., Weitzman, E., & Greenberg, J. (2003). Training day care staff to facilitate children's language. *American Journal of Speech-Language Pathology, 12*(3), 299-311.
- Girolametto, L., Weitzman, E., & Greenberg, J. (2006). Facilitating language skills. Inservice education for early childhood educators and preschool teachers. *Infants & Young Children: An Interdisciplinary Journal of Special Care Practices, 19*(1), 36-49.
- Girolametto, L., Weitzman, E., & van Lieshout, R. (2000). Directiveness in teachers' language input to toddlers and preschoolers in day care. *Journal of Speech, Language, and Hearing Research, 43*, 1101-1114.
- Glesne, C. (2011). *Becoming qualitative researchers: An introduction* (4th ed.). Boston: Pearson.
- Goethals, G. W., & Whiting, J. W. M. (1957). Chapter II: Research methods: The cross-cultural method. *Review of Educational Research, 27*(5), 441-448. doi: 10.3102/00346543027005441
- Göncü, A., & Gauvain, M. (2011). Sociocultural approaches to educational psychology: Theory, research, and application. In K. Harris, S. Graham, & T. C. Urdan (Eds.), *American Psychological Association, educational psychology handbook: Contributions to education* (Vol. 1, pp. 123-152). Washington, D.C.: American Psychological Association.
- Grosjean, F. (2001). The bilingual's language modes. In J. Nicol (Ed.), *One Mind, Two Languages: Bilingual Language Processing* (pp. 1-22). Oxford: Blackwell.
- Gutiérrez-Clellen, V., Simon-CCereijido, G., & Leone, A. (2009). Code-switching in bilingual children with specific language impairment. *International Journal of Bilingualism, 13*, 91-109.
- Gutiérrez, K., Baquedano-López, P., & Turner, M. G. (1997). Putting language back into language arts: When the radical middle meets the third space. *Language Arts, 74*(5), 368-378. doi: 10.2307/41482886
- Hall, J. K. (2000). Classroom interaction and additional language learning: Implications for teaching and research. In J. K. Hall & L. S. Verplaetse (Eds.), *Second and foreign language learning through classroom interaction* (pp. 287-298). Mahwah, NJ: Lawrence Erlbaum.
- Helm, J. H., & Katz, L. (2012). *Young investigators: The project approach in the early years* (2nd ed.). New York: Teachers College Press.

- Hindman, A., & Wasik, B. (2015). Building vocabulary in two languages: An examination of Spanish-speaking dual language learners in Head Start. *Early Childhood Research Quarterly, 31*, 19-33.
- Hirschler, J. (1994). Preschool childrens help to second language learners. *Journal of Educational Issues of Language Minority Students, 14*(Winter), 227-240.
- John-Steiner, V. (2007). Vygotsky on thinking and speaking. In H. Daniels, M. Cole, & J. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 136-152). Cambridge: Cambridge University Press.
- John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist, 31*(3/4), 191-206.
- Justice, L. (2004). Creating language-rich preschool classroom environments. *Teaching Exceptional Children*(Nov/Dec), 36-44.
- Kelly, C. A. (2013). *Facilitating learning for prekindergarten English language learners*. (3559084 Ed.D.), Walden University, Ann Arbor. Retrieved from <http://search.proquest.com/docview/1353186607?accountid=12964> ProQuest Dissertations & Theses Full Text database.
- Kozulin, A., Gindis, B., Ageyev, V., & Miller, S. (2003). Introduction: Sociocultural theory and education: Students, teachers, and knowledge. In A. Kozulin, B. Gindis, V. Ageyev, & S. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 1-11). Cambridge: Cambridge University Press.
- Lake, V., & Pappamihel, N. E. (2003). Effective practices and principles to support english language learners in the early childhood classroom. *Childhood Education, 79*(4), 200-203. doi: 10.1080/00094056.2003.10521193
- Lantolf, J., & Thorne, S. (2007). Sociocultural theory and second language learning. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition* (pp. 204-221). Mahwah, N.J.: Lawrence Erlbaum Associates.
- Layzer, C., & Maree, K. (2011). Using the Observation Measures of Language and Literacy Instruction (OMLIT) to characterize early literacy classrooms-- Focus on dual language learners. In C. Howes, J. T. Downer, & R. C. Pianta (Eds.), *Dual language learners in the early childhood classroom* (pp. 147-232). Baltimore, MI: Paul Brookes Publishing Co.
- Levy, R. (2008). 'Third spaces' are interesting places: Applying 'third space theory' to nursery-aged children's constructions of themselves as readers. *Journal of Early Childhood Literacy, 8*(1), 43-66.

- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA.: Sage Publications.
- Longtin, S. E., & Fabus, R. L. (2008). The use of videotape self-monitoring to facilitate interactive intervention in speech-language therapy with preschool children with autism. *The Clinical Supervisor, 27*(1), 111-133. doi: 10.1080/07325220802221595
- McWayne, C. M., Melzi, G., Schick, A. R., Kennedy, J. L., & Mundt, K. (2013). Defining family engagement among Latino Head Start parents: A mixed-methods measurement development study. *Early Childhood Research Quarterly, 28*(3), 593-607.
- Méndez, L. I., Crais, E. R., Castro, D. C., & Kainz, K. (2015). A culturally and linguistically responsive vocabulary approach for young latino dual language learners. *Journal of Speech, Language & Hearing Research, 58*(1), 93-106. doi: 10.1044/2014
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis : An expanded sourcebook*. Thousand Oaks: Sage Publications.
- Minick, N., Stone, C., & Forman, E. (1993). Integration of individual, social, and institutional processes in accounts of children's learning and development. In N. Minick, C. Stone, & E. Forman (Eds.), *Contexts for learning: Sociocultural dynamics in children's development* (pp. 3-16). New York: Oxford University Press.
- Moje, E., Ciechanowski, K., Kramer, K., Ellis, L., Carrillo, R., & Collazo, T. (2004). Working toward third space in content area literacy: An examination of everyday funds of knowledge and discourse. *Reading Research Quarterly, 39*(1), 38-70.
- O'Toole, C., & Kirkpatrick, V. (2007). Building collaboration between professionals in health and education through interdisciplinary training. *Child Language Teaching and Therapy, 23*(3), 325-352.
- Paradis, J., Genesee, F., & Crago, M. (2011). *Dual language development & disorders: A handbook on bilingualism & second language* (2nd ed.). Baltimore, MA: Paul H. Brookes Publishing Co.
- Passe, A. (2013). *Dual-language learners birth to grade 3: Strategies for teaching English*. St. Paul, MN: Redleaf Press.
- Pellegrino, M. L., & Scopesi, A. (1990). Structure and function of baby talk in a day-care centre. *Journal of Early Intervention, 15*(4), 358-376.

- Pianta, R. C., & Walsh, D. J. (1996). *High-risk children in schools : constructing sustaining relationships*. New York; London: Routledge.
- Reese, L., & Gallimore, R. (2002). Immigrant Latinos' cultural model of literacy development: an evolving perspective on home-school discontinuities. *Educational Administration Abstracts*, 37(2), 143-276.
- Richards, L., & Morse, J. M. (2013). *Readme first for a user's guide to qualitative methods* (3rd ed.). Los Angeles: Sage Publications.
- Rivkin, S., Hanushek, E., & Kain, J. (2005). Teachers, schools, and academic achievement. *Econometrica*, 72(2), 417-445.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York, NY: Oxford University Press.
- Rogoff, B. (1994). Developing understanding of the idea of communities of learners. *Mind, Culture, and Activity*, 1(4), 209-229.
- Rogoff, B. (1995). Observing sociocultural activity on three planes: Participatory appropriation, guided participation, an apprenticeship. In J. Wertsch, P. Del Río, & M. Alvarez (Eds.), *Sociocultural studies of mind* (pp. 139-164). Cambridge: Cambridge University Press.
- Rogoff, B., Mosier, C., Mistry, J., & Göncü, A. (1993). Toddlers' guided participation with their caregivers in cultural activity. In E. Forman, N. Minick, & C. Stone (Eds.), *Contexts for learning: Sociocultural dynamics in children's development* (pp. 230-253). New York Oxford University Press.
- Roskos, K., & Christie, J. (2007). Play and early literacy in these times *Literacy for the new millennium. Volume 1, Early literacy B2 - Literacy for the new millennium. Volume 1, Early literacy* (pp. 201-212). Westport, CT: Praeger.
- Roskos, K., & Neuman, S. B. (2002). Environment and its influences for early literacy teaching and learning. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research* (pp. 281-294). New York: The Guilford Press.
- Rubin, K. H., Bukowski, W., & Parker, J. (2006). Peer interactions, relationships, and groups. In N. Eisenberg (Ed.), *Handbook of Child Psychology, Vol. 3: Social, Emotional, and Personality Development* (Vol. 3, pp. 571-645). New York: John Wiley & Sons.
- Rushton, S., Juola-Rushton, A., & Larkin, E. (2010). Neuroscience, play and early childhood education: Connections, implications and assessment. *Early Childhood Education Journal*, 37(5), 351-361.

- Rushton, S., & Larkin, E. (2001). Shaping the learning environment: Connecting developmentally appropriate practices to brain research. *Early Childhood Education Journal*, 29, 25-34.
- Santrock, J. (2014). *Essentials of life-span development* (3rd ed.). New York: McGraw-Hill.
- Saville-Troike, M. (1998). Private speech: Evidence for second language learning strategies during the 'silent' period. *Journal of Child Language*, 15(3), 567-590.
- Saville-Troike, M. (2012). *Introducing second language acquisition* (2nd ed.). Cambridge: Cambridge University Press.
- Scott, S., & Palincsar, A. (2009). Sociocultural theory. In M. Anderman & L. H. Anderman (Eds.), *Psychology of classroom learning: An encyclopedia* (pp. 851-856). Farmington Hills, MI: Gale Group.
- Shotter, J., & Newson, J. (1982). An ecological approach to cognitive development: Implicate orders, joint action and intentionality. In G. Butterworth & P. Light (Eds.), *Social Cognition: Studies of the Development of Understanding* (pp. 34). Chicago, IL: University of Chicago Press.
- Silver, A. (1999). Play: A fundamental equalizer for esl children. *TESL Canada Journal*, 16(2), 62-69.
- Slavin, R. E., & Cheung, A. (2005). A synthesis of research on language of reading instruction for english language learners. *Review of Educational Research*, 75(2), 247-284.
- Smidt, S. (2009). *Introducing Vygotsky: A guide for practioners and studnts in early years education*. London: Routledge.
- Smith, K. M. (2008). *An exploration of musical play and scaffolding in early childhood*. (NR45602 Ph.D.), University of Alberta (Canada). Retrieved from <http://search.proquest.com/docview/304408337?accountid=12964> ProQuest Dissertations & Theses Full Text database.
- Stegelin, D. A. (2005). Making the case for play policy: Research-based reasons to support play-based environments. *Young Children*, 60(2), 76-85.
- Tabors, P. O. (2008). *One child, two languages : a guide for early childhood educators of children learning English as a second language*. Baltimore, Md.: Paul H. Brookes Pub. Co.

- Thompson, C. M. (2009). Mira! Looking, listening, and lingering in research with children. *Visual Arts Research*, 35(1), 24-34. doi: 10.2307/20715485
- Trawick-Smith, J. (2010). *Early childhood development: A multicultural perspective* (5th ed.). Upper Saddle River, NJ: Pearson.
- van Lier, L. (2000). From input to affordance: Social-interactive learning from an ecological perspective. In J. Lantolf (Ed.), *Sociocultural Theory and Second Language Learning* (pp. 245-259). Oxford: Oxford University Press.
- van Oers, B. (2004). Steps towards a sociocultural theory of learning. Retrieved March 20, 2014, 2014, from <http://www.bertvanoers.nl/page6.php>
- Vygotsky, L. S. (1962). *Thought and language*. Cambridge MA: MIT Press.
- Vygotsky, L. S. (1967). Play and its role in the mental development of the child. *Journal of Russian and East European Psychology*, 5(3), 6-18. doi: 10.2753/RPO1061-040505036
- Vygotsky, L. S. (1978). *Mind in society* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman Eds.). Cambridge: Harvard University Press.
- Wasik, B., & Hindman, A. (2011). Improving vocabulary and pre-literacy skills of at-risk preschoolers through teacher professional development. *Journal of Educational Psychology*, 103, 455-469.
- Wertsch, J. (1985). *Vygotsky and the social formation of mind*. Cambridge: Harvard University Press.
- Wertsch, J. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Cambridge: Harvard University Press.
- Wertsch, J. (2007). Mediation. In H. Daniels, M. Cole, & J. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 178-192). Cambridge: Cambridge University Press.
- Wood, D., Bruner, J., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 17(2), 89-100.
- Yin, R. K. (2009). *Case study research : Design and methods* (4th ed.). Los Angeles: Sage Publications.
- Zuengler, J., & Miller, E. R. (2006). Cognitive and sociocultural perspectives: Two parallel SLA worlds? *TESOL Quarterly*, 40(1), 35-58. doi: 10.2307/40264510

Appendix A: Interview Protocol

1. Tell me about your teaching career.
2. What background and experience do you have in promoting a language environment?
3. How do you, as the teacher support the language development of children in your class?
4. How do you promote peer interaction?
5. How do you feel the environment supports language development?
6. When setting up your classroom, do you consider language development? If so, what do you do to the classroom in order to promote language development?
7. Tell me about your experience working with DLLs.
8. Describe any training/education for working with DLLs?
9. How do you feel the environment supports language development for DLLs?
10. How do DLLs interact with their peers? (language, interactions, length of interaction)
11. How is peer interaction helpful for DLLs' language development?
12. How do you, as the teacher support the language development of the DLLs in your class?
13. When setting up your classroom, do you consider DLLs and their language development? If so, what do you do to the classroom in order to promote language development?

14. When thinking about the overall language environment of DLLs in your classroom, what do you see as the most helpful? Least helpful?

Appendix B: Scan Sheet

Scan	Child 1	Child 2	Child 3	Child 4	Child 5	Child 6
1						
2						
3						
4						
5						
6						
7						
8						



Institutional Review Board for the Protection of Human Subjects

Final Report – Inactivation

Date: July 13, 2015

IRB#: 4914

To: Janice Kelly

Inactivation Date: 07/13/2015

Study Title: Dual Language Learners in One Preschool: How the Language Environment Supports Their Language Development

On behalf of the Institutional Review Board (IRB), I have reviewed the Final Report for the above-referenced research study. You have indicated that this study has been completed and should be inactivated. This letter is to confirm that the IRB has inactivated this research study as of the date indicated above.

Note that this action completely terminates all aspects and arms of this research study. Should you wish to reactivate this study, you will need to submit a new IRB application.

If you have questions about this notification or using iRIS, contact the IRB at (405) 325-8110 or irb@ou.edu.

Cordially,

A handwritten signature in blue ink that reads 'Fred Beard'.

Fred Beard, Ph.D.

Vice Chair, Institutional Review Board

