Abstract: In the Bilingual Literacy Development Model: A holistic way to support Spanish-speaking children research study, I studied bilingual families over a 5-month period in their home environments through home visits. Drawing from data obtained through home visits, including interviews with mothers and observations of family literacy practices in the home environment, this study examines children's bilingual literacy development. The findings are presented in an adapted Bilingual Literacy Development Model I created. The model was adapted from the work of researchers Leseman and de Jong (1998), and Bronfenbrenner's ecological system (1977, 1995) where four facets were developed: literacy and language opportunities, constructional practices, literacy interactions, and socio-emotional quality of practices. Each of these facets are viewed from the lens of child, family, and society (the school or community) with specific activities identified that help to make a holistic bilingual child.

Keywords: bilingual, biliteracy, home visits, Latino/a children and families

Stephanie Wessels (PhD) is an associate professor at the University of Nebraska-Lincoln. Dr. Wessels' coursework, research, and teaching have focused on literacy development for young emergent multilinguals and their families. She has conducted bilingual family literacy programs which built on literacy practices of the home and extended those practices into school-based literacy skills. Currently, she is focusing on digital family literacy programs where parents become storytellers on mobile devices.
Families, educators, and community members all have a critical impact on children’s language and literacy skills, and the need to understand bilingual families’ literacy practices in their home environment becomes critical due to the continual population growth in the United States. As the population of students who speak a language other than English continues to grow, the U.S. public schools are becoming richer with linguistic and cultural resources that often go untapped. Students bring linguistic and cultural funds of knowledge that are often underused in schools (Enright, 2011; Moll, 2010; Paris, 2012). Funds of knowledge are comprised of previously developed information, expertise, traditions, and practices that families and community share, and ways of understanding them depend on the social conditions, language, and culture in which they are learned (Perez, 2004). To understand the linguistic and cultural resources that bilingual students bring to school, more research is needed to examine the ways that the “wealth of unexpected talents, perspectives, and unique experiences [of the new Mainstream] . . . are taken up and engaged for sophisticated work within and beyond classrooms” (Enright, 2011). Bravo et al. (2007) stated that such funds of knowledge create a “zone of possibilities” in which classroom learning might be supported by the bridging of community ways of knowing with the expected classroom curriculum enhancing their education. They contend that the accumulated body of cultural resources used to maintain and enhance family life should be tapped as a way for students to use literacy and learn in school (Bravo et al., 2007).

Alma Flor Ada (2003) acknowledged that “students live in two worlds: home and school. If these two worlds do not recognize, understand and respect each other, students are put in a difficult predicament” and very little learning can take place (p. 11). It is important to understand how bilingual children negotiate between schools and their home environments. We have a better understanding of the school environment, but the problem is that there is little literature that describes how bilinguals navigate literacy in the home where these funds of knowledge are developed (Morita-Mullaney et al., 2021; Wessels & Trainin, in press). Children’s first language, culture, and identity are inextricably linked to form the backdrop for their literacy development. The positive development of each child requires maintaining close ties to the child’s family and community. In this study, I wanted to examine how family and society can support children’s biliteracy development through the lens of an ecological model of Bilingual Literacy Development that examines various typical reading practices from the home environment.

Bilingual Families

Currently, literacy practices based on the middle-class mainstream culture in American education (Trainin et al., 2017). Teachers often see the lack of family literacy in culturally linguistically diverse families as a predisposing fact to the child having problems in school. As the student population becomes more diverse, educators and parents need to be familiar with a broader array of literacy practices that reflect students’ cultural values and heritage. Various forms of cultural literacy could bring the richness of literacy practices to formal educational settings if we, as educators, were more inclusive of various cultural differences in our culturally and linguistically diverse classrooms (Trainin et al., 2017).
The term “bi/multilingual learners” refers to students who are learning English. In contrast to more commonly used terms such as English Learners or Limited English Proficient learners, the term “bi/multilingual learners” allows educators to focus on language differences as assets and highlights the richness of these students’ linguistic repertoires.

Parents are an important component of successful academic learning in all children. Bilingual families must cope with the values and expectations of at least two different cultures as they participate in the process of educating their children in U.S. schools. Given that parents are the first teachers of children, the importance of a supportive home learning environment cannot be underestimated. The home learning environment is reflected by the interactions between family members, the physical environment, and learning (Matafwali & Munsala, 2011). We cannot assume that all children who are bilingual come from homes that do not value literacy, have a limited supply of materials, or do not spend time reading at home. We can assume that families will be different, children will have different experiences with print literacy, and their experiences can be a strength to learning in school. Throughout this paper, I refer to print literacy instead of all the different multiliteracies that are available to children. Print makes it easier for parents and children to interact with language, generate questions, and conduct shared reading. Print provides a more focused attention to text where digital ones can be distracting and at times a passive engagement activity (Wolf, 2018).

**Home Visits**

Home visits can be an essential way to learn about families and their literacy practices. Home visits are a face-to-face interaction that occurs between the participants and the home visitor (Wessels, 2014). Through home visits, an understanding begins to develop, individual and shared perspectives of individual family members and the extraordinary funds of knowledge that they bring to any learning situation (Moll, 2010; Paris, 2012). The home environment creates and is the background source for all interactions and learning within the family. The whole family becomes the focus rather than just the child (Bogenscheneider, 2002). A family’s culture, language, practices, and expectations can be an influence. The nature of literacy and language interactions in the home is a direct reflection of parents’ views (values and beliefs) about how children learn to read, write, and acquire other bilingual competencies. Home visits allow those insights to be understood in how a child is supported in their literacy development.

According to the National Academies (2015), constructs of literacy development include an examination of environmental print that exists in the home, the questioning patterns of adults and children, as well as oral language traditions. This evidence is critical for understanding a family’s fund of knowledge and how home-school connections might be strengthened using existing literacy development practices. Valuing family and parent’s cultural practices is vital if we are to maximize family and parental participation in home learning activities. Li (2007) suggests that “language and literacy learning is deeply embedded in the social fabric of schools and homes that school success is dependent upon a complex combination of home and school variables that may vary from [student to student]” (p. 258). In other words, language learning occurs both in school and at home, and thus, it is important to explore the bilingual students’ home environments to better understand how it contributes to the development of language and literacy skills. This is why I developed the Bilingual Literacy Development Model. I wanted to examine different pathways that support students’ bilingual literacy development.
The Bilingual Literacy Development Model

As a family literacy researcher, I found that I needed a model that conceptualized the diverse ecology at play in the bilingual family literacy data, an ecology that encompasses the child, the family, the school, and the community and how those interact with one another (Pahl, 2008). Further, the diverse ecology model needed to be understood through the conceptual facets that helped frame and understand the actions and beliefs of a child’s literacy experiences. In building off the theoretical framework of researchers Leseman and de Jong (1998) and Bronfenbrenner’s ecological system (1977, 1995), I adapted and developed a Bilingual Literacy Development Model for children. The Bilingual Literacy Development Model (Figure 1) was developed to break down what is observed or described into actions or beliefs of the child, the family, and the society (the United States schools or the community) to see how they intersect and influence the development of an emerging bilingual child. In this study, I will examine how the Bilingual Literacy Development Model pinpoints specific aspects that support language and literacy practices in bilingual children’s lives. The term bilingual instead of multilingual was used because at the time when developing the model, all the families were bilingual. However, multilingual can easily be substituted instead of bilingual.
Leseman and de Jong (1998) developed their theoretical framework on the neo-Piagetian and neo-Vygotskian social constructivist position. Building off the work of Rogoff et al. (1993), Leseman and de Jong realized that the home environment can be characterized by opportunities for literacy-related activities and social participation of knowledge, skills, and values. Home literacy is seen as “a system of constructive and co-constructive processes in language and literacy learning that consist of essentially four facets . . . determined by context factors outside of the system” (Leseman & de Jong, 1998, p. 289). The four facets that were identified were literacy opportunity, instruction, cooperation, and social-emotional quality.

For the Bilingual Literacy Development Model, two of the four facets were changed by Lesman and de Jong (1998) to gain a better perspective of the whole child’s language and literacy experience. The literacy opportunity facet was changed to include language, making it the new facet of language and literacy opportunities. Language and literacy are intertwined and lay a foundation to build upon. I wanted the instruction quality to be more encompassing to involve the school educational experiences as well as parental involvement, so it was changed to constructional practices facet. The cooperation facet was changed to interaction because it was better to understand how children and parents interact within the model.

Knowing that children’s language and literacy development are influenced by family, immediate community or society I wanted to incorporate Bronfenbrenner’s Ecological Model of Child Development (1977, 1995) into the Bilingual Literacy Development Model. Bronfenbrenner (1977, 1995) created a bi-directional and reciprocal nature of social relations that children encounter that I used to develop my model. Bronfenbrenner’s social ecological model focuses on the developing individual, the environment, and the evolving interaction between the two to examine the impact of these shifting systems over time as a child grows and has more experiences. Bronfenbrenner (1977, 1995) claimed that children’s development was influenced by the three overlapping contexts of spheres of home, community, and school. These layers establish the importance of adults in the lives of children for all aspects of development, including cognitive, psychological, and social-emotional. The child is at the center of the model, being directly influenced by each level of the system, and is the first layer of the model, which is shaded dark grey. For a bilingual child, the family context is the first and foremost layer and, secondarily, the society from an ecological perspective. The school system is embedded in the society layer because education contributes to society, and both have influences on the development of children. From this perspective, the Bilingual Literacy Development Model could be interpreted such that language and literacy development are embedded in society. Further, within the society layer, language and literacy development are filtered by significant others, especially parents. Parental influence is in the next lighter shade of grey in the model, with the lightest) shade of grey representing the society/community influences of the model. The Bilingual Literacy Development Model is intended to be a holistic approach that encourages cultural and linguistic competence across all the systems.

“The Bilingual Literacy Development Model is intended to be a holistic approach and encourages cultural and linguistic competence across all the systems.”
knowledge, and supporting their language use. The model explores the way children, families, and society use literacy and language at home in the community. It also reflects the cultural values and beliefs of the bilingual families and supports the development of literacy and language behaviors to the child.

Once the facets and levels were developed, essential activities were identified for each of the four areas. I identified these essential activities as typical U.S. reading behaviors based on literature review, personal research, and teaching experiences. The model involves the daily activities of children, families, and society, which are ways to teach literacy to children while meeting their biliteracy needs. These activities may be initiated by a parent or a child, or they may occur spontaneously as families go about their daily lives. There are cognitive and social advantages to knowing another language. In their immediate social context, children who do not develop and maintain proficiency in the home language run the risk of losing the ability to communicate with their family and shifting roles, responsibilities, and relationships among them (Hoff, 2006).

Examining the layers through these facets then allows one, from interview transcripts, observational data, or other qualitative data sources, to better understand how the layers are at play in the families or the children examined. This enriches analysis, particularly when a conflict is observed or described between the layers. For example, a family or a child values home language literacy but is unable to access books in the home language at the school or community library. Additionally, this model fosters analysis that focuses from an asset-based perspective over a deficit one.

**Looking into each facet of the Bilingual Literacy Development Model**

**Literacy and Language Opportunities**

The literacy and language opportunities facet involves both literacy and language aspects of the child. Through social interactions in a literacy-rich environment, children acquire knowledge about the conventions and purposes of print and the uses of language in organized activities and experiences. Opportunities for exposure to and practice with language facilitate language learning in everyday routines, activities, and observations. Strategies such as speaking clearly and coherently, expanding and elaborating on a child’s speech throughout the day, and explaining unfamiliar vocabulary are just a few examples of enriching a child’s language. Reading materials that are found in the home and school are an important aspect of a literacy-rich environment. The presence and messages of bilingual materials that relate to culturally diverse community experiences in conjunction with home and school life aid in supporting the development of reading and writing skills (Ernst-Slavit & Mulhern, 2003).
The constructional practices facet examines the parent and families’ academic involvement in the lives of the child. U.S. schools have the automatic expectations that parents will be involved with their children’s education. Parent involvement in schools can be a significant source of support for students and teachers. Schools that support meaningful parent involvement have higher levels of academic achievement, improved school attendance, higher graduation rates, and increased positive attitudes by students (Edwards, 2011). Teachers and schools have an obligation to reach out to parents in all communities in order to develop and maintain a productive dialogue to elicit an effective collaboration between the school and the home. Bilingual children benefit just as much from their parents’ involvement in their education as other students. It becomes critical that schools find ways to involve bilingual parents that build on their strengths and utilize their funds of knowledge.

Despite common misconceptions about bilingual parental involvement in schools, bilingual parents place a very high value on education. They are involved in their children’s education in important ways, such as homework, participating in parent-teacher conferences, and attending school-based parent meetings (Goldenberg, 2004). In particular, parents support their children’s education in culturally specific ways that are invisible and often ignored by teachers and staff, such as reinforcing good behavior, hard work, and teacher respect (Valdes, 1996). Bilingual families engage in both traditional (shared reading) and nontraditional (storytelling) literacy practices to develop and maintain skills that are used in the home, school, and community.

The interaction facet is at the center of literacy and language learning of the child. These interactions can be social interactions with other people or interacting with text. Language plays a vital role in facilitating the
interaction between people and their environment (Lantolf & Throne, 2007). Building on language’s capacity to construct knowledge, Storch and Whitehurst (2002) write, “Language also reflects cognitive development” (p. 121). It is through interactions with one another that the child acquires new knowledge, which can eventually be internalized into permanent memory. According to Vygotsky (1962), “social interactions between children and adults provide the content for what is being internalized” (as cited in Zimmerman, 2001, p. 28). During interactions, the transmission and sharing of literacy information occurs through various models which helps the child with their oral language development (Pianta & Stuhlman, 2004). The act of parents reading to young children is associated with language growth and builds a foundation of developmental literacy knowledge (Trainin et al., 2017). Parents’ involvement can help children be more engaged with school activities and feel motivated to work harder (Epstein, 2001).

**Socio-emotional Aspects**

The socioemotional facet represents the most fundamental information related to the child’s biography. The social and emotional development of bilingual learners and their consequent approaches to learning may play out in different ways depending upon their proficiency in the dominant language. Children with greater fluency in spoken English are more likely to engage and socialize with monolingual English-speaking children in the same classroom (Byers-Heinlein & Lew-Williams, 2013). A certain degree of second language proficiency furthermore is required before children have the linguistic skills they need for successful peer interaction in the second language. When bilingual children are heard and valued, it promotes a sense of belonging, community, and social competency. It can turn typical transactional relationships of school into transformational ones (Rubin & Silva, 2003).

Research also indicates that children who display more talkative personalities (in their first language) tend to be more rapid learners of their second, at least for language associated with social talk. In order that less talkative children gain opportunities for practice speaking English, teachers are recommended to provide structured interaction between native English speakers and English learners, rather than relying on children to always create their own opportunities for interaction (Zelasko & Antunez, 2000). This provides an avenue through which children may enter the conversations and have a sense of belonging. Hans (2008) revealed that young children from supportive home learning environments expressed higher socio-emotional development than those from less supportive home learning environments. Efforts to improve children’s biliteracy skills must be integrated with broader facets for children’s development such as their socioemotional growth as they are exposed to new ideas and content. This facet is dynamic, cultural,
and social, and it involves not just the learner but, equally important, the family and society.

Figure 5
**Socio-emotional Aspects**

Research Method

Participants

The participants in this study included seven mothers and their 19 children (11 girls and 8 boys) who were enrolled at Harper Elementary (pseudonym). Their first language was Spanish, and all were Mexican-American. Three of the girls and three of the boys were in preschool. Four of the girls and three of the boys were in kindergarten. Two girls were in First Grade. One girl and two boys were in Second Grade. Two boys were in Third Grade, and one girl was in Fourth Grade. All the children were or have participated in English Language pullout programs throughout the school day. Each family was part of a multilingual family literacy project, which was conducted in a voluntary after-school program that provided school reading techniques to Spanish-speaking Latino families through an after-school program. Educators of Harper Elementary wanted families to support storybook reading at home; however, they had few opportunities to share reading strategies with parents at the school. Harper Elementary was in a high-poverty neighborhood in a mid-western city. The school had 30% English learners, 87% received Free or Reduced Lunch, and 81.4% of students were from minoritized backgrounds.

The children (ages 4-10) were acquiring Spanish as their first language at home and in the community while simultaneously being introduced to English in the school setting. The mothers indicated that their children spoke Spanish to them, but most children spoke English with their siblings. All children were typically developing and had age-appropriate expressive and receptive language skills as reported by parents and teachers.

The age of the mothers ranged from 26-37. All the mothers spoke Spanish but had a variety of different levels of oral English language proficiency. Two of the mothers were enrolled in English classes while one mother was on the waiting list. Two of the mothers had been in English classes previously but were not currently enrolled. None of the mothers identified that they were fluent in English. Four of the mothers worked outside of the home. Five of the mothers have had several years of education in their home countries, while the other two had some secondary education. The participating families came from various parts of Mexico (both rural and urban settings), and most of the families (6 out of 7) have lived for extended periods in various parts of the United States. All the families were intact with all immediate family members living in the United States. The mothers self-reported that they engaged their children with literacy in diverse ways. Access to books, including picture books and story books for children, varied among the families. They said
prayers in Spanish, read Spanish books, and had environmental print throughout their homes. They sang songs, engaged in cooking with their children, and talked about daily experiences in Spanish.

Data Collection and Analysis

An ethnographic approach was used for data collection (Dyson & Genishi, 2005), spending time in the participants’ homes and gathering data from multiple sources. The following data sources were used to gather and analyze parent/child observations in the home setting, individual interview transcripts and field notes. Each participant signed the consent and assent forms to participate in the study. Data were collected over a 5-month period in 2019-2020. Triangulation was assured through multiple sources of data: participant observations during home visits, individual semi-structured interviews were conducted with participating parents, and researcher field notes that provided contextual information (Agar, 1996).

Participant observations during home visits:
During each of the 3 home visits per family, I observed the participants’ interactions and home literacy practices. On each of the visits, I was able to naturally observe the physical setting and the informal interaction between the parents and children. The initial home visit involved a brief interview with each mother conducted by the researcher and a Spanish interpreter. Also, I was given a tour of their homes, where they showed me special reading places. The second home visit and interviews were conducted two weeks after the initial interview and the final home visit and interview was conducted two weeks after the second. Each home visit lasted 60-90 minutes in the home environment. Every time a home visit was conducted, the participants were given bilingual books to help build their home libraries and encouraged shared reading amongst the families. The bilingual books were given according to the interest and developmentally-appropriate reading for the children.

Semi-structured interviews: During the first home visit, each parent participant in the project was interviewed in their home setting. The semi-structured interviews supplied information about specific family situations as well as parental perceptions of the uses and functions of print literacy in their daily lives. The questions were used to gain an understanding of how they used literacy with their children, how they perceived literacy, and the support they offered their children. The semi-structured interviews, conducted in Spanish, were transcribed and translated into English. All three semi-structured interviews were 20-30 minutes and took place within the participant’s home during the home visit. The areas of interest in the semi-structured interviews were parents’ beliefs in literacy learning, attitudes towards bilingualism, and literacy practices. Please see Appendix A for a list of sample interview questions.

Field notes: The last data source was the researcher’s field notes and reflections made immediately after each home visit. The reflective field notes were made after the observations and before parent interviews. This reflective time allowed me occasions to clarify, question, and analyze moments of the observations, as well as develop probing questions based on the observations. Field notes included comments specific to individual experiences and comments from participants. The field notes were often design-oriented and contained notes about how to support the parents during the next home visit or what other questions to ask to help gain a better understanding of the bilingual environment.

When analyzing the data, the data was coded deductive, a priori approach (Graue & Walsh, 1998) because there were pre-determined structures for the findings. The data was coded according to the activities in the Bilingual Literacy Development
Model with the data that was generated during the home visits. The activities identified in the model were pre-set coding scheme. As the data was analyzed, the findings to a particular activity in the model were identified when there was evidence of each activity in the Bilingual Literacy Development Model. The same analysis procedure was used on the reflective field notes from each home visit observation. Instances of occurrences were recorded on a separate sheet for each facet with each of the identified a priori codes. Then, the codes were combined into a crosswalk to code for the activities in the model. It was predicted that within the crosswalk, there would be activities that emerge multiple examples, and some that may be blank.

Member checking (Patton, 2002) occurred throughout the study as I engaged in conversations with the participants. After each home visit interview, the transcripts were shared with the participants to read through to ensure that their words were accurately captured during the next home visit. In the final phase of data analysis, I met with each participant to share all the data collected to conduct a participant audit (Lincoln & Guba, 1985) and share how the information fits into the Bilingual Literacy Development Model.

**My Role as a Researcher**

It is critical that I acknowledge my role as a researcher on the project. I am European American from the Midwestern United States. I positioned myself as a curriculum developer, participant observer, and learner in relation to the bilingual family participants. I have worked with bilingual families as a teacher, educator, and researcher. For this project, I also assumed the role of a learner. The family members had more knowledge about their lives and bilingual literacy experiences. I recognized how my racial and cultural positioning impacted how information can be represented and interpreted.

**Findings: A breakdown of each bilingual literacy development facet and discussion**

The first facet explained is language and literacy opportunities. In the chart below, the child, parent, and society layers are identified with a specific activity that helps develop the bilingual child’s overall development. This is the same layout for each of the four facets of the Bilingual Literacy Development Model in future sections.

**Facet: Language & Literacy Opportunities**

Because children’s early language opportunities are embedded in social and cultural contexts, it is important that teaching and learning take place within the context of the children’s day-to-day lives, as such opportunities are more meaningful to the child (Carter et al., 2009). Their language, culture, connections to community/family, and approaches to learning support their full development.

According to the literature, low-income Latinx families tend to have fewer print materials and storybooks in the home compared to middle-class white families (Sawyer et al., 2018). When parents in this study were asked about the books in their home environment, and access to picture and story books for children, the answers varied among the families. Five of the children had fewer than 10 books (no Spanish books), seven of the children had 10-20 books (a few Spanish books), and seven had more than 20 books with (a few Spanish books). According to the mothers’ reports, the child mostly read with siblings and the mothers. One of the mothers mentioned that the books were stored underneath the TV because of their importance in the family home. Access to books or the number of books in the home is a factor in the number of opportunities children must read at home. The book count that I found in this study aligns with research done by Davis et al. (2016), which found that
50% of Spanish-speaking homes have 15 children’s books in English and just 5 books in Spanish.

Two out of the seven parents did not participate in school events because they felt that they did not understand or speak English well enough to communicate effectively with their child’s teacher.
Solie (2013) found that there were three primary obstacles for Latino's not taking traditional school support roles: communication barriers, structural limitations, and cultural challenges. Communication is a critical aspect that is necessary to involve parents in the school system process, and without access to the native language, Latino parents will be excluded. However, many of the partners indicated that they were relieved when there was a bilingual interpreter to share their concerns and answer questions. The schools must reach out to bilingual families by sending notes home in Spanish about upcoming events, making phone calls, home visits, and inviting parents into the classrooms. Language is central in opening up and continuing communication between schools and bilingual parents.

All the family participants indicated that they did not use the local libraries to check out books or other services on a regular basis. Libraries can play a critical role in fostering literacy development as they expose children to a variety of print and language opportunities that are essential for reading achievement (Neumann & Celano, 2011). However, many libraries do not have a large bilingual book selection. For many bilingual children, they are Spanish speakers raised in an environment dominated by English print. The lack of bilingual materials makes libraries an uninviting and unmotivating environment to develop reading habits for families. Bilingual children need to see themselves in the characters of the books and to have access to both languages.

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Many parents indicated that they attended English as a Second Language courses. The parents shared that they wanted to gain personal knowledge and skills in English to help them interact effectively with their children and the society at large. Through the classes, they were able to gain confidence while gaining skills and knowledge in English. Although three of the parents lacked the English skills for high-level conversations, they have created environments where home-based knowledge was being developed.

Facet: Constructional Practices

Research has demonstrated that parents' enjoyment during literacy experiences with their children is an important way in which parents develop literacy motivation and skills in their children (Green et al., 2007). In many incidents with the bilingual participants, the children were the motivating factor for literacy activities by getting their parents to go to the library and read at home. Davis et al. (2016) found that Spanish-speaking families declare an interest in going to the library, even when early research says they are less likely to do so. However, Reese and Goldenberg (2008) found that a big obstacle for Latino families in getting a library card was the requirement of a Social Security Number to access the full resources of the libraries, which can impede undocumented and some mixed-status families. I found that when the children encouraged their parents, it led to an increased level of enjoyment in engaging in literacy activities, which leads to a supportive learning environment where positive attitudes are growing among the family.
daily and the strong foundation of the home language. Children form opinions about themselves, others, and cultures through what they see and hear in their home environment.

One of the mothers discussed the lack of resources for her children to complete or attempt creative writing. In 2013, researcher Hoff stated that research has not disentangled low-income from cultural and

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Constructional Practices</th>
<th>Spanish</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>Tutoring after School (Child Layer)</td>
<td>Pues por lo regular en inglés pero cómo con el tutor más busca él cómo español e inglés pero como él va a ser maestro de español entonces él también busca para él practicar y así los dos. MPí</td>
<td>Well they usually read in English but the tutor looks for things in English and Spanish. He’s going to teach Spanish so sometimes he wants to practice so they read both. MPs</td>
</tr>
<tr>
<td></td>
<td>Reading at Home (Child Layer)</td>
<td>Pues a los niños si les gusta mucho leer, a veces la floja soy yo. Pero ellos desde que empezamos en el programa en el que estaban ellos en la lectura el niño siempre dice: quiero ir a la librería, quiero ir a agarrar libros y este y es cómo ya les llamó más la atención. Y este y ahora como también tenían un tutor desde hace como un año. Entonces este tutor cada semana les estaba leyendo y también vamos a la librería y entonces esto les está ayudando mucho. MPí</td>
<td>My children like reading a lot. I’m the one that is a little lazy sometimes. Since they started the reading program the boy is always telling me that he wants to go to the library to get some books. Now they are more interested. They also have had a tutor for the last year. This tutor reads with them every week and we also go to the library. This is helping them a lot. MPs</td>
</tr>
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<td></td>
<td>Seeking Opportunities for Child (Parent Layer)</td>
<td>Les apunté a los dos porque la chiquita necesita ayuda a leer y también escribir. ML</td>
<td>I enrolled both because the girl needs help with her reading and writing because she’s just starting to learn. ML</td>
</tr>
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<td></td>
<td>Parent Learning (Parent Layer)</td>
<td>Si son casi todos los días porque dos días a la semana casi que no se peja, tiene que ser seguido. DFi</td>
<td>[Speaking about ESL program] It’s almost every day. If you go only two days a week you don’t learn, it has to be more consistent. DFi</td>
</tr>
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<td></td>
<td>Parent Application of Learning (Parent Layer)</td>
<td>Si les sirvió y a la chica también les estoy poniendo porque les falta de esas hojas que nos diera la otra vez, las venden en dollar tree y se les pone la letra y a veces le pongo eso que se ponga a hacer y ella sí lo usa bastante. Ella después de la escuela ahí está raya y raya y mi esposo le dice, ¿no te cansaste de la escuela? Pero es que a ella le gusta. ML</td>
<td>Yes, it was useful. I’m making my younger daughter to do some work. I don’t have more of the writing paper you gave us but they sell them at the Dollar Tree. I write the letters and she writes. She’s always writing after school and my husband tells her; aren’t you tired after being at school? But she likes it a lot. ML</td>
</tr>
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<td></td>
<td>ESL Availability (Society Layer)</td>
<td>[parents had varying levels of ESL experience]</td>
<td>[no quotes but all families involved participated in the family literacy program]</td>
</tr>
<tr>
<td></td>
<td>Family Literacy Availability (Society Layer)</td>
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</tr>
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</table>
linguistic background to understand what is behind the scarcity of materials in Latinx low-income families. Reese and Goldenberg (2008) explain that the scarcity could be related to issues of access: communities with higher Latinx population are less likely to have libraries, bookstores, or retail stores. I did find that the main issue for the families I was working with was lack of access rather than socio-economic status. The families lived in close proximity of each other near the elementary school. In that neighborhood, the families had to drive to access stores and other places beyond residential homes and living spaces.

In addition to resources, all the classroom teachers of the participants in this study did not live in the neighborhood where they taught. Meltzer and Hamann (2004) found that English Language Learners and their families may feel disconnected from school, among other feelings, as teachers do not always represent the students they are teaching. This was the case for all the participants in my study. All the classroom teachers were white monolingual females who did not live close to the school or in the community where they taught. Children can make a smoother transition between home and school when they see aspects of themselves and their experiences reflected in the adult who teaches them (Nevarez et al., 2019).

Facet: Interactions

Children gain knowledge about their world through social interactions with their parents, brothers and sisters, important adults, as well as other children. Language is at the center of these social interactions. Siblings model their literacy behaviors for the younger children by pushing them to imitate those behaviors while teaching them important literacy knowledge. While they are sharing knowledge with younger siblings, they are enhancing and reinforcing their own literacy at their current developmental level. Siblings are a critical piece in promoting literacy within the Latino environment (Farver et al., 2013). Simpson Baird et al. (2016) found that Latino siblings shared storybooks, helped with homework, and socialized school-like practices within the home setting.

However, it is not just younger siblings. Many bilingual children are modeling and teaching their parents the target language. This “synergistic” involvement is in conjunction with the parents’ own literacy habits. It refers to time parents spend engaging with their children in literacy-related activities, such as reading books together and participating in culturally valued activities (Turner et al., 2005). These activities are not only conducted by family members for instructional purposes but also are routine arrangements (e.g., going to the grocery store, picking up the mail, or reading a recipe), and all activities are added to their children’s cognitive development. The experience of regularly speaking two languages has broad implications for cognitive ability because it enhances executive control functions across the lifespan (Bialystok & Craik, 2010).

Parents can be involved in their children’s literacy and language development in a variety of ways, such as through parenting, parent-school communication, volunteering at school, promoting learning at home, decision-making, and engaging in the community. Parent involvement can be classified into at least three categories: school-based involvement, home-school conferencing, and home-based involvement (Hill & Craft, 2003). For bilingual families, parent involvement is home-based involvement, which

“Children can make a smoother transition between home and school when they see aspects of themselves and their experiences reflected in the adult who teaches them.”
involves parents actively encouraging children to engage in Spanish in the home setting and providing learning opportunities for their children. This home-based involvement can have a strong influence on their children's attitudes towards literacy and language learning. Other home-based involvement practices are storytelling (the practice of telling stories to a child) and direct conversation (where the
child is engaged in the conversation), which were found as essential elements to facilitate oral language and literacy learning in children from Spanish-speaking homes (Farver et al., 2013; Galloway & Lesaux, 2017; Lewis et al., 2016). Educators need to connect and expand the wealth of home-based knowledge to school-based practices to build a foundation for bilingual students' success.

Many families indicated that they did not feel comfortable navigating the school system. They mentioned that they received many fliers and notices from school but had trouble figuring out what the information meant and what needed their attention. Many times, they would just ignore the information or ask their children what the information meant. Educators and school officials say they support bilingual families, but many times, they view bilingual children as having a deficit in their learning and marginalize their voices and efforts (Trainin et al., 2017); schools never made efforts in sending information in the home language of the families. The bilingual knowledge and ability of the children often go unrecognized, and their strengths get ignored. Educators need to reflect on their own personal dispositions and their assumptions about bilingualism. Flores et al. (1991) describe the need for educators to identify what they refer to as “habitually unexamined attitudes” (p. 27). The examined attitudes are unconsciously or consciously impacting how educators interact with bilingual children and their families.

Three out of the seven parent participants indicated that they were hesitant to attend school activities because they were not familiar with the educational system and felt that if there was a serious problem, the teacher would personally contact them. When families feel welcome in schools and participate actively in children’s education, children’s attendance, interest, motivation, general achievement, and reading achievement improve (Sclafani, 2018). Parent involvement provides natural opportunities for modeling, guiding, and nurturing positive racial, ethnic, and cultural attitudes and perspectives. Children learn best when parents are involved and when the classroom curriculum represents the history and culture of all children (Gurung, 2009). This experience promotes each child’s self-esteem and sense of uniqueness. Gee (2004) found that “children cannot feel they belong at school when their valuable home-based practices . . . are ignored, denigrated, and unused. They cannot feel like they belong when the real game is acquiring academic discourse varieties of language, yet they are given no help with this, as they watch other children get . . . assessed at school for what they learned, not at school but at home” (p. 37). Teachers who believe in their efficacy in involving families achieve high parental involvement regardless of parents’ background or socioeconomic status (Hoover-Dempsey et al., 1987).

**Facet: Socioemotional Aspects**

One of the mothers shared that her son needed to use Spanish to help his understanding when he is reading in English. This is a great example of translanguage. According to Cen Williams as reported in Lewis’s et al. (2012), translanguage was used to strengthen the weaker language with the aim of achieving a balanced development of the two languages of the child. García and Kleyn (2016) point out that translanguage pedagogy is “transformative for the child, the teacher, and education itself, as the full language repertoire is used to organize and mediate processes of understanding, speaking, literacy and learning” (p. 18). Hamman (2018) argued that translanguage pedagogy acted as a bridge between Spanish and English and increased student’s opportunities for meaning making.
All the parents were concerned about children losing the ability to maintain Spanish while they were learning another language which is called language loss (Dastgoshadeh & Jalizadeh, 2011). Language loss is defined as the gradual replacement of the native language by English when the child’s opportunity or contact for language exposure in the native language is hampered or interrupted in any way. This can occur in schools where the children are flooded with English language and English print. This results in an

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Socioemotional Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>Spanish</td>
</tr>
<tr>
<td>L1 &amp; L2 Valued (Child Layer)</td>
<td>[no quotes]</td>
</tr>
<tr>
<td>Literacy &amp; Biliteracy Valued (Child Layer)</td>
<td>Los bilingúes. Emmanuel leía en inglés y luego en español para él ya era más fácil entender, le quedaba más claro lo que estaba diciendo. DC1</td>
</tr>
<tr>
<td>School Success Valued (Child Layer)</td>
<td>[no quotes]</td>
</tr>
<tr>
<td>Bilingualism Valued (Parent Layer)</td>
<td>Sí, ya hemos hablado con ellos que tienen que hablar bien español porque no queremos que un día vayamos a México y hablen todos pochos. Entonces se les dificultan algunas palabras pero estamos, así no se dicen. DC1</td>
</tr>
<tr>
<td>Literacy &amp; Biliteracy Valued (Parent Layer)</td>
<td>Yo he visto que pues puro inglés pero mejor las dos cosas, los dos idiomas para que no se les olvide el español. DF1</td>
</tr>
<tr>
<td>School Success Valued (Parent Layer)</td>
<td>Sí y que vayan bien en la escuela y que sigan bien en sus estudios. Esas son cosas que siempre a uno le preocupan. DF1</td>
</tr>
<tr>
<td>Bilingualism Valued (Society Layer)</td>
<td>Pues es el único lugar, bueno porque me refiero al único lugar porque como en la escuela me dice el niño que los regañan si hablan español. Verdad porque hay más... MP1</td>
</tr>
<tr>
<td>Biliteracy Valued (Society Layer)</td>
<td>Muchas veces no he encontrado. Muchas veces he ido a la librería y no había muchos interesantes. ML</td>
</tr>
<tr>
<td>School Success (Society Layer)</td>
<td>Ah sí, pues ahorita le hace mucha falta al niño también leer. Ahorita salió un programa en la escuela que le van a poner tutoras si califican los que agarran este, el lanche gratis. Entonces yo les apunte a los dos porque al grande le hace mucha falta leer y matemáticas. ML</td>
</tr>
</tbody>
</table>
English language gain at school, which translates into a native language loss in the home. This is why it is critical that bilingual families communicate and provide enriching Spanish experiences for their children, especially when educators are supportive of native language use. Familial bilingualism “not only does maintenance of L1 (native language) help students to communicate with their parents and grandparents in their families, and it increases the collective competence of the entire society, it enhances the intellectual and academic resources of the individual bilingual students” (Wong Fillmore & Snow, 2000, p. 38).

Participant parents expressed concern over their ability to prepare children for educational success. Four parents indicated that they already possessed interest and motivation to support their children, but they lacked the knowledge of the curriculum and routines that could help their children succeed in school. Latinx parents believe that the teacher is the best person to teach their children academic matters (Espinoza, 2010). They respect the position of the teacher and believe that schools will provide their children with the best education (Ryan et al., 2010). Bialystok and Craik (2010) established that literacy and schooling intertwined and thus found to be the main factor in progressing bilingual children’s development. Involving parents is essential to support learning and explore language and literacy patterns in the home, and integrate culture and language into classroom learning (Peterson & Coltrane, 2003). Li (2007) suggests that “language and literacy learning is deeply embedded in the social fabric of schools and homes that school success is dependent upon a complex combination of home and school variables that may vary from [student to student]” (p. 285). There needs to be a partnership between family and society to help nurture the continued development of the home language while creating the conditions for them to acquire English as well as creating a bilingual child.

Family expectations and approaches to encourage learning in children are influenced by family values, beliefs, and parenting practices. Home language helps children connect to their families and culture. It allows children to communicate their feelings and ideas with their families, build trusting relationships, and hear the structure and purposes of the language. The bilingual students build on the strength of parents’ knowledge and experience, which is the biliteracy capital they bring into the classroom. When family members use their home language, they are often able to share thoughts and ideas in a more complex way than they could in English, allowing children to build a stronger foundation of concepts and knowledge. This foundation supports children as they learn, write, read, and develop other languages.

Oral storytelling is a tradition that is highly preferred by Spanish-speaking families instead of reading books to their children. Casper (2009) found that Latinx mothers possessed a strength in storytelling, which was a way for children to understand the social aspects of narratives. These narratives would focus on the comprehension of socio-emotional cues of the story when sharing with their children. This is one aspect that I did not find among the families that I observed. One mother mentioned that her children would tell stories. However, she did not engage with them as they played.
Limitations

This design study focused on bilingual families; however, mothers were the only family members besides the children to be involved in the project. In the future, we will try to recruit fathers and other extended family members to learn about their literacy practices and how they impact children’s learning and engagement with print. In subsequent studies, I will go beyond print text but will include multiliteracies, especially digital and other multimodal literacies that are increasingly part of families’ and especially children’s lives.

An additional limitation of this study is that I was trying to confirm whether my Bilingual Literacy Development Model worked rather than examining the rich variety of family literacies. I coded with the model as a priori coding system, which limited me to only the things I was looking to see in the data rather than revealing anything new from the data sources. Conducting a secondary data analysis will let me find if there are any missing activities.

Reflecting on the module I think adding an activity section on cultural practices is necessary. Culture and language are intertwined while influencing each other. The relationship between culture and language is known as linguistic relativity (Light, 2017). The concept is that language determines the way a person views the world, or their perception of the world reflects a person’s spoken language.

Implications

Literacy attainment for bilingual families is culturally defined. “Language is one of the strongest elements in one’s self-definition as an individual and a social being” (Ada, 2003, p.7). As educators begin to embrace both language and experiences of bilingual families, they need to understand how maintaining home-based literacy practices in the primary language of the students is critical for English language development. Research on instructional practices indicates “Educational needs to be meaningful and responsive to children’s needs, as well as linguistically and culturally appropriate” (Tharp et al., 2000). The concept of literacy and language development is culturally defined and is viewed differently by different cultures. The Bilingual Literacy Development Model can be used as guidelines for fostering literacy and language for bilingual families. This additive model continues to develop the languages they already know and are learning. It is clear that children do begin “literacy learning with language and that enhancing their language development by providing them with rich and engaging language environments during the first five years of life is the best way to ensure their success as readers” (Tabors et al., 2001, p. 334). This can be particularly critical for bilingual children and their families. When using the model, parents and professionals need to remember that children have individual differences that will affect their language development. Children come to the classroom with different experiences and interact differently with other children and adults. Parents and guardians need to continue to use their native language with their children. It is the best foundation for the child to learn an additional language. Also, praise the child when they use a different language. This tells a child that they can be encouraged to learn and not a source of pressure. Parents want to keep bilingual reading material available in the home for
children to be encouraged to read outside of the classroom. Magazines, packages, labels, newspapers, posters, mail, and other printed materials are all reading materials that can help develop language.

A research study conducted by Strasser and Lissi (2009) suggests that a cultural model of the home literacy environment should be created to account for the discrepant results of studies conducted in countries other than the U.S. The Bilingual Literacy Development Model is pivotal in that it can serve as an avenue for defining bilingual families' engagement as it translates into literacy and language practices, which enhance bilingual children’s skills for success in school and beyond. The model is designed to build an understanding of family practices to provide teachers and schools with valuable information about bilingual children that can be utilized to enhance their schooling experiences. The facets are interrelated and interdependent, so all facets need to be considered when supporting, assessing, and planning for bilingual language and literacy development of children.

Furthermore, the Bilingual Literacy Development Model provides valuable information regarding the practices of bilingual families’ engagement in literacy and language, which will inform educators by bringing to the forefront those elements that influence a bilingual child’s development. With the model, educators can develop an understanding of family literacy practices so these can be built upon in the classroom to set children up for success in school by looking at the different activities identified in the model. Also, educators need to be aware of their unintentional biases when they are approaching a situation from their own cultural norms and perspectives. For example, when planning a school event, the educator needs to stop and think about the language needs of the families as well as child care for the event in the evening.

School systems can evaluate how they are supporting bilingual families by completing the model in a self-study. The self-study can expose areas where the school district needs to improve parents' and families' engagement. When parents and families are involved, children's achievement can be boosted. Children who are second-language learners need our support and our belief in them that they can become bilingual and biliterate.
References


Sawyer, B. E., Ccyck, L M, Sandilos, L. E., & Hammer, C. S. (2018). “So many books they don’t even all fit on the bookshelf”: An examination of low-income mothers’ home literacy practices, beliefs and influencing


Appendix A

Sample of Research Questions

1. Do you read with your child at home?
2. If yes, what do you read with your child?
3. In what language do you read with your child?
4. What language do you speak to your child?
5. What language does your child use most at home and with siblings?
6. Does your child read in the home?
7. Do they have a special time when they like to read?
8. How often does your child read in the home?
9. What does your child read in the home?
10. Do you ever talk about books you have read with your child or that your child has read on their own? Please explain.
11. What information would you like to receive from the school?
12. What concerns do you have regarding school?