Improving Education for Multilingual and English Learner Students

RESEARCH TO PRACTICE

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CHAPTER

4

Early Learning and Care for Multilingual and Dual Language Learners Ages Zero to Five

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Miss Lisa is a preschool teacher in a school-based preschool program that serves 18 children ages three to five. Lately, there has been an increase in the number of families from India who speak Urdu in her neighborhood. One family recently enrolled their three-year-old daughter, Pryta, in Miss Lisa's classroom. Miss Lisa speaks mostly English and some Spanish while her part-time assistant, Maria, speaks mostly Spanish and very little English.

Pryta is mostly silent during the classroom activities but brightens up and starts chattering in Urdu as soon as her mother comes to pick her up. In addition to Pryta, eight other children are enrolled in Miss Lisa's classroom who do not speak only English in the home—five who speak mainly Spanish with some English, two who speak both Mandarin Chinese and English, and one who speaks only Burmese.

Miss Lisa is very concerned that Pryta may be getting confused with all of these different languages being spoken in the classroom. She knows she needs to have frequent language interactions with Pryta, but she is unsure which language she should use. Would it be better for Pryta to use one language, English, or both English and Urdu—even though Miss Lisa does not speak Urdu? Pryta does not answer questions posed to her in English and rarely speaks to the other children, although she does follow another girl around during center time and often watches and mimics other children's behavior, such as during cleanup or circle time.

The questions Miss Lisa has about how to best meet Pryta's needs are very real for many California early childhood education (ECE) educators who are increasingly serving children from very diverse ethnic, linguistic, and cultural backgrounds. California has the most linguistically diverse population of children and families in the US, with approximately 60 percent of all children age birth to five living in homes where English is not the primary language (First 5 California 2017). More than 65 different languages are spoken in California's school-age population, and the majority of preschool classrooms have children who speak a language other than English in the home (Early Edge California 2019). The State of California has a long-standing commitment to promoting equal access to high-quality early education for all children, based in the principles of equity and multilingualism. This includes valuing all children and families for their unique talents and cultural and linguistic strengths (California Department of Education [CDE] 2014; 2015c). The CDE has an explicit commitment to fostering bilingualism and biliteracy that begins with fully supporting the cognitive and linguistic capacities of dual language learners (DLLs). "DLLs" is the term used to describe young children (children from birth through age five) who are exposed to two or more languages or who begin to learn an additional language as they continue to develop their first language. The term "dual language learner," as well as "multilingual learner," emphasizes that these children are learning both or all of their languages—typically English and one or more home languages.

The CDE explicitly recognizes and promotes the linguistic and cognitive capacities of DLLs through multiple publications and policy statements. For example, the *California Preschool Curriculum Framework, Volume 1*, states: "Being exposed to two or more languages at a young age is a gift. It is a gift because children who are able to learn through two or more languages benefit cognitively, socially, and emotionally" (CDE 2010a, 224). In addition, the *English Language Arts/English Language Development Framework for California Public Schools* (2015c) emphasizes the value of biliteracy and multiliteracy for the state, nation, and world. Early childhood educators in partnership with families play a critical role in supporting the optimal learning and development of California's DLLs.

> "Children given the opportunity to develop competence in two or more languages early in life benefit from their capacity to communicate in more than one language and may show enhancement in certain cognitive skills, as well as improved academic outcomes in school" (National Academies of Sciences, Engineering, and Medicine [NASEM] 2017, 147).

This chapter builds on the momentum of these groundbreaking resources. It will (a) propose three core evidence-based principles for supporting the education of DLL children, (b) summarize the educationally relevant research on the early language and literacy development of DLLs age birth to five, (c) present instructional and classroom adaptations based on current scientific evidence on how to best support the academic success of DLLs, and (d) describe foundational family engagement and assessment practices that have shown to be effective for DLLs. In addition, the chapter includes an example of a California school district that is implementing innovative practices for DLLs age birth to five and offers additional resources for practitioners. Finally, the chapter concludes with some suggestions for next steps for ECE educators to deepen their understanding of these topics by exploring additional evidence-based resources.

> As stated in *California Early Childhood Educator Competencies,* all ECE educators should be able to "communicate[] with the larger community about how children develop both their home language and English, and how this knowledge is applied in early education settings" (CDE 2011, 47).

Core Evidence-Based Principles for Supporting the Education of Dual Language Learners

This chapter is built on three core evidence-based principles about the learning and development of DLLs that have important implications for ECE:

1. Learning two or more languages during the early childhood years is a strength, not a weakness.
2. Strong home language skills combined with English language skills appears to be the best preparation for early and later school success.
3. Successful ECE educators build their knowledge about the development and learning of DLLs and consistently implement curricular adaptations in order to provide equitable early education to linguistically diverse children.

Our first principle, **learning two or more languages during the early childhood years is a strength, not a weakness**, is based on current research from neuroscience, developmental psychology, program evaluation, and psycholinguistics. A recent report from the National Academies of Sciences, Engineering, and Medicine (NASEM) overwhelmingly concluded that all young children can learn more than one language during the ECE years and that doing so carries significant linguistic, academic, social, and cognitive advantages (NASEM 2017). This asset-based approach is particularly important because much of the early research focused on DLLs compared their knowledge of one of their languages—English, to that of their peers who were monolingual English-speakers. These earlier studies ignored the implications of dual language development, in which DLLs' language knowledge is spread across two languages (not one), as they develop conceptual and academic knowledge through two separate languages at once (Center for Early Care and Education Research—Dual Language Learners 2011).

Recent research has clearly demonstrated that learning two or more languages during the early years is associated with certain enhanced cognitive abilities and the potential for higher achievement in both languages for DLLs than for monolingual students (Halle et al. 2012; NASEM 2017; Thompson 2015). In fact, research demonstrates that learning two languages

is an asset that enhances the achievement of DLLs. When educators view the learning and achievement of DLLs through an asset-based lens, they value what DLLs know and form positive beliefs about their potential.

DLLs bring linguistic, cognitive, and social strengths to their educational experiences, and evidence finds that supportive experiences in school help them reach their full potential. However, gaps in academic achievement between DLLs and monolingual English speakers remain. DLLs show language gaps in English beginning in infancy, likely due largely to many DLLs having fewer opportunities to learn English (Fuller et al. 2015). DLLs also perform significantly below their English-only peers on measures of kindergarten readiness and have much lower English reading and math scores at third grade. However, this gap seems to be associated with a lack of English proficiency rather than with bilingualism itself. Those DLLs who achieve some level of English proficiency on measures of kindergarten readiness often perform as well as or better than their English-only peers on third-grade reading and math assessments. ECE educators can realize the potential of DLLs when they understand the benefits of early bilingualism and adopt more effective strategies for building on the linguistic and cognitive strengths of DLLs.

The second principle is based on recent research that shows DLLs have higher long-term achievement in reading and math and are less likely to drop out of school when they have acquired some level of English proficiency by kindergarten entry (Halle et al. 2012; Thompson 2015). **Strong home language skills combined with English language skills appears to be the best preparation for early and later school success.** Since all children can—with sufficient support and opportunities to learn—become proficient in two or more languages during the early childhood years, and since early bilingualism is associated with certain cognitive advantages, ECE educators play a critical role in promoting both languages (NASEM 2017). All ECE educators can learn specific strategies that will support DLLs' acquisition of English, while also supporting the continued development of their home language. Many of the recommended adaptations to universal high-quality ECE practices are described throughout this chapter and are appropriate for DLLs from birth to age five.

An underlying principle for the effective education of DLLs is that they need both intentional support for home language maintenance and development, as well as purposeful exposure to English (NASEM 2017).

This brings us to our third evidence-based principle: **All successful ECE educators build their knowledge about the development and learning of DLLs and consistently implement curricular adaptations in order to provide equitable early education to linguistically diverse children.** High-quality ECE has been shown to improve the school achievement of low-income and ethnically diverse preschoolers (Yoshikawa et al. 2013). Additional research has also found that DLLs may benefit more from high-quality ECE than their English-only peers (Gormley 2008). However, research also demonstrates that high-quality ECE for DLLs supports them in building on what they already know in their home language while they are also adding English and building knowledge across the learning domains (Castro, Espinosa, and Páez 2011; CDE 2014). Successful ECE educators make these essential adaptations and provide targeted instructional enhancements when they understand the process of second language acquisition, and understand how DLLs' development unfolds and that it is distinct from monolingual development.

What do all early childhood educators need to know about dual language development?

DLLs are not a uniform group. Although the majority of DLLs in California speak Spanish in the home, 64 other languages are also represented in California's DLL population. DLLs vary according to many other educationally significant characteristics: country of origin; how much English exposure they have had and when they were exposed to it; their family's social, educational, and economic status; immigration history; cultural background; early language experiences; and community characteristics. ECE educators should consider these factors when designing an educational plan for each DLL. The following three profiles illustrate the diversity of DLLs in California:

1. Dani, who is thirty-four months old, recently immigrated to the Fresno area from Honduras and only speaks Spanish. She seems eager to interact with her Spanish-speaking peers but will not look at her teacher or answer any questions from adults. Dani follows other children to the rug during circle time and occasionally will follow the finger plays but does not join in the songs or volunteer responses during circle activities.
2. Derek, who is forty months old, immigrated to the San Francisco Bay area with his parents and younger brother from Hong Kong when he was three years old. Derek's family speaks Mandarin in the home, although his father also speaks English at work. The family relocated to the United States as a result of his father's promotion within his IT company. Derek is very sociable and actively seeks out other children to play with. He rapidly learned a few phrases in English, like "come here" and "wanna play," which helped him form friendships with other children. However, after four months in the pre-K program, Derek still is not participating in large- or small-group times, which are conducted in English. The teacher has noticed that Derek seems distracted and uninterested during storybook read-alouds.
3. Nhan is a three-year-old child whose parents immigrated from a mountainous, rural area in Vietnam. The family had been farmers in Quang Nam Province and pooled all of their resources to endure a difficult immigration in 2010. Nhan's older brother and sister were born in Vietnam, and he was born in the United States. His parents are eager to help Nhan learn English and succeed in school. The family received resettlement support and have many friends in their community. Nhan's father insists that Nhan speak only English at school, while Nhan's mother seems to speak very little English. Nhan is polite and good-natured but engages very little with the other children and rarely speaks to an adult.

All of these DLLs deserve high-quality ECE that is linguistically and culturally appropriate for their specific circumstances. What is appropriate will likely look different for each child. The diversity in their early cultural and language learning contexts, family circumstances, and language learning opportunities may require specific types of instructional enhancements.

Until recently, there was limited research that could guide ECE educators in their instructional approaches to DLLs. Fortunately, a recent report by NASEM—*Promoting the Educational Success of Children and Youth Learning English*—provides a research synthesis on the development and achievement of DLLs from birth to age twenty-one (NASEM 2017). This national report confirms the research foundation that underlies California's approach to supporting DLLs (e.g., *California's Best Practices for Young Dual Language Learners: Research Overview Papers* [Governor's State Advisory Council on Early Learning and Care 2013]; *California Preschool Learning Foundations, Volume I* [CDE 2008]; *California Preschool Program Guidelines* [CDE 2015a]). Figure 4.1 provides a summary of the NASEM findings for DLLs ages birth to five, which educators might find helpful for long-term planning or talking with parents and families about DLLs and language development.

Figure 4.1 Research summary of language development of DLLs ages zero to five

The major findings about the language development of DLLs ages birth to five from the NASEM (2017) report include the following:

Capacity of All Children and Benefits of Early Bilingualism

- All young children, if given adequate exposure to two languages, can acquire full competence in both languages.
- Early exposure to a second language—before three years of age—is related to better language skills in the second language.
- Early bilingualism confers benefits such as improved academic outcomes in school and enhancement of certain cognitive skills such as executive functioning.

Process of Dual Language Development

- The language development of DLLs often differs from that of monolingual children. They may take longer to learn some aspects of language that differ between the two languages, and their level of proficiency reflects variations of amount and quality of language input.
- Social and cultural factors affect language development. There is wide variation in the language competency among DLLs that is due to multiple social and cultural factors, such as parents' immigration status and number of years in the US, family's socioeconomic status (SES), status of home language in the community, and resources and amount of support for both languages.

Strategies for Supporting Dual Language Development

- DLLs are supported in maintaining their home language in preschool and the early school years while they are learning English in order to achieve full proficiency in both languages.
- The cognitive, cultural, and economic benefits of bilingualism are tied to high levels of competence, including listening, speaking, reading, and writing, in both languages. Balanced bilingualism at kindergarten entry predicts best long-term outcomes.
- DLLs' language development is enhanced when adults provide frequent, responsive, and varied language interactions that include a rich array of diverse words, sentence types, and longer stretches of language. For most DLL families, this means they should continue to use their home language in everyday interactions, storytelling, songs, and book readings.

Dual Language Development and Babies

All young children (including DLLs) need responsive, sensitive, trusting, and nurturing relationships with adults in order to develop the social–emotional competencies that underlie all future learning (National Research Council and Institute of Medicine 2000). In addition, important early language skills, such as listening comprehension and expressive language abilities, depend on meaningful language interactions during infancy. The quantity and quality of adult language that is directed at a child, as well as the diversity of that language, influences future cognitive and language outcomes (Tamis-LeMonda, Kuchirko, and Song 2014). Children benefit when adults pose interesting questions, give them adequate time to respond, engage in extended conversational turn taking, and expose them to rich vocabulary and

diverse sentence structures. All infants and toddlers, including DLLs, succeed with attentive adults who are warm and responsive, and provide frequent language interactions that are interesting and enriching.

A bilingual or multilingual language environment during the first years of life uniquely influences the brain architecture of infants. Sophisticated noninvasive brain imaging techniques are allowing researchers to study how early bilingualism impacts brain functioning. For example, magnetoencephalography is currently being used to study language processing in infants and toddlers. This advanced method of studying how the human brain processes language during the earliest years is providing insights into how specific experiences with more than one language influence the organization of the language processing systems of young DLL brains (Conboy 2013). Based on this recent research from cognitive neuroscientists, we now know that from the earliest days of life, human babies have an extensive and innate capacity to hear, process, and learn multiple languages. In fact, even the youngest babies are able to sort into separate language categories the unique phonology (sounds) of each language perceived, and by the preschool years, bilingual children are skilled in interpreting contextual cues to direct their utterances in the appropriate language to the appropriate person (Byers-Heinlein, Burns and Werker 2010; Kuhl et al. 2006). Additional research has concluded that during the last trimester of pregnancy, fetuses are actively processing the unique characteristics of different languages and beginning to make distinctions among them (Conboy 2013).

Research shows that all infants, including those with special needs, have the innate capacity to learn multiple languages, and that the early years are an ideal time to acquire multiple languages (Conboy 2013).

Age of exposure. The influence of the age when a child is first exposed to the second language has also been extensively studied. Research has shown that during the first year of life, DLLs are capable of distinguishing between two different languages and can quickly learn the salient features of each language (Kuhl et al. 2006). Very young children who are exposed to more

than one language during the earliest years, experience certain cognitive enhancements that are discernable during the first year of life (Barac et al. 2014; Sandhofer and Uchikoshi 2013). Bilingual or multilingual infants as young as seven months of age demonstrate superior mental flexibility when presented with shifting learning tasks—bilingual infants are able to respond more quickly than monolingual infants to a switch in learning conditions and change their responses. This particular skill—the ability to inhibit previous learning when conditions change—is usually considered an aspect of executive functioning and is an essential component of school readiness.

Early bilingualism has also been associated with other aspects of executive function abilities, for example, working memory, inhibitory control, and attention to relevant versus irrelevant task cues, as well as improved language skills (Sandhofer and Uchikoshi 2013). As stated above, these executive function skills have been identified as foundational for kindergarten readiness and academic success (Espinosa 2013). As infants mature into preschoolers, these advantages in executive function abilities become even more pronounced, especially in tasks that require selectively attending to competing options and the ability to suppress interfering information (Sandhofer and Uchikoshi 2013).

This research shows that infants are most sensitive to the different sounds of diverse languages during the first year of life and that sometime during the second half of the first year, infants' perceptual sensitivities to the sounds of unfamiliar languages start to decline. Additional studies have found that DLLs who learn two languages simultaneously, or from a very early age, reach major language milestones in each language at approximately the same age and learn both languages at approximately the same rate (Holowka, Brosseau-Lapré, and Petitto 2002). Further, some research has shown that the optimal age for learning the morphology and syntax of a second language is before age five, and the "language sensitivities" identified in infants start to fade after age three or four (Meisel 2008).

Type of input. Babies learn language best when adults engage in one-on-one interactions that are directed at them. Just overhearing others' conversations does not help toddlers advance in their language development.

The amount and quality of child-directed speech is directly related to DLLs' language development (NASEM 2017). Some studies have found that DLLs who spend at least 40 to 60 percent of their time interacting in each language made as much progress as monolinguals who had 100 percent exposure to one language (Thordardottir 2011). In one study, DLLs who had more than 70 percent exposure to English did not differ from monolingual children who had 100 percent exposure (Hoff et al. 2012). Taken together, this research suggests that DLLs need frequent, responsive, and enriched language interactions, and that early, balanced dual language exposure with at least 40 percent of the time in each language will lead to high levels of competence in both languages and improved long-term academic achievement for DLLs.

The educational implications of this brain research is that very young children are capable of learning two languages earlier than was previously thought (NASEM 2017) and that early exposure to more than one language alters the neural architecture of the brain in ways that enhance certain cognitive processing abilities.

What is executive function?

Enhanced executive function abilities have been linked to early bilingualism; these include working memory, inhibitory control, attention to relevant versus irrelevant task cues, and mental or cognitive flexibility, as well as improved language skills. These abilities have been portrayed as the biological foundation for school readiness, providing the platform which children's capacities to learn (the "how") educational content (the "what") depend upon. Multiple studies have found a bilingual advantage on tasks that require selective attention, cognitive flexibility, and certain literacy skills such as decoding when the two languages have similar writing systems. Notably, these advantages have been found across all socioeconomic, racial, and ethnic groups (Espinosa 2013).

Bilingualism and the Preschool Years

As DLLs enter the preschool years, they often show even more advantages in executive function than the advantages found for bilingual infants. These bilingual benefits have been found across cultural and socioeconomic groups, as well as across different language combinations. However, these cognitive advantages depend on the extent to which the child is bilingual. Children who are more balanced in their bilingualism show greater advantages than children who are more strongly dominant in one language.

The preschool years are a critical period for language and literacy development for all children, including DLLs. Research from psycholinguists has shown that although DLLs follow a similar general language trajectory as monolingual children, their development varies in unique ways as a function of learning two languages. These differences include language mixing, smaller vocabularies in each language (Bedore et al. 2005), and differences in the emergence of certain linguistic benchmarks (NASEM 2017). For instance, Sandhofer and Uchikoshi (2013) point out that studies have consistently found that bilingual children take longer to recall words from memory and may have slower word retrieval times in picture-naming tasks and lower scores on verbal fluency tasks. This suggests that ECE educators should allow enough wait time for the child to come up with a response, given the additional challenge a young DLL experiences when processing language, particularly the nondominant language. These differences are a feature of early bilingualism and not a reason for concern. Sufficient wait time is important for all children, but critical for young DLLs as they are processing language requests in two languages.

Many studies have found that bilingual preschoolers tend to have smaller vocabularies in each language when compared to English-speaking and Spanish-speaking monolinguals. However, when both languages are considered together, bilinguals' vocabulary size is often comparable to monolingual students. As Conboy points out, "… bilingual lexical learning leads to initially smaller vocabularies in each separate language than for monolingual learners of those same languages, and that **total vocabulary**

sizes (the sum of what children know in both their languages) in bilingual toddlers are similar to those of monolingual toddlers" (2013, 19).

As vocabulary size is a key goal in preschool and very important to future reading comprehension, this variation in dual language learning is critical for ECE educators to understand. This difference in vocabulary development does not usually indicate language delays or possible learning problems but is a typical feature of early bilingualism. For example, if a preschool DLL does not know the English word "story," the child may still understand the concept of a story, and might know a word in their home language for the concept (e.g., *"cuento"*). This is an example of how DLL children have assets (e.g., vocabulary in their home language) that should not be overlooked.

Oral language skills, including vocabulary skills, listening comprehension, grammatical knowledge, and expressive vocabulary have been found to be especially important for DLLs' future reading comprehension abilities (Espinosa 2015; Crosson and Lesaux 2013). In general, DLLs have shown comparable phonic and decoding skills as English-only students early in the reading process. With good instruction, DLLs are able to master the building blocks of word decoding. In order to understand the meaning of what they read, DLLs need sufficient oral language skills. This research demonstrates the importance of oral language development and instructional practices that provide rich and engaging language experiences in both languages, while at the same time focus on building early literacy skills. In light of this research, it is essential for preschool programs to recognize the critical importance of attending to oral language and vocabulary development for DLLs.

Multiple studies have emphasized the importance of purposeful exposure to English during the preschool years for DLLs' future school performance. For example, research has shown that lower levels of English language proficiency at kindergarten entry are related to later school, and specifically English language reading, difficulties (Galindo 2010; Halle et al. 2012). In addition, several recent studies examining the amount of time it takes for DLLs to become reclassified as fluent English proficient have found that early proficiencies in both the home language and English at kindergarten entry

are critical to the process of becoming academically proficient in the second language and may reduce the number of children who become long-term English learner (EL) students (Thompson 2015; Kim, Curby, and Winsler 2014).

To summarize, multiple factors are known to affect DLLs' language and literacy growth, including the language of schooling, age of acquisition of each language, and the quality and quantity of exposure to each language.

Importance of Home Language Maintenance and Development

While early exposure to English benefits DLLs' eventual bilingualism, it also carries some risks. Often, when preschool DLLs are introduced to English in the preschool setting and it is the main language of instruction, they start to prefer to speak only English and become reluctant to use their home language (Oller and Eilers 2002; Wong Fillmore 1991). Early loss of a child's first or home language is associated with long-term language difficulties as well as the risk of becoming estranged from their cultural and linguistic heritage (NASEM 2017). When children can no longer communicate with their parents, grandparents, aunts and uncles, and other extended family in the language of their home and community, they risk losing their sense of identity and connections to their ethnic, cultural, and linguistic heritage. In order to prevent the early loss of home language skills, successful ECE educators actively support, intentionally promote, and frequently monitor DLLs' growth in their home language as well as in English. The goal of achieving high levels of English language proficiency should not come at the expense of continued development of a DLL's home language. Preschool DLLs with a strong foundation in their home language and high levels of English proficiency thrive in a global, multilingual world while maintaining and sustaining strong bonds with their immediate and extended families.

Vignette 4.1 illustrates how a preschool early childhood program in California promoted bilingualism and early language and literacy development for DLLs.

VIGNETTE 4.1

A California Model Program for DLLs Age Birth to Five

In the 2011–12 school year, Fresno Unified School District (FUSD) convened an Early Learning Task Force that included educators, administrators, families, and community partners. The task force was commissioned by FUSD's superintendent and school board to examine the supports available in the Fresno community and school district for children age birth to five, to study current research, and to develop recommendations. Fresno is a diverse community where 76 different languages are spoken, 35 percent of kindergarten through grade three (K–3) students in FUSD are DLLs, and 84 percent of K–12 students qualify for free and reduced-price lunch. Low academic achievement and high school graduation rates of FUSD's EL students were motivators for the task force's work.

The Early Learning department had participated in the development of FUSD's English Learner Master Plan and recognized the need to intentionally address language development strategies for young EL students, or DLLs. The resulting initiative of the task force—the Language Learning Project—was based on a cross-agency collaborative that included all community providers of services to DLL children age birth to five (Early Head Start, Head Start, FUSD, and community-based family child care). Each agency participated equally in creating a vision, establishing goals, and making operational decisions. This multiagency collaboration was essential to active engagement and high levels of implementation across all sites.

The essential components of the Language Learning Project are:

- A multiagency collaborative to ensure all children have a strong foundation in both English and their home language upon entering kindergarten

- Broad representation, including 79 participants from the school district's infant and preschool programs, a community infant and preschool child care program, Head Start, Early Head Start, and family child care homes
- Strong asset-based partnerships with families and a perception of parents and families as having much to offer to the education of their children
- A targeted focus on Personalized Oral Language(s) Learning (POLL) strategies—concrete instructional approaches that support DLLs' language learning in multiple environments. The POLL strategies include (1) family engagement methods and tools, (2) guidance on environmental supports that welcome DLLs, and (3) specific instructional enhancements and scaffolds that promote early bilingualism and overall development.
- Frequent teacher professional learning opportunities focused on cultural and linguistic diversity, family engagement, and POLL strategies combined with individualized coaching and mentoring

Evaluation results indicate that ECE educators are able to successfully apply the newly learned approaches, including the POLL strategies, across ECE settings, are satisfied with the approach, and are excited to see the language growth of their DLLs. Another promising aspect of FUSD's work was greater articulation and collaboration between ECE and K–12 educators. For example, district leaders of the ECE and K–12 EL Services departments routinely structured time for instructional coaches in each department to share knowledge and instructional practices with one another and even participate as cofacilitators in each other's professional learning sessions in an effort to enhance and align each department's services.

Early Childhood Program Language Models

How do ECE educators provide equitable early education to linguistically diverse children? How do they support DLLs' learning and development in their home languages and in English? Research suggests that it depends. There are several ways to organize the ways languages are used and promoted in a classroom or other group setting. The full and effective implementation of an appropriate Early Childhood Program Language Model (ECPLM) is an important foundation for effective ECE for DLLs. These ECPLMs guide how ECE educators will support each of a child's languages. Figure 4.2 defines and describes California's ECPLMs: Dual Language (Birth to Five); Infant–Toddler (Birth to Three); and Preschool English with Home Language Support (Three to Five). The figure presents each ECPLM and briefly describes how both the home language and English are supported in the model. In addition, the figure describes how ECE educators' own language fluency affects the ways they support the language development of DLLs in each model. Each ECPLM can, if implemented well, support DLLs as they learn and develop both of their languages, as well as support them in the other learning domains (e.g., social–emotional development).

Figure 4.2 Early Childhood Program Language Models

Language Model	DLL Language Development Within This Model	How do ECE Educators of Different Language Backgrounds Support DLLs in this Model?
Dual Language Program (Birth to Five)	Home language development and English language development (ELD) are promoted and supported with a systematic, intentional plan. Ideally, at least 50% of the child's time is in the child's home language.	*ECE educators are fully qualified to provide instruction and language interactions in each language.* Curriculum and language support materials in each language are of equal quality. Sufficient time is provided in each language to promote bilingualism and biliteracy.
Infant–Toddler (Birth to Three)	Home language is used intentionally. Ideally, the primary caregiver speaks the child's home language. Children are invited to use their home language and are responded to in that language. Teachers partner with families to ensure ongoing use of home language in the home. ELD is supported in the context of a responsive, respectful relationship.	*ECE educators who speak a child's home language* will primarily communicate with the child in that language, including nonverbally. Children will also begin to experience English. *ECE educators who speak English but not a child's home language* will communicate in English and learn and use the home language and nonverbal communication that is important to the child and family. Native speakers of the home language will be recruited to participate in classroom activities.

Language Model	DLL Language Development Within This Model	How do ECE Educators of Different Language Backgrounds Support DLLs in this Model?
Preschool English with Home Language Support (Three to Five)	Home language development is promoted and supported by actively integrating the use of children's home languages into the classroom and partnering with families to ensure ongoing development of children's home language. ELD is promoted and supported through high-quality, systematic instruction with specific enhancements to promote comprehension and language learning for DLLs.	*ECE educators who speak English and a child's home language* will provide instruction in English, using appropriate scaffolds. ECE educators will also promote and support the child's home language by providing instruction in the home language, using the home language during some classroom activities, and using the home language for comfort and support. *ECE educators who speak English but not a child's home language* will provide instruction in English, using appropriate scaffolds. ECE educators will also promote and support the child's home language by bringing the home language into the classroom in varied ways in collaboration with families and other native speakers of the language (inviting speakers of the language to tell stories, lead activities, and so forth).

Recommended Promising and Evidence-Based Teaching Practices for DLLs

ECE educators in each ECPLM will implement the same set of promising and evidence-based teaching practices in ways that align with the design of the

model. The promising and evidence-based practices are grouped here into four practice areas:

Practice Area 1: Provide a culturally and linguistically responsive learning environment

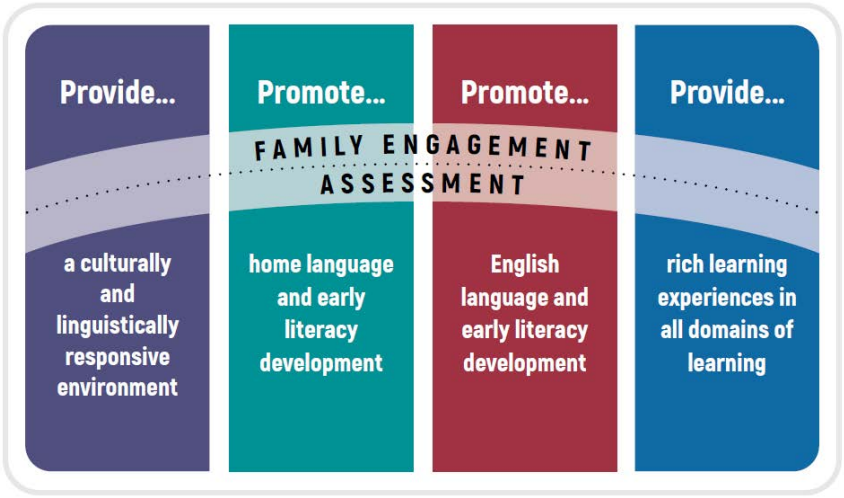
Practice Area 2: Promote continued home language and early literacy development

Practice Area 3: Promote English oral language and early literacy development

Practice Area 4: Provide rich learning experiences in all domains of learning

High-quality ECE is much more than just effective implementation of evidence-based teaching practices (see fig. 4.3). The foundation for these practice areas is effective family engagement and continuous assessment. Strong implementation of high-quality practices depends on ECE educators being highly engaged with families and frequently conducting linguistically appropriate assessments. After all, the ways ECE educators implement teaching practices will be informed by their family engagement and ongoing assessment of DLLs' strengths and needs.

Figure 4.3 High-Quality Early Childhood Education



Long description of figure 4.3

Practice Area 1: Provide a Culturally and Linguistically Responsive Learning Environment.

ECE educators strive to provide each child with a positive, warm, and engaging environment for learning. This learning environment supports and builds on the knowledge and skills each child is developing at home within their home language and culture. It also introduces toddlers and preschoolers to the cultural and linguistic diversity of the learning community. ECE educators learn from families about their child's language and culture; even families who speak the same language may speak different dialects and have different cultural practices.

Snapshot 4.1

A video from Teaching at the Beginning[1], shows preschoolers teaching a bilingual Spanish–English teacher some words in their home language, Mandarin. In this scene, the teacher demonstrates interest in the children's home language and respect for their knowledge of the language, which delights them. They are using their home language, stretching sounds, and communicating in English, as well. This video is available on the Teaching at the Beginning YouTube channel at https://www.cde.ca.gov/sp/el/er/ch4.asp#link1.

The foundation for a culturally and linguistically responsive learning environment is strong, respectful, and reciprocal relationships with families. Learning from families about their languages and cultures is an essential practice that begins at program entry and continues throughout a child's enrollment. For example, intake processes typically include discussions about each child's language background. Teachers can also invite families to share their expectations for how their child will be cared for within the early learning setting and their goals for their child's language learning (see the Family Engagement section later in this chapter). ECE educators may ask about the ways that families soothe their child, feed their child, and support their child's learning and development. ECE educators then use this information to

guide their interactions with children and families. For example, they may use soothing practices with a baby that are suggested by the baby's family or use a child's interest in rolling objects to engage them in a learning experience. ECE educators also invite families to contribute to the classroom learning environment throughout the child's enrollment. This includes asking families to share their important practices and traditions, as well as their languages.

All ECE learning environments, in every program language model, need to fully include the cultural and linguistic diversity of the classroom and the wider community in meaningful ways. Promising and evidence-based practices for providing a culturally and linguistically responsive learning environment are presented in figure 4.4. Visual displays that represent the cultural and linguistic diversity of the classroom are one important element of a culturally and linguistically responsive learning environment. Figure 4.5 describes additional practices teachers can use to support a culturally and linguistically responsive learning environment.

Figure 4.4 Visual Display Representing Classroom Diversity

Long description of figure 4.4

Figure 4.5 Practices to Support a Culturally and Linguistically Responsive Learning Environment

Practice	What does this mean?	What does this look like?
Use each child's home language with that child	• Use home languages when interacting with children and leading activities (e.g., book reading) • Use important words (e.g., milk, hungry, hurt) in home languages • Ask about, learn, and use words and phrases (e.g., words for a favorite food or toy) and songs that are important to each child in home languages	• *Miss Lisa says hello and goodbye to Pryta and her family in Urdu at drop-off and pick-up. Pryta seems to engage in activities more easily when Miss Lisa says "please" in her home language.* • *Parents and other family members read short stories and have conversations with DLLs in their home language.*
Support each child in using and developing their home language	• Invite children to use home languages (e.g., while holding infants and young toddlers; during learning experiences and book reading) • Encourage children to learn and use each other's home languages (e.g., using *"leche"* to ask for milk) • Invite DLLs to use and sometimes teach other children and educators words in their home language	• *A school administrator who speaks Urdu comes to the room daily to read books to Pryta in Urdu and extend Prtya's talk in Urdu.* • *Dani has daily experiences in a small group with the assistant teacher and other Spanish speakers. The assistant teacher uses language modeling to support and expand children's talk in Spanish.*

Practice	What does this mean?	What does this look like?
Include books and environmental prints in each home language in the learning environment	• Signs, labels, and visual displays on any topic represent the languages and cultures of the students • Books in home languages are available for infants and toddlers to explore, and are available in preschool reading areas, play areas, and learning centers • Families help select books, objects, and materials for the setting (e.g., music, displays, learning centers) • Avoid stereotypes that present generalizations about cultures	• *The labels and signs in Miss Lisa's room were bilingual Spanish–English. Miss Lisa, with support from the Urdu-speaking administrator, adds Urdu to the signs and labels that are used most often. She also adds Urdu-language materials to the classroom library.* • *Miss Lisa invites families to contribute to the learning environment by sharing photographs of important objects in their homes. She creates displays that children can touch.*
Provide learning experiences that include meaningful opportunities to share and learn about cultures	• Learn about and build on what children know and can do (including ways that may be specific to their culture) • Invite families to participate in and lead learning experiences with children • Modify a curriculum's learning experiences to connect to children's cultures	• *Miss Sophia uses music that families share in addition to the music suggested by her curriculum.* • *Miss Lisa invites families to share and talk about plants they have, cook with, or love during a unit on plants.*

Sources: CDE 2015a; NASEM 2017; CDE 2019

Practice Area 2: Promote continued home language and early literacy development.

ECE educators strive to provide young children with experiences with their home language to support their development as multilingual learners. Supporting home language development promotes DLLs' overall language development by building on the knowledge and skills they have developed in their home language. In addition, it supports children's full participation in a language that is central to their family, culture, and identity. The ways ECE educators promote DLLs' continued home language and literacy development depend on their knowledge of the language and on the ECPLM (see fig. 4.2).

Why is the ECE educator's language fluency important?

DLLs' language development benefits from the input of adults who talk to them in the language in which the adults are the most competent and with which the children are most familiar. DLLs' language development, like that of all children, benefits from the amount and quality of child-directed language that adults use with them. This type of language is used frequently in daily interactions, is attentive to the child's language and focus of attention, and is rich and diverse (NASEM 2017, 148).

ECE educators who are fluent in a child's home language use that language to promote the child's ongoing learning and development according to their ECPLM. Educators in infant–toddler classrooms will primarily use a child's home language in their interactions with that child. ECE educators in dual language programs follow their program's intentional, systematic plan for supporting the development of each language (e.g., 50:50, 90:10). Finally, ECE educators in Preschool English with Home Language Support classrooms promote home languages in multiple and varied ways depending on whether or not they are fluent in the home language.

ECE educators who are not fluent speakers of a child's home language still promote the child's development of that language. An important foundation for promoting home language development is demonstrating respect and

interest in home languages. ECE educators demonstrate this respect and interest through positive, responsive interactions with children and other speakers of the languages. For example, ECE educators respond warmly when others use languages that the educators do not understand. They also support and encourage children to use their home language with each other and with adults.

ECE educators who do not speak a child's home language fluently should collaborate with native speakers of the language to promote home language development in the classroom. This collaboration takes many forms. For example, an ECE educator can invite family members, staff, and volunteers who are native speakers of home languages to use them with children in the classroom. These adults may use a child's home language while singing and talking with a baby, reading stories to a toddler, or playing games with a group of preschoolers. They can also teach preschoolers about their home language by introducing new vocabulary or using and teaching the written form of their home language. For example, an adult might take dictation in a home language or support children in creating classroom books in their home language. These experiences provide an important foundation for DLLs' bilingualism and biliteracy. Figure 4.6 provides additional promising and evidence-based practices ECE educators can use to promote children's home languages even if they are not fluent in them.

Program leaders support ECE educators in collaborating with native speakers of children's home languages by training native speakers of the home languages to support DLLs in using and developing their home language in the classroom. Training topics may include language modeling, dialogic reading, dictation, or other classroom language and literacy activities.

Finally, ECE educators partner with families in their efforts to promote their child's home language development. This partnership begins by learning about families' language goals for their children, sharing information about the benefits of bilingualism, and using interpreters and translators to ensure that families can communicate with ECE educators and other program staff in their home language. ECE educators should have two-

way communication with families about topics that children are exploring, activities that they are doing, and stories they are hearing. ECE educators then need to use the information that families share to build on what children are learning at home. Also, families can build on what children are learning in the classroom in the home environment, using the home language. For example, ECE educators can share photographs of children engaging in classroom activities (e.g., planting seeds or finger painting) and support families in discussing these activities with their children in the home language. In addition, families can read books or introduce vocabulary in the home language, which supports children's language development and learning across domains. (See the Family Engagement section later in this chapter for additional ways to collaborate effectively with families of DLLs to support home language development.)

Figure 4.6 Promoting Home Language and Early Literacy Development

Practice	What does this mean?	What does this look like?
Respond to children's verbal and nonverbal communication warmly and positively, acknowledging that the child is communicating	Responsive relationships are important in their own right, and they also support language learning. Responding to children's efforts at communication with a smile, nod, hug, or words helps children know that they are seen and heard and encourages them to use and develop language.	*As Alicia was changing Amir, he smiled at her, kicked playfully, and made a few sounds. She was not sure whether he was communicating in his home language or not, so she smiled back and said, "Yes, let's move those legs!"*

Practice	What does this mean?	What does this look like?
Learn important words or phrases in each child's home language and use them with the child	Ask families to share words or phrases that soothe a child, or that a child uses to communicate their needs. Ask families to share words in their home language to use at school with children, such as "snack" or "bathroom."	*Mia's mother has taught her teacher the names that she uses for Mia's pacifier and blanket, as well as how to say "milk," "stop," and "snuggle" in her home language.*
Encourage older toddlers and preschoolers to use home languages with each other	Identify times in the schedule when children can use their languages with each other. Children may code switch or move between languages; this is a normal aspect of language development.	*Miss Lily encourages children to use their home languages together, including during outdoor gross motor play and center play.*

Sources: CDE 2015a; Goldenberg et al. 2013; NASEM 2017; CDE 2019

Practice Area 3: Promote English oral language and early literacy development.

Successful ECE educators strive to provide young children with experiences in English in order to support their development as multilingual learners. The ways they do this will differ depending on the age of the child, the language fluency of the educator, and the ECPLM (see fig. 4.2). ECE educators in a dual language classroom model will follow the requirements of their program's model (e.g., 50:50, 90:10). Infant–toddler educators will support infants and toddlers in building on their existing language knowledge—of the home language, of English, or of both languages. Infant–toddler educators will begin to introduce young children to English (in collaboration with others, if they themselves do not speak English). Figure 4.7 describes approaches infant–toddler educators can use to support ELD depending on their language fluencies.

Figure 4.7 Supporting Infants' and Toddlers' English Language Development

Educators' Fluency in English and a Child's Home Language	Approach to Supporting ELD
English and the Home Language	*Miss Marta, who is bilingual, primarily uses Spanish but also shares English stories or songs with the babies during one of their alert times every day.*
English Only*	*Miss Stephanie, who only speaks English, leads learning experiences in the domains in English. She also partners with families and colleagues to include and support home languages in the classroom.*
Home Language Only	*Mr. Tomás, who only speaks Spanish, partners with Miss Stephanie, a colleague, to support English. Stephanie visits his group a few times a week to sing a song, read a book, or lead a learning activity in English. Ideally, this is an experience the children have already had in their home language with Mr. Tomás.*

**Whenever possible, an infant's or toddler's primary caregiver will be fluent in the child's home language.*

Preschool teachers in an English with Home Language Support Model provide practices that explicitly and intentionally support ELD, while at the same time include and support home languages. Preschool teachers in this ECPLM use appropriate scaffolds to make English more comprehensible to those who are just beginning to learn it. In other words, they provide DLLs with comprehensible input. Preschool teachers help DLLs understand what they are saying in English by modifying their speech and using nonverbal supports. Recommended strategies for providing comprehensible input include:

- Speak to a DLL who is just beginning to learn English naturally, but slowly and clearly.

- Use appropriate gestures or actions to illustrate speech (e.g., acting out drinking from a cup while saying, "drinking"; using total physical response to demonstrate actions).
- Demonstrate concepts and actions using hand puppets, realia, or realistic objects or props.
- Give DLLs longer wait times to allow them time to process speech.
- Check for understanding from DLLs on what was said.
- Use longer phrases and sentences and offer less support as a DLL's English proficiency grows.

Snapshot 4.2

When Pryta first came to her class speaking no English, Miss Lisa asked her to choose where she would go at center time by demonstrating the different centers and teaching her to point to the picture of the station she wanted. Pyrta learned that she would point to the picture whenever it was time for centers. By the end of the year, Miss Lisa would ask Pyrta, "Which center would you like to go to?" and Pyrta would point and respond in English, "the art center." Miss Lisa would follow up, asking a more open-ended question: "What would you like to do there?" Pyrta would reply with more English, "Make picture."

In Preschool English with Home Language Support classrooms, preschool teachers embed enriched language-building experiences in English into daily interactions and activities. In these classrooms, DLLs use and expand their English skills through interaction with English-speaking ECE educators and peers. Adults extend and expand children's English utterances by repeating the words children say, extending what they say by adding a few words, or asking questions to get them to say more (educators should aim for three or more back-and-forth exchanges).

The daily schedule in this ECPLM includes frequent one-on-one and small-group opportunities for DLLs to use and develop their social and academic

English language skills. These include informal (e.g., dramatic play) and formal (e.g., structured learning activities) times for children to interact with preschool teachers and peers. Preschool teachers plan daily learning experiences that build DLLs' knowledge of the important features of English, including vocabulary, alphabet, and phonemic awareness. In addition, the daily schedule includes times and spaces in which children have a break from language stimulation. Preschool teachers support DLLs in engaging in play or other activities they choose at these times (neither requiring nor avoiding the use of language). Often teachers identify places in the room where children may go to take a break from hearing and using language, and they support them in using these places when they need to.

Snapshot 4.3

Miss Lisa plans the daily schedule so that she meets with DLLs in small groups for ELD at center time and facilitates talk in English and home languages during free play. This morning, she spoke with Mario in the dramatic play area. Mario said, "Cook" and opened the toy oven. Miss Lisa asked, "What are you cooking?" Mario responded, "Rice." Miss Lisa replied, "Rice, yum! What will you have with it?" and the exchange continued.

Miss Lisa intentionally supports vocabulary knowledge by previewing important words in a book in English and home languages. She reads to DLLs in small groups, and draws attention to the features of English (like rhyming) as she reads. Sometimes she will discuss letters before and after reading.

Miss Lisa has a short time planned in the middle of the schedule for quiet play. While she does not insist on silence, she does not ask children to speak with her. She also has a spot in the classroom for quiet play. She has taught the children that they can go there to be quiet. If a child is there for a long time, she will engage with the child and bring them back to the learning experience.

Practice Area 4: Provide rich learning experiences in all domains of learning.

At the same time that DLLs are developing two or more languages, they are also developing in all other learning domains. DLLs are developing cognitive knowledge, motor skills, mathematical understanding, social–emotional skills, and skills in other learning domains with and through language. Therefore, ECE educators support each child, including each DLL, to learn and develop in each domain of the learning foundations. The Infant–Toddler and Preschool Learning Foundations provide learning goals in each of these domains for all children, including DLLs. DLLs may practice, develop, and demonstrate their growing knowledge and skills in the domains in either of their languages (see the Assessment section later in this chapter). For example, a DLL may demonstrate counting skills by counting in English or in a home language; they may use vocabulary relating to feelings in English or in a home language.

Successful ECE educators strive to provide learning experiences in the domains that are responsive to children's interests, strengths, and needs. This includes learning about and building on the knowledge and skills that children have developed within their family, language, and culture. With infants and toddlers, these experiences are individualized and support children's ongoing growth and development across the domains. With preschoolers, instruction that is organized into high-interest topics, studies, or themes supports children in making connections with prior knowledge and experiences (Konishi et al. 2014). This thematic learning is most effective when preschool teachers highlight highly relevant key vocabulary and provide children multiple opportunities to engage in hands-on experiences on the topic. This supports children in making connections between related vocabulary and provides multiple, repeated opportunities to learn about a concept or skill. This type of integrated learning, in which children explore an idea or topic over days, weeks, or even months, supports the learning and development of all children, including DLLs.

Snapshot 4.4

When studying worms, Miss Lisa provided many related learning experiences to support children in developing vocabulary, skills, and knowledge. Students made diagrams of worms, built worm habitats, compared worms to other similar animals, and described worms using "juicy" words. They shared their many creations with their parents at an open house.

The specific teaching practices ECE educators use to support DLLs across learning domains again depend on the age of the child, the language(s) spoken by the educator and child, and the ECPLM (see fig. 4.2). Preschool DLLs whose ECE educators are using English will require specific scaffolds to support them in fully participating in the learning experiences in the curriculum. Some of these scaffolds are detailed in figure 4.8.

Figure 4.8 Supporting Preschool DLLs in Participating in Learning Experiences in English Across Learning Domains

Practice	What does this mean?	What does this look like?
Introduce concepts, vocabulary, and activities in the home language before providing learning experiences in English	Use a home language to introduce new ideas or vocabulary. Read a book to DLLs in a home language before reading it in English. Each book reading should be in a single language, but the next one can be in the other language.	*As they were beginning their study of worms, Miss Maria used Spanish to introduce the topic, key vocabulary, and learning experiences to Spanish-speaking DLLs.*

Practice	What does this mean?	What does this look like?
Build and activate vocabulary and background knowledge for book readings and other learning experiences in English	Identify words that are useful to understanding a book reading and support DLLs in engaging with those word meanings before, during, and after a read-aloud. Support children in making connections between these words and other related words they know in English or in their home language.	*Miss Lisa supported DLLs in learning the word for "worm" in their home languages and asked them to make pictures about worms. They did a "picture walk" through an informational text about worms, which showed worms in their habitat.*
Use hands-on experiences or real-life objects (realia) and pictures to illustrate key concepts	Provide opportunities to develop knowledge and skills in the domains through hands-on experiences. Build on those experiences with language and through additional related experiences.	*When teaching the words "worm," "snake," and "lizard," Miss Lisa provided a stuffed animal and a picture of each word so children could visualize what the word represented.*
Scaffold for preschool DLLs so they can participate in whole-group activities (including read-alouds) even if they do not fully understand what is being said	Keep whole-group activities in English short. Support children, including DLLs, in engaging in group repeated actions during group activities. This includes choral chants, rhymes, poems, songs, and physical movements.	*Miss Lisa asks children to "show" her a smile or a frown when she reads about one and teaches children to chant repetitive language during book readings.*

Sources: CDE 2015a; Goldenberg et al. 2013; NASEM 2017

Family Engagement

Effective family engagement is the basis of high-quality ECE for all children and especially for DLLs. Strong family engagement can help DLLs become bilingual and biliterate by supporting them in developing strong language skills in both a home language and English. Family engagement supports DLLs' development in the other domains of learning as well. Families and ECE educators can bridge DLLs' experiences at home and at school by helping children make connections between the knowledge and skills they have developed at home and in their community within their home language and culture and the knowledge and skills they are developing at school. While these connections are important for all children, they are particularly important when the child's language or cultural background is different from that of the educator or the program overall.

ECE educators have a responsibility to partner with families of DLLs in culturally and linguistically responsive ways (see Halgunseth, Jia, and Barbarin 2013 for more about the research and theory behind family engagement with families of DLLs). Successful engagement with families of DLLs involves positive two-way relationships with families, effective communication, encouragement for families to continue to develop their children's home language, and a welcoming classroom environment for families.

Develop positive, two-way relationships with families of DLLs.

Effective family engagement is rooted in positive relationships with families (Halgunseth, Jia, and Barbarin 2013). Authentic relationships are two-way, with each partner learning from the other. Strong family engagement means learning from families, as well as sharing information with them. Families have important information to share about their children that will support ECE educators in teaching more effectively (see Practice Areas 1 and 2 above). They are also critical partners in assessment, providing valuable information about their child's development (see the Assessment section later in this chapter). The following practices may support ECE educators in developing two-way relationships with families of DLLs:

- Learn from families about their parenting practices, cultural values, and goals for their children. ECE educators use the information they learn from families when they interact with them and their children. For example, if a baby's family shares excitement over the child's interest in pulling up to stand, the ECE educator can provide learning experiences to support that interest and share the child's progress with the family.
- Expect that sometimes ECE educators and families will disagree. ECE educators can expect that some of a family's practices and beliefs will differ from their own and from the other members within the family. When this happens, ECE educators should partner with families (and other staff, as appropriate) on an approach that honors the family's perspective as well as the ECE educator's own professional role. For example, if it is important to a family that their baby always be held, the educator will partner with the family and colleagues to address the family's concerns in a way that is feasible within the program.
- Consider visiting families at home. ECE educators may take up home visiting as a practice with all families or focus on families who are unable or unwilling to come to the classroom.

Educators should communicate with families of DLLs frequently, even when they do not speak their home language, and be responsive to their preferences.

Communicating with families when there is not a shared language can be challenging, but it is an important responsibility for an ECE educator (Halgunseth, Jia, and Barbarin 2013). ECE educators communicate with families frequently, not just when there is a specific situation to discuss. The following practices may support ECE educators in communicating effectively with families of DLLs:

- Collaborate with colleagues and program leadership to ensure that families can communicate with each ECE educator in their preferred language. If an ECE educator does not speak a family's language, trained translators or interpreters need to support that educator to communicate with the family. (It is not appropriate to ask older children to interpret; any time an interpreter is used, the family's privacy should be considered.)

- Communicate with families directly when possible (when using an interpreter, look at the family member when speaking). Personal interaction is important to building a relationship. Learning and using greetings and keywords in a home language communicate respect, even if the ECE educator is not a fluent speaker of the language. ECE educators should also learn and use the correct (or preferred) pronunciation of each family member's name.
- Ask about and listen to families' preferences for communicating, including which language they prefer and how they like to communicate (e.g., at drop-off, by text message, through notes). Begin by communicating with families in multiple ways, notice how they respond, and use the forms of communication they use.

Encourage families to continue to develop their child's home language.

One important way ECE educators can support DLLs' language and identity development is to support families in continuing to develop their child's home language. Some families may be concerned that they should be using English at home to support their child's ELD. ECE educators can affirm the critical role families play in providing a home language environment that will support their child in becoming bilingual. ECE educators may do the following:

- Convey respect for home languages by providing translations of written materials into home languages and partnering with interpreters to communicate with families in home languages
- Ask families about their child's home language experiences and home language development as part of ongoing communication about their child's learning and development. (At the end of this chapter is an example of a home language interview/survey)
- Ask families about their long-term goals for their child, including their goals for a child learning their home language
- Share the research that being bilingual is a strength that their child can achieve with consistent, language-rich experiences in both languages. Ask families whether they have information to share or questions to ask about the topic, as well. Assure families that using home languages at home will not harm their child's ELD, rather it is essential for maintaining and continuing to develop their home language. (See the

Importance of Home Language Series under Family Engagement in the Next Steps section of this chapter for family handouts in six different languages in addition to English)

- Demonstrate respect for the role home language knowledge is playing in the child's development by including the home language in the classroom and encouraging children and families to use the home language (see Practice Area 2 above)
- Learn and share information about opportunities to foster the development of home languages at home and in the community (e.g., public libraries that have books available in the language)

Snapshot 4.5

The program hires staff who speak the languages in the community. They also hire and support translators, interpreters, and language models and include them in meetings, trainings, and classrooms to understand the program better.

The program's intake and assessment materials include specific questions about home languages, family language goals, and concerns about language. Educators are prompted to ask about children's home language development several times during the year.

Miss Lisa shares information and resources with families about home languages, including the importance of home language development. She encourages families to ask questions and share information and resources about home languages with her as well.

Welcome families into the classroom.

It is important for ECE educators to greet families warmly, create a classroom environment that reflects children's and families' cultures and languages, and provide varied opportunities for families to participate in the classroom, including, but not limited to, sharing their culture and language. See the practice areas above for specific practices to include families in classrooms.

Assessment of Dual Language Learners

Understanding when and how to implement the practices described above is dependent upon an accurate assessment of each child's current knowledge and skills. Effective assessment also informs the ways ECE educators help children build new knowledge. The valid and comprehensive assessment of DLLs' development and achievement is essential to understanding their strengths and needs, but this is often challenging for ECE educators (Espinosa and Garcia 2012). Individualized instruction enhances young children's learning opportunities and promotes the important developmental and achievement outcomes necessary for school success. Individualized instruction, however, requires comprehensive, ongoing assessments that are fair, valid, and linguistically, culturally, and developmentally appropriate. Such assessments play an important role in promoting positive outcomes for DLLs.

Language of Assessment

For DLLs, the language in which an assessment is given may have serious implications for their ECE experience. It affects how capable they are judged to be by educators in the educational services they receive. Because DLLs acquire their knowledge of the world around them in and through two languages, their knowledge and skills will be distributed across both of their languages. Therefore, in order to have an accurate picture of what young DLLs know and do not know, it is necessary to assess them in each of their languages. A DLL may know some words and concepts in one language and other words and concepts in the second language. Depending on prior experiences and learning opportunities, a DLL may not perform as well as a monolingual English-speaking peer on an assessment in English even if the child's conceptual knowledge is similar. While in the early stages of English language acquisition, a DLL will not perform on English language assessments as well as a monolingual English-speaking child, simply as a consequence of limited experiences in English. An English language assessment is not an appropriate measure of a DLL child's conceptual knowledge and skills. With appropriate and enriched language learning opportunities in English, DLLs can achieve at high levels in English as well as in their home language(s) (Paradis, Genesee,

and Crago 2011). A DLL who demonstrates difficulties on a concept or skill in both languages, however, should be referred for further evaluation to determine whether additional services are needed. The earlier additional services are provided for a child who is not merely struggling with linguistic development, the greater the success will be addressing language delays.

To summarize, a child who speaks and hears only English in the home should be assessed across all learning domains in English. A child who speaks a language other than English in the home should be assessed in both the non-English language and in English to determine their level of ELD.

Purpose of Assessment

For ECE educators, there are three main purposes of assessment: (1) to identify who is a DLL, (2) to conduct developmental screenings to decide whether a child should be referred for further evaluation for possible developmental delays, and (3) to guide educators' daily interactions and individualization of the curriculum through ongoing formative assessment.

Identification of DLLs. In K–12 education, federal regulation requires a consistent process for identifying which students qualify for EL services. Typically, school districts administer a home language survey that indicates which families speak a language other than English at home, followed by an individual assessment of the child's English language proficiency. Districts establish cutoff scores to determine which children are eligible for language support services.

There are no comparable requirements for whether or how ECE programs will identify children who are DLLs. Therefore, programs use a variety of methods to identify DLLs. One recommended practice is to use intake procedures that include a comprehensive family survey or interview about a child's language background that goes beyond a simple question about which languages are spoken in the home (see the end of this chaper for an example of a family interview sheet). This face-to-face conversation occurs early in the enrollment process and gathers information about the following: (1) when the child was first introduced to English and the amount of English exposure the child

regularly experiences; (2) the number of different languages the child speaks and hears at home; (3) the language of the child's primary caregiver; (4) other important people the child interacts with and the languages they speak; (5) the child's preferred language; and (6) information about the child's interests and favorite activities. The family will be a critical source of information about the child's early language learning experiences, which contribute to both individualized instructional planning and DLL identification.

Developmental screening. Developmental screening is the process of early identification of children who may be at risk for cognitive, motor, language, or social–emotional delays and who require further assessment, diagnosis, and intervention. Typically, brief standardized developmental screenings are administered to large numbers of children to determine whether there is a potential problem and referral for a more in-depth assessment is warranted. Standardized instruments are most often used for this purpose since comparisons of one child's development against other children of similar age are required to determine whether the child is developing within a normative range or may have developmental delays.

It is important for assessors to employ multiple measures and sources of information, consult with a multidisciplinary team that includes bilingual experts (e.g., speech therapists and psychologists who speak the home language), collect information over time, and include family members as informants when making any screening recommendations (Barrueco et al. 2012; Espinosa and Lopez 2007). These measures include ensuring that culturally and linguistically appropriate screening tools and procedures are conducted with young DLLs and that standardized screening tools have been designed or normed for young bilingual children. Prepared ECE educators and assessment professionals receive training to conduct unbiased assessments with children from culturally and linguistically diverse backgrounds. DLLs benefit when assessments are conducted by ECE educators and assessment professionals who speak the child's native language and are familiar with the home culture. ECE educators who are knowledgeable of the psychometric characteristics of tests can make more informed judgments about the appropriateness of specific tests when their students are from linguistically

diverse backgrounds (Sánchez and Brisk 2004). And finally, assessors need to be able to distinguish between language differences attributable to growing up with two languages and language delays, which may require specialized language interventions (Espinosa and López 2007).

Continuous formative assessment. Frequent and ongoing assessment for instructional improvement and adjustment is a process that is an indispensable part of instruction. Formative assessment occurs in real time, during instruction while student learning is underway, in a way that assists their learning (Heritage 2013). As such, it is often referred to as assessment for learning. Tools for formative assessment purposes include observation notes on each child's performance, checklists, rating scales, work samples, and portfolios used during everyday activities (Espinosa and López 2007). Assessors are able to accurately collect data on the emerging competencies of young DLLs when they understand the typical development of young children who are growing up with more than one language, their home languages, and their cultures.

Observational assessments that are aligned with curriculum goals, focus on educationally significant outcomes, rely on data from multiple sources gathered over time, and include families are considered the best method for collecting accurate information about DLLs' development (Espinosa and Lopez 2007). In California, all state-funded preschool programs are required to administer the Desired Results Developmental Profile (DRDP) (CDE 2015b). Preschool teachers complete this observational assessment twice a year to measure children's progress toward the Desired Results, or learning expectations. The California Department of Education, Early Learning and Care Division (CDE/ELCD) recommends the following when assessing DLLs:

> The teacher who completes the assessment for a child who is a dual language learner should speak the child's home language. If not, the teacher must receive assistance from another adult, such as an assistant teacher, director, or parent, who does speak the child's home language. It is important that the program plans for time during the day when the child and adult have time to interact if the adult is not the child's parent or the assistant teacher in the child's classroom. (CDE 2010b, 13)

This guidance to teachers is intended to ensure that the assessors of DLLs have the capacity to judge the child's abilities in any language, not just in English. Especially for DLLs who are in the early stages of English acquisition, it is crucial that someone who is proficient in their home language is part of the assessment team to determine their understanding of mathematical concepts, social skills, and progress in the other developmental domains. Without an assessor who is fluent in the child's home language and properly trained to conduct the assessment, it is not possible to obtain accurate results. For example, an assessor who does not understand the language a child is using when communicating to a peer would find it difficult to determine whether that child is displaying empathy for others. Vignette 4.2 illustrates the formative assessment process in action.

VIGNETTE 4.2

Example of a Formative Assessment Process

In order to answer the following questions about Pryta, Miss Lisa will conduct an ongoing formative assessment:

- How is Pryta progressing?
- What does Pryta need to learn next?
- How can I adapt my instruction to better meet Pryta's needs?

Miss Lisa talked with Pryta's parents using the Family Languages and Interests Interview sheet and observed Pryta's use of Urdu with a staff member who was fluent in Urdu. Together, the parents, the staff member, and Miss Lisa determined that Pryta's language functioning in Urdu was at about an age-appropriate level. She communicated eagerly with her parents and extended family members and was able to express her thoughts, ideas, and needs to others. She played easily with the Urdu-speaking children in her community and correctly used a variety of nouns, verbs, adjectives, and adverbs with increasing complexity.

Pryta's family used Urdu almost exclusively in the home, although Pryta did watch many television shows in English and heard English when she went shopping with her parents. Since Pryta had the majority of her early language learning opportunities in Urdu and her primary exposure to English was in the preschool program, Miss Lisa was curious about her English language skills. To gauge Pryta's level of ELD, Miss Lisa reviewed the ELD domain in the California Preschool DRDP (CDE 2015b). The DRDP is a formative assessment tool that is required in California for all programs for children age zero to five that receive funding from the CDE. To complete the DRDP, ECE educators must carefully observe and document each child's behavior and language. In addition to observation notes, Miss Lisa will use samples of Pryta's work, her drawings, and possibly video or audio recordings of her interactions with others.

Soon after Pryta's enrollment, Miss Lisa created an observation schedule for Pryta that included a variety of times and contexts: during whole group, during small group, and during center time. Since no one can observe all aspects of development in a single observation, Miss Lisa decided to initially focus on Pryta's comprehension of English. After taking very specific notes on Pryta's interactions with her English-speaking peers and other adults in the classroom, Miss Lisa assessed that Pryta was in the Exploring English level of ELD and was showing some indicators of the Developing English level. Pryta interacted with her peers mostly silently, but with focused attention and some mimicking of their behavior. She also responded appropriately to simple requests from her peers and teachers such as "Come here" or "Cleanup time." She also occasionally responded to teachers' questions and directions such as "Where are the markers?" or "Time to eat."

However, Pryta's level of Self-Expression in English (ELD 2) was not as developed. Miss Lisa determined that Pryta was probably between Exploring English and Developing English. Pryta used very little English in the classroom, and when she did speak to others, it included mostly Urdu phrases with a few recognizable English words such as "hi" or "yes." Once, Miss Lisa heard Pryta say a few words that sounded like "I want paint" under her breath, as though she was practicing the new language.

As a result of these observations, Miss Lisa determined that Pryta was in the early stages of ELD and would benefit from targeted language interactions in English using many of the suggested strategies described in this chapter. She also focused on working with the family to continue Pryta's home language development while applying some of the strategies recommended above.

Conclusion

ECE educators have the wonderful opportunity to positively influence the learning and development of DLLs and support them on their journey in becoming fully bilingual in both English and a home language. With high-quality instruction and support tailored to their individual strengths and needs, ECE educators can help provide a foundation for DLLs to reach high levels of achievement in the content areas. DLLs bring a wealth of knowledge and skills to California schools, including knowledge of many languages and cultures. The school years are a crucial period for DLLs, when their assets and potential can be either strengthened, allowing them to thrive, or neglected, denying them the equitable education they deserve. Following is the vision of the *California English Learner Roadmap: Strengthening Comprehensive Policies, Programs, and Practices for English Learners:*

> English learners fully and meaningfully access and participate in a twenty-first century education from early childhood through grade twelve that results in their attaining high levels of English proficiency, mastery of grade level standards, and opportunities to develop proficiency in multiple languages. (CDE 2018, 10)

Early childhood education has an important role in enacting this vision. DLLs' earliest years of school set the stage for their continued schooling and later life. These years can be full of promise and potential, as ECE educators leverage DLLs' knowledge and skills to build their English, their home language, and the content areas. ECE educators can enact a shared commitment across California to respect, include, and support home languages, whether they are teaching in a dual language program model or in an English classroom with home language support. They can do this through evidence-based professional practices that guide their instruction, their interactions with children and families, and their assessment procedures. California ECE educators hold the key to a future in which every DLL receives the high-quality instruction they deserve with attention to their individual strengths and needs. California's diversity is its strength, and DLLs are among its most diverse group of students. As we aim for a future in which every DLL can thrive, we work toward a future of success for all.

Next Steps

Successful ECE educators build their knowledge about the development and learning of DLL students and consistently implement curricular adaptations in order to provide equitable early education to linguistically diverse children.

–Guiding Principle 3

ECE educators have the privilege and responsibility of partnering with families to provide a foundation for California DLLs' emergent bilingualism and biliteracy. This chapter oriented ECE educators to research findings and promising and evidence-based practices that can inform the ways they support the learning and development of DLLs in early learning settings. ECE educators may use this chapter as an overview of key topics, including dual language development, teaching practices, family engagement, and assessment. Following are suggested resources that ECE educators can use to deepen their knowledge about each of these essential areas. A variety of types of resources are included in each section, including professional development materials, videos, research syntheses, early learning standards, and program guidelines. Each resource is briefly described, and links are included when available.

ECE educators may choose to begin by identifying resources that will deepen their knowledge of dual language development, because this is a critical foundation for their work with DLLs and their families. They may then want to explore the resources for teaching practices, family engagement, or assessment, depending on their context, interests, and needs. In addition, at the end of this chapter, the sample Family Languages and Interests Interview document, which was referenced throughout the chapter, is available for teachers to use to improve learning experiences for their DLLs.

Dual Language Development Suggested Resources

- For information on language development, bilingualism, second language acquisition, and code switching, refer to chapters 3–6 of *Preschool English Learners: Principles and Practices to Promote Language, Literacy, and Learning*, available at https://www.cde.ca.gov/sp/el/er/ch4.asp#link2.
- Information on "Foundations in English-Language Development" is presented on pages 103–142 of the *California Preschool Learning Foundations (Volume 1)*, available at https://www.cde.ca.gov/sp/el/er/ch4.asp#link3.
- Summary information on language development and bilingualism from the NASEM Promising Futures report are included as part of a practitioner toolkit to accompany the report. The language development section of the toolkit includes a video, a fact sheet for educators, and links to relevant chapters in the report. It is available on the Promoting the Educational Success of Children and Youth Learning English: Children's Language Development Toolkit web page at https://www.cde.ca.gov/sp/el/er/ch4.asp#link4.
- Research findings on the neuroscience of dual language development (Paper 1, 1–50) and the cognitive consequences of dual language learning (Paper 2, 51–89) can be found in *California's Best Practices for Young Dual Language Learners*, available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link5.
- Information on the stages of preschool second language acquisition can be found in the *California Preschool Learning Foundations (Volume 1)*, available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link6.
- A video series that chronicles the first 14 months of ELD for a DLL child learning English in preschool is available on the Teaching at the Beginning YouTube channel at https://www.cde.ca.gov/sp/el/er/ch4.asp#link7.

Evidence-Based Teaching Practices

- Information that guides ECE educators toward an integrated approach to curriculum planning for children from birth to five years of age (including DLLs) can be found in the CDE publication *Best Practices for Planning Curriculum for Young Children: The Integrated Nature of Learning*, available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link8.
- The *California Preschool Curriculum Framework (Volume 1)*, pages 10–12, presents teaching strategies to support the learning and development of all preschoolers. Information on how to use the frameworks with DLLs is available on the California Preschool Curriculum Frameworks web page at https://www.cde.ca.gov/sp/el/er/ch4.asp#link9.
- Chapter 6, pages 75–92, of *California Preschool Program Guidelines* describes supports for preschool DLL students. *California Preschool Program Guidelines* is available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link10.
- CDE *Infant/Toddler Learning and Development Program Guidelines, 2nd Edition*, describes supports for infant and toddler DLLs in chapter 5, pages 107–130. The document is available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link11.
- PD2GO offers a series of online modules on "Enhancing Interactions with Young Dual Language Learners" that include bundles of resources, facilitators' guides, and family connections. The online modules are available on the PD2GO website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link12.
- Practices to support preschool DLL students are presented in chapter 8 of CDE *Preschool English Learners: Principles and Practices to Promote Language, Literacy, and Learning*, available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link13.

The following resources present the findings of the National Academy of Sciences research synthesis on promising practices for supporting dual language learners, including a video and fact sheets:

- CDE *Preschool English Learners: Principles and Practices to Promote Language, Literacy, and Learning*, available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link14.
- "A Quick Guide to the DRDP (2015): Assessing Children Who Are Dual Language Learners," available on the Desired Results website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link15.
- CDE *California Preschool Program Guidelines*, available at https://www.cde.ca.gov/sp/el/er/ch4.asp#link16.
- CDE *Best Practices for Planning Curriculum for Young Children*, available at https://www.cde.ca.gov/sp/el/er/ch4.asp#link17.
- *Promoting the Educational Success of Children and Youth Learning English: Promising Futures*, available on the National Academies of Sciences, Engineering, and Medicine website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link18.
- Research findings on program elements and teaching practices that support DLLs are found on pages 90–118 in Research Overview Paper 3 of *California's Best Practices for Young Dual Language Learners*, available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link19.

Family Engagement

- Information describing practices to support family partnerships with families from varied cultural backgrounds is found in the CDE publication *Best Practices for Planning Curriculum for Young Children: Family Partnerships and Culture*, available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link20.
- Research findings on engaging families of DLLs are found on pages 119–171 in Research Overview Paper 4 in the CDE document *California's Best Practices for Young Dual Language Learners*, available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link21.
- Information describing family engagement, including for DLLs, is found on pages 40–41 and 87–88 of the *California Preschool Program Guidelines*, available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link22.
- Informational handouts in several different languages to share with families are included in Head Start's Importance of Home Language Series, available on the Head Start ECLKC website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link23.
- Information describing family engagement, including with families of DLLs, is found on pages 15–36 and 118–119 of the CDE *Infant/Toddler Learning and Development Program Guidelines, 2nd Edition*, available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link24.
- *Partnering with Families of Children Who Are Dual Language Learners*, developed by Head Start, provides suggestions for family engagement and includes scenarios of various situations. It is available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link25.
- PD2GO offers a series of online modules on "Families are Systems," "Building Relationships with Families," and "Circles of Influence," which include bundles of resources, facilitators' guides, family connections, and links to additional resources. The online modules are available on the PD2GO website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link26.

Assessment

Information on the early childhood assessment system used in California can be found in the following resources:

- "A Quick Guide to the DRDP (2015): Assessing Children Who Are Dual Language Learners," available on the Desired Results website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link27.
- The Preschool English-Language Development Measures tutorial on the Desired Results website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link28.
- PD2GO offers a series of online modules on "Assessing Young Dual Language Learners" that includes bundles of resources, facilitators' guides, and family connections. The online modules are available on the PD2GO website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link29.
- Research findings on assessing DLLs are found on pages 172–201 in Research Overview Paper 5 in CDE *California's Best Practices for Young Dual Language Learners*, available on the California Department of Education website at https://www.cde.ca.gov/sp/el/er/ch4.asp#link30.

Sample Family Languages and Interests Interview*

CHILD'S NAME: _____
FIRST MIDDLE LAST

Date:_____

Date of Birth: _____ Age: _____
MONTH DAY YEAR

Gender: ☐ FEMALE ☐ MALE ☐ NONBINARY

1. How many family members live with you and the child?
2. Who are the members of your family?
3. Who is the primary caregiver of your child?
4. What language does the primary caregiver speak most often with the child?
5. What language did your child learn when they first began to talk?
6. Can you tell me what language(s) each of the following people in your household speak to your child?

Names	Only English	Mostly English; some other language (identify)	Mostly other language (identify); some English	Only other language (identify)
Parent (or you):				
Parent (or you):				

Older siblings:				
Grandparent:				
Grandparent:				
Aunts/ Uncles:				
Others (after school program, community members)				

7. What are your feelings about maintaining your home language?
8. At what age was your child first exposed to English?
9. Who does your child play with most often?
10. What special talents or interests does your child have?
11. Do you have any hobbies or interests that you would like to share with your child's class?
12. Would you be interested in volunteering in your child's class?

**Adapted from Appendix A of California's Best Practices for Young Dual Language Learners (Governor's State Advisory Council on Early Learning and Care 2013, 207–208).*

References

Barac, R., E. Bialystok, D. C. Castro, and M. Sanchez. 2014. "The Cognitive Development of Young Dual Language Learners: A Critical Review." *Early Childhood Research Quarterly* 29 (4): 699–714.

Barrueco, S., M. López, C. Ong, and P. Lozano. 2012. *Assessing Spanish–English Bilingual Preschoolers: A Guide to Best Approaches and Measures.* Baltimore, MD: Paul H. Brookes Publishing.

Bedore, L. M., E. D. Peña, M. García, and C. Cortez. 2005. "Conceptual Versus Monolingual Scoring: When Does It Make a Difference?" *Language, Speech, and Hearing Services in Schools* 36 (3): 188–200.

Byers-Heinlein, K., T. C. Burns, and J. F. Werker. 2010. "The Roots of Bilingualism in Newborns." *Psychological Science* 21 (3): 343–348.

California Department of Education (CDE). 2008. *California Preschool Learning Foundations, Volume 1*. Sacramento: CDE Press.

California Department of Education (CDE). 2010a. *California Preschool Curriculum Framework, Volume 1.* Sacramento: CDE Press.

California Department of Education (CDE). 2010b. *Desired Results Developmental Profile—Preschool* (DRDP-PS©). Sacramento: CDE Press.

California Department of Education (CDE). 2011. *California Early Childhood Educator Competencies.* Sacramento: CDE Press.

California Department of Education (CDE). 2014. *California English Language Development Standards: Kindergarten Through Grade 12.* Sacramento: CDE Press.

California Department of Education (CDE). 2015a. *California Preschool Program Guidelines.* Sacramento: CDE Press.

California Department of Education (CDE). 2015b. *Desired Results Developmental Profile—Preschool* (DRDP-PS©). Sacramento: CDE Press.

California Department of Education (CDE). 2015c. *English Language Arts/ English Language Development Framework for California Public Schools: Kindergarten Through Grade Twelve.* Sacramento: CDE Press.

California Department of Education (CDE). 2018. *California English Learner Roadmap: Strengthening Comprehensive Educational Policies, Programs, and Practices for English Learners.* Sacramento: CDE Press.

California Department of Education (CDE). 2019. *Infant/Toddler Learning and Development Program Guidelines*. 2nd ed. Sacramento: CDE Press.

Castro, D. C., L. M. Espinosa, and M. M. Páez. 2011. "Defining and Measuring Quality Early Childhood Practices That Promote Dual Language Learners' Development and Learning." In *Quality Measurement in Early Childhood Settings,* edited by M. Zaslow, I. Martinez-Beck, K. Tout, and T. Halle. Baltimore, MD: Paul H. Brookes Publishing.

Center for Early Care and Education Research—Dual Language Learners. 2011. *Research Brief #5: Early Care and Education Quality Measures: A Critical Review of the Research Related to Dual Language Learners.* Chapel Hill, NC: The University of North Carolina, Frank Porter Graham Child Development Institute, Center for Early Care and Education Research—Dual Language Learners.

Conboy, B. T. 2013. "Neuroscience Research: How Experience with One or More Languages Affects the Developing Brain" (Paper 1). In *California's Best Practices for Young Dual Language Learners: Research Overview Papers,* edited by Governor's State Advisory Council on Early Learning and Care. Sacramento, CA: CDE Press.

Crosson, A. C., and N. K. Lesaux. 2013. "Does Knowledge of Connectives Play a Unique Role in the Reading Comprehension of English Learners and English Only Students?" *Journal of Research in Reading* 36 (3): 241–260.

Early Edge California. 2019. Dual Language Learners. https://www.cde.ca.gov/sp/el/er/ch4.asp#link31.

Espinosa, L. M. 2013. *Early Education for Dual Language Learners: Promoting School Readiness and Early School Success.* Washington, DC: Migration Policy Institute.

Espinosa, L. M. 2015. *Getting it Right for Young Children from Diverse Backgrounds: Applying Research to Improve Practice with a Focus on Dual Language Learners.* Upper Saddle River, NJ: Pearson.

Espinosa, L. M., and E. García. 2012. *Developmental Assessment of Young Dual Language Learners with a Focus on Kindergarten Entry Assessment: Implications for State Policies, Working Paper #1.* Center for Early Care and Education Research—Dual Language Learners (CECER-DLL). Chapel Hill, NC: The University of North Carolina, Frank Porter Graham Child Development Institute.

Espinosa, L. M., and M. L. López. 2007. "Assessment Considerations for Young English Language Learners Across Different Levels of Accountability." Prepared for the National Early Childhood Accountability Task Force and First 5 LA, August 2007.

First 5 California. 2017. *What Constitutes High Quality Early Learning Experiences for California's Young Dual Language Learners: A Working Paper.* First 5 California Dual Language Learner Pilot, July 2017.

Fuller, B., E. Bein, Y. Kim, and S. Rabe-Hesketh. 2015. "Differing Cognitive Trajectories of Mexican American Toddlers: The Role of Class, Nativity, and Maternal Practices." *Hispanic Journal of Behavioral Sciences* 37 (2): 139–169.

Galindo, C. 2010. "English Language Learners' Math and Reading Achievement Trajectories in the Elementary Grades." In *Young English Language Learners: Current Research and Emerging Directions for Practice and Policy,* edited by E. E. García and E. C. Frede, pp. 42–58. New York, NY: Teachers College Press.

Goldenberg, C., K. Nemeth, J. Hicks, M. Zepeda, and L. M. Cardona. 2013. "Program Elements and Teaching Practices to Support Young Dual Language Learners" (Paper 3). In *California's Best Practices for Young Dual Language Learners: Research Overview Papers,* edited by Governor's State Advisory Council on Early Learning and Care. Sacramento, CA: CDE Press.

Gormley, Jr., W. T. 2008. "The Effects of Oklahoma's Pre-K Program on Hispanic Children." *Social Science Quarterly* 89 (4): 916–936.

Governor's State Advisory Council on Early Learning and Care, ed. 2013. *California's Best Practices for Young Dual Language Learners: Research Overview Papers*. Sacramento, CA: CDE Press.

Halgunseth, L. C., G. Jia, and O. A. Barbarin. 2013. "Family Engagement in Early Childhood Programs: Serving Families of Dual Language Learners" (Paper 4). In *California's Best Practices for Young Dual Language Learners: Research Overview Papers,* edited by Governor's State Advisory Council on Early Learning and Care. Sacramento, CA: CDE Press.

Halle, T., E. Hair, L. Wandner, M. McNamara, and N. Chien. 2012. "Predictors and Outcomes of Early Versus Later English Language Proficiency Among English Language Learners." *Early Childhood Research Quarterly* 27 (1): 1–20.

Heritage, M. 2013. *Formative Assessment in Practice: A Process of Inquiry and Action.* Cambridge, MA: Harvard Education Press.

Hoff, E., C. Core, S. Place, R. Rumiche, M. Señor, and M. Parra. 2012. "Dual Language Exposure and Early Bilingual Development." *Journal of Child Language* 39 (1): 1–27.

Holowka, S., F. Brosseau-Lapré, and L. A. Petitto. 2002. "Semantic and Conceptual Knowledge Underlying Bilingual Babies' First Signs and Words." *Language Learning* 52 (2): 205–262.

Kim, Y. K., T. W. Curby, and A. Winsler. 2014. "Child, Family, and School Characteristics Related to English Proficiency Development Among Low-Income, Dual Language Learners." *Developmental Psychology* 50 (12): 2600–2613.

Konishi, H., J. Kanero, M. R. Freeman, R. M. Golinkoff, and K. Hirsh-Pasek. 2014. "Six Principles of Language Development: Implications for Second Language Learners." *Developmental Neuropsychology* 39 (5): 404–420.

Kuhl, P. K., E. Stevens, A. Hayashi, T. Deguchi, S. Kiritani, and P. Iverson. 2006. "Infants Show a Facilitation Effect for Native Language Phonetic Perception Between 6 and 12 Months." *Developmental Science* 9 (2): F13–F21.

Meisel, J. M. 2008. "Child Second Language Acquisition or Successive First Language Acquisition?" In *Current Trends in Child Second Language Acquisition: A Generative Perspective*, edited by B. Haznedar and E. Gavrueseva, eds. Philadelphia, PA: John Benjamins.

National Academies of Sciences, Engineering, and Medicine (NASEM). 2017. *Promoting the Educational Success of Children and Youth Learning English: Promising Futures.* Washington, DC: The National Academies Press.

National Research Council and Institute of Medicine, Committee on Integrating the Science of Early Childhood Development. 2000. *From Neurons to Neighborhoods: The Science of Early Childhood Development,* edited by J. P. Shonkoff and D. A. Phillips. Washington, DC: National Academies Press.

Oller, D. K., and R. E. Eilers, eds. 2002. *Language and Literacy in Bilingual Children, Volume 2.* Clevedon, England: Multilingual Matters.

Paradis, J., F. Genesee, and M. B. Crago. 2011. *Dual Language Development and Disorders: A Handbook on Bilingualism and Second Language Learning.* Baltimore, MD: Paul H. Brookes Publishing.

Sánchez, M. T., and M. E. Brisk. 2004. "Teachers' assessment practices and understandings in a bilingual program." *NABE Journal of Research and Practice* 2 (1): 193–213.

Sandhofer, C., and Y. Uchikoshi. 2013. "Cognitive Cconsequences of Dual Language Learning: Cognitive Function, Language and Literacy, Science and Mathematics, and Social–Emotional Development" (Paper 2). In *California's Best Practices for Young Dual Language Learners: Research Overview Papers,* edited by Governor's State Advisory Council on Early Learning and Care. Sacramento, CA: CDE Press.

Tamis-LeMonda, C. S., Y. Kuchirko, and L. Song. 2014. "Why Is Infant Language Learning Facilitated by Parental Responsiveness?" *Current Directions in Psychological Science* 23 (2): 121–126.

Thompson, K. D. 2015. "English Learners' Time to Reclassification: An Analysis." *Educational Policy* 31 (3): 330–363.

Thordardottir, E. 2011. "The Relationship Between Bilingual Exposure and Vocabulary Development." *International Journal of Bilingualism* 15 (4): 426–445.

Wong Fillmore, L. 1991. "When Learning a Second Language Means Losing the First." *Early Childhood Research Quarterly* 6 (3): 323–346.

Yoshikawa, H., C. Weiland, J. Brooks-Gunn, M. Burchinal, L. Espinosa, W. T. Gormley, J. Ludwig, K. A. Magnuson, D. Phillips, and M. J. Zaslow. 2013. "Investing in Our Future: The Evidence Base on Preschool Education." Foundation for Child Development and Society for Research in Child Development, October 2013.

Endnotes

1 The Teaching at the Beginning website offers many free professional learning resources, including videos and resources for parents in multiple languages. It can be accessed at the following link: https://www.cde.ca.gov/sp/el/er/ch4.asp#link32.