

## Challenges and Benefits of Early Bilingualism in the United States' Context

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### Abstract

The population of young dual language learners (DLL) in the United States has tripled in the last several decades and now accounts for 25% of all children in the United States (Migration Policy Institute, June 2014). Many of these children are exposed to multiple languages in the home and the early childhood setting (ECE) setting, and the vast majority are U.S. citizens. Despite the robust research documenting the extensive capacity of infants, toddlers, and preschoolers to learn multiple languages and the cognitive, social, and linguistic benefits of early bilingualism, most young DLLs in the United States do not receive enriched ECE that supports their emergent bilingualism. This article reviews the latest research, describes the developmental characteristics of young dual language learners, the similarities and differences between DLLs and young monolingual children, the current ECE policies and practices toward DLLs in the United States, and concludes with policy recommendations at the federal, state, and local levels.

### Keywords

Dual language learners, early bilingualism, early childhood second language acquisition, early childhood education, bilingualism, dual language learner policies

### Introduction

The population of young children who speak a language other than English in the home and are acquiring English as a second or third language has increased dramatically across the United States in early care and education (ECE) settings as well as K-12 public schools. Many of these children are exposed to more than one language in the home and can be considered emergent multilinguals. These young children who are acquiring two or more languages simultaneously, or are learning a second language while continuing to master their first language are considered dual language learners (DLLs). The population of young DLLs has tripled in the last

several decades and now accounts for 25% of all children in the United States (Migration Policy Institute, June 2014). Recent enrollment reports show that in 2011 fifty nine percent of the children served in Head Start programs were from racial or ethnic minority families, 37% of them were of Hispanic/Latino origin and more than 30% were dual language learners (Office of Head Start, 2011). This article reviews the latest research, describes the developmental characteristics of young dual language learners,

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the similarities and differences between DLLs and young monolingual children, and the current ECE policies and practices toward DLLs in the United States. It concludes with policy recommendations at the federal, state, and local levels.

Throughout all phases of their educational experiences, from preschool to school entry and K-12 schooling, the educational achievement of DLLs has historically lagged behind their native English-speaking peers (Espinosa, 2010; Rumberger & Tran, 2007). A large proportion of young DLLs are from immigrant families, and children with immigrant parents are much more likely to experience poverty (40%) than children in the United States in general (20%) (Hernandez, Denton, & McCartney, 2009). Recent studies have suggested that high-quality ECE experiences may be especially beneficial to DLL children's school readiness (Magnuson & Waldfogel, 2005).

Fortunately, during the past decade, there has been an explosion of research findings that provide a scientific basis for designing expectations, program approaches, and assessment procedures that support the development and school achievement of young DLLs. We now know more about how the development of DLLs is similar to and distinct from monolingual children, and we have an emerging knowledge base about effective instructional and assessment approaches. At this point in time, we are experiencing both a dynamic shift in the demographics of our youngest Americans as well as an expanding scientific basis for designing responsive and appropriate early learning environments.

Young dual language learners represent multiple language groups, diverse cultural backgrounds, a wide range of family circumstances, and many different countries of origin; this group of children and families are very diverse (Winsler, Burchinal, Tien, Peisner-Feinberg, Espinosa & Castro, 2014). However, all young DLLs have one thing in common—they

are challenged with mastering the linguistic components of several different language systems during a period of rapid overall development. While some ECE professionals maintain that mastering the fundamentals of more than one language during the critical early years is overwhelming for many children, current research suggests that, in fact, all children—even those with special needs—are capable of learning multiple languages from their earliest months of life, and this language challenge benefits DLLs in multiple ways.

### **United States' Context of Development for Young Dual Language Learners**

In the United States three federal programs fund most of the nationally subsidized services to young children: the Child Care and development Block Grant (CCDBG), Temporary Assistance for Needy Families (TANF), and Head Start. States also invest in CCDBG and in some cases in prekindergarten and Head Start, including Early Head Start programs which serve children from birth to age three. CCDBG provides child care assistance to low-income families and requires state matching and maintenance of effort (MOE) funds. Individual states are permitted to spend TANF funds directly on child care assistance and/or transfer up to 30 percent of their grant to CCDBG. State TANF MOE funds may also be spent on child care. Head Start is the primary comprehensive early education program for poor children in the United States. It served about 1.1 million children and invested approximately eight billion dollars in 2012 for early educational services. The comprehensive services provided by Head Start include health, nutrition, social, and other services determined to be necessary by family needs assessments. It has been estimated that this patchwork of federal programs serves less than 50% of the low-income children in the United States who are eligible for and would benefit from high quality ECE services (Schmidt, Matthews, Smith, & Robbins, 2013).

In addition to the federal investments, 40 states fund pre-kindergarten programs that provide educational services to an additional 1.3 million children representing expenditures of more than 5.1 billion dollars. These programs provide services to 28% of all four year olds and 4% of all three year olds across the 50 states. In the United States, children with parents who are more educated are much more likely to attend state supported pre-kindergarten programs than those children whose parent did not complete high school (NIEER, 2012)<sup>1</sup>. Further, Latino and Pacific Islander children have the lowest participation rates and only a minority of state pre-kindergarten programs in the United States have been judged to be of high quality (NIEER, 2012).

In the United States, where a child lives, as well as his family background, is closely associated with ECE participation. Children in Washington D.C., Florida, Oklahoma, or Vermont, are very likely to have public ECE programs available, while children in Montana, Wyoming, or Utah, have no access to state-funded pre-kindergarten programs because these states don't fund public pre-kindergarten programs. Federally funded programs for low-income children and their families such as Head Start or CCDBG may be available in these states. In addition, states vary enormously in their adherence to high quality standards; only a few states provide sufficient funding to implement programs that require highly qualified teachers and assistant teachers, as well as regular program monitoring and program assistance to ensure consistent quality.

### **Socio-Cultural Context for Dual Language Learners**

As DLL children and families represent many different social, cultural, and linguistic backgrounds, there are important socio-cultural differences within the DLL population that influence development across all learning domains. For example, in the United States,

children in a bilingual home, are likely to have parents without a high school education, are likely to be growing up under economic adversity, and are likely to be raised in specific cultural contexts that may differ from mainstream U.S. norms. (Castro, Garcia, Espinosa, Genesee, Gillanders, Hammer, LaForett, Peisner-Feinberg, Tabors, under review). In addition, it has been found that children with immigrant parents (who are more likely to speak a language other than English in the home) are more likely than those with United States-born parents to live in two-parent families (Hernandez and Napierala, 2012); immigrant mothers are more likely to be married, less likely to be depressed, and more likely to have larger families than non-immigrant mothers (Mistry, Biesanz, Chien, Howes, & Benner, 2008). These socio-cultural factors represent a constellation of strengths and potential risks for children growing up with more than one language in the United States and need to be considered when designing specific educational services.

Children being raised by foreign-born parents or those whose dominant language is not English also experience unique cultural, linguistic, and parenting contexts that influence their development and kindergarten readiness (Castro, et al., under review; Perreira, Chapman, & Stein, 2006; Winsler et al., 2014). For example, young children with balanced bilingual abilities have shown some advanced linguistic, cognitive, and social-emotional skills during the preschool years (Castro & Espinosa, 2014; Espinosa, 2013). In order to design the most responsive and linguistically enriching early learning experiences for young DLLs, it is important for ECE providers to have a good understanding of the unique contexts that shape the development of dual language learners and in which ways they differ from those of monolingual children.

In the United States, for most young children from cultural and language minority

families, growing up with more than one language is associated with low performance on assessments of cognitive development and academic achievement. National statistics and evaluation studies in the United States, for example, indicate that children of immigrants, who are dual language learners, enter kindergarten with academic deficits and often have lower school achievement than those who are native English speakers (Garcia & Frede, 2010). However, the vast majority of these assessments and academic achievement measures are administered only in English without considering knowledge or skills in languages other than English, or ways of demonstrating knowledge that may be culturally embedded. Unfortunately, the confounding effects of poverty and minority status are rarely disentangled from language status so it is often impossible to determine if the lower achievement of DLLs is due to the corroding effects of chronic poverty or more directly related to English language skills.

In addition, much of the current research does not address the complexity of the developmental context of DLLs or offer comprehensive solutions that recognize and build on the potential linguistic, cultural, or social strengths of early bilingualism. Recent comprehensive reviews of the literature conducted by the Center for Early Care and Educational Research - Dual Language Learners (CECER-DLL) and other recent reviews have revealed limitations in the extant research (CECER-DLL, 2011; Garcia & Nañez, 2011). Much of the existing research focuses on the differences between DLL and non-DLL populations from a deficit perspective and fails to offer developmental frameworks based on normative developmental pathways of young DLLs. Therefore, findings most often point to deficits in the achievement of DLLs when compared to native English speakers and recommendations are focused on interventions to help them *catch up* (Castro et al., under

review). In contrast, what we need now in the United States is to re-examine the science of early bilingualism, recognize the unique developmental contexts and characteristics of young DLLs without concluding that these differences are deficits, and design instructional and assessment approaches that are responsive to the needs and emerging potentials of young children from linguistically and culturally diverse backgrounds.

### **The Science of Early Bilingualism**

New noninvasive brain-imaging techniques are allowing researchers to study how the bilingual condition changes brain functioning. For example, magnetoencephalography (MEG) is currently being used to study language processing of infants and toddlers. This neuro-imaging technique has high operating costs, but is ideally suited to studying language processing because it yields precise data on neural responses to language stimuli, exactly *when and in what order* specific aspects of language knowledge are accessed, as well as *where* or in which parts of the brain neural activity occurs. This advanced method of studying how the human brain processes language during the earliest years is providing insights on 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 the unique phonology (or sounds) of each language perceived into separate language categories, 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,

& Werker, 2010; Kuhl, Stevens, Hayashi, Deguchi, Kiritani, & Iverson, 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).

There is widespread agreement in the scientific community that as infants are exposed to two languages and developing their bilingual abilities, they are developing two distinct but connected linguistic systems. It appears that all infants, even those with special needs, have the innate ability to learn multiple languages and that the early years are an ideal time to acquire multiple languages (Conboy, 2013).

Petitto and colleagues (2012) in a series of studies focused on young bilingual children found that bilingual infants (10-12 months old) demonstrated enhanced brain plasticity and increased language processing skills. These groundbreaking studies show that

experience with two linguistic systems, no matter how short and regardless of the language pairs involved, changes the way in which language is organized in the brain. Furthermore, these functional brain changes are present very early on, after only limited bilingual experience, suggesting that setting up representations in two linguistic systems through exposure to two languages, and not only language production, drives functional plasticity in bilingual children. (Barac, Bialystok, Castro & Sanchez, 2014 p. 13).

### **Cognitive Development of Dual Language Learners**

Very young children who are exposed to more than one language during the earliest years experience certain cognitive enhancements that are discernable as early as seven months of age (Barac, et al, 2014; Sandhofer & Uchikoshi, 2013). Recent scientific studies have found that bilingual infants as young as seven months of age demonstrated superior mental flexibility when presented with shifting learning tasks;

when compared to monolingual infants, bilingual infants were able to quickly respond to a switch in learning conditions and change their responses. Many of the studies of this bilingual advantage have focused on infants' ability to process and discriminate different speech sounds, which suggests that young bilingual infants may have enhanced attention during speech processing. This particular skill, the ability to inhibit previous learning when conditions change, is usually considered one 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, attention to relevant vs. irrelevant task cues, as well as improved language skills (Sandhofer & Uchikoshi, 2013). As stated above, executive function skills have been identified as foundational to 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 & Uchikoshi, 2013).

These cognitive advantages to early bilingualism have been found across multiple language combinations as well as across socio-economic status (SES) and ethnic/cultural groups. An important finding across studies is that these cognitive advantages have been associated with balanced bilingualism. Those children who demonstrate roughly equal abilities in each of their languages show greater advantages than those who are unbalanced, or more dominant in one language. Thus, in order to understand the cognitive and linguistic abilities of young DLLs, ECE providers will need to consider the amount and quality of DLLs exposure to each language (Barac et al, 2014).

### **Language and Literacy Development of Young Bilingual Children**

Infants' earliest language learning exposure begins by attending to the sounds of their mothers speech even before birth, during the last trimester of pregnancy. (Byers-Heinlein, Burns, & Werker, 2010). They rapidly continue to learn about the sounds of speech and features of language through all their language interactions, in the home, in the community, with adults, with peers, and in their ECE settings. These early language learning environments can vary tremendously, from all interactions at home in their non-English language and incidental English exposure in the community to English exposure at home from older siblings and dual language instruction in a formal ECE program. Thus, the amount of exposure to English can vary enormously across settings from almost none to all language interactions conducted in English. These earliest language learning opportunities are important for ECE providers to understand, as both the amount of exposure to and opportunity to learn a second language contribute to the overall language development of young bilingual children (Castro et al., under review). All young children in bilingual environments have the potential to become fully bilingual (i.e., learning two languages at the same time, and developing a similar levels of proficiency in each language), (Albareda,-Castellot, Pons, & Sebastián-Gallés, 2011; Pearson, Fernandez, Lewedeg, & Oller, 1997), however, successfully becoming a balanced bilingual will require sufficient exposure and high quality learning opportunities in both languages.

Although we know that emergent bilingual children require sufficient exposure in both languages to achieve proficiency and to experience the bilingual advantages described above, in the United States this is rarely the case (Hoff et al., 2012; Marchman et al., 2004). A secondary analysis of the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B)

conducted by the CECER-DLL indicated that in the United States DLL infants and toddlers are more likely to be in bilingual care when they are 9 months old, less likely at 24 months and unlikely to receive bilingual ECE services once they are 52 months of age, when they are more likely to attend center-based ECE (Espinosa, Burchinal, Tien, Castro, Peisner-Feinberg & Winsler, 2013). This large nationally representative study shows that in the United States young dual language learners who attend ECE programs have fewer opportunities to develop proficiency in both of their languages as English-only instruction is the most common language offered in preschools. This means that young emergent bilingual children in the United States are unlikely to benefit from the cognitive advantages of balanced bilingualism.

### **How are Dual Language Learners Similar to and Different from Monolingual Children?**

As the population of young children who speak a language other than English in the home and are acquiring English as a second or third language continues to increase across the United States there has been a corresponding explosion of research findings on the specific developmental characteristics of DLLs. These recent research findings provide a scientific basis for designing expectations, program approaches, and assessment procedures that support the development of young DLLs. We now have a better understanding about the development of DLLs as well as how DLLs' development is similar to and different from monolingual children. There is also an emerging knowledge base about effective instructional design and assessment approaches for DLLs.

Some features of DLLs' language development may look like speech or language delays. (Sandhofer & Uchikoshi, 2013). The ongoing challenges of processing more than one language and frequently switching between languages results in a different set of language

and cognitive strengths and needs for bilingual children than those of monolingual children. (Conboy, 2013). Young children who are learning through two languages initially make slower progress in each of their languages than monolingual children (Sandhofer & Uchikoshi, 2013). In addition, they typically have smaller vocabularies in each of their languages than monolingual children, but their total vocabulary size (the sum of what children know in both languages) is frequently similar to monolingual children (Espinosa, 2015). Young DLLs also take longer to recall words from memory and have lower scores on verbal fluency tasks, as their language processing is more complex than that of monolingual children (Petitto et al., 2011). Most often these differences are temporary and disappear as young DLLs become more proficient in both of their languages (Conboy, 2013).

These are some of the more salient and well-documented differences between DLLs and monolingual children, however, it is clear that the experience of being systematically exposed to more than one language during the early years will influence many aspects of cognitive and linguistic development. These early differences in language exposure for DLLs result in unique neural connections and pathways that permanently affect the very basic architecture of their brain development (Conboy & Kuhl, 2011). It is important to remember that these documented differences in the language and early literacy skills of young DLLs are just that—differences and not delays! They are a by-product of the challenges of hearing, processing, and making meaning from multiple language systems during the early childhood years.

These findings underscore the need for early care providers to understand the challenges a young dual language learner experiences when processing language, particularly the non-dominant language, and the need to allow sufficient time for the child to come up with a response. Wait time is

important for all children, but critical for young dual language learners.

## **Importance of Supporting both Languages**

As mentioned above, very young children have the capacity and, indeed are neurologically prepared to learn more than one language—and they gain cognitively from managing the linguistic processing required when becoming bilingual. However, frequently when very young children are exposed to English in the United States' ECE context for significant amounts of time, they shift their dominant language to English. DLL preschoolers who attend English-dominant ECE programs often quickly start to demonstrate a preference for using English and become disinclined to continue to use their home language in preschool and in the home (Espinosa, 2010). This outcome has been discussed by researchers as first language loss, or a subtractive language experience; in many early care settings in the United States, young dual language learners show first language loss as they become more proficient in English, given children's limited or non-existing exposure to and use of their first language. As stated by Conboy (2013), “. . . it is important for practitioners to look at the long-term outcomes of those effects, and also to consider children's experiences with both of their languages instead of only focusing on whether second language performance matches that of native speakers” (p. 36). Thus, in the United States, increased attention must be given to both English language development as well as to continued home language development in order to facilitate both the cognitive, social, and linguistic benefits of early bilingualism as well as to promote school readiness goals.

To summarize, learning a second language during the preschool years--- typically English in the United States-- should not come at the expense of continued first language development. Research highlights the importance of sufficient

exposure to both languages in order to reap the benefits of bilingualism.

Frequently, in the United States, educators voice the concern that spending time in any language other than English during the preschool years may delay the acquisition of English or interfere with school achievement (Espinosa, 2013). Teachers and school administrators often think that they can accelerate English acquisition by early English immersion. However, many studies have shown that DLLs can successfully learn two languages, and do not need to give up their home language in order to learn English if that is the goal of the preschool program. There are also promising approaches to promoting English acquisition while also supporting home language maintenance that can be implemented by all ECE teachers (Espinosa, 2015). It is possible for all ECE staff to enhance the language acquisition of dual language learners by adapting instruction to include use of the home language and employing specific strategies that promote English language development. Some of these strategies include active engagement of family and community members to present and support lessons in the home language, making sure there are materials in each language as well as incorporating stories and content that is culturally familiar to the children (Conboy, 2013; Espinosa, 2015).

In addition to the benefits of knowing two (or more) languages, there are other reasons for supporting DLLs' home language development. Children who become proficient in more than one language experience the advantages described above as well as certain social and economic advantages well into adulthood. In addition, there are developmental risks associated with loss of a child's first language. Children who do not develop and maintain proficiency in their home language may lose their ability to communicate with parents and family members and risk becoming estranged from their cultural and linguistic heritage. Dual

language learners who are proficient in their first language are able "to establish a strong cultural identity, to develop and sustain strong ties with their immediate and extended families, and thrive in a global multilingual world" (Espinosa, 2006, p. 2). Thus, there are compelling reasons to actively support the development of young DLLs' first language as well as the acquisition of English.

In the United States the approach of systematically promoting the acquisition of English during the early years while also attending to the maintenance of a child's first language is often described as an *additive* approach to second language acquisition. In this approach English is not thought of as a replacement of the home language, but as an addition to a primary language that is important for DLLs overall development and future success. The research described above, both the cognitive neuroscience and the educational research, fully support an additive approach—almost all young children are capable of *adding* a second or third language during the preschool years and this multilingual ability confers long-term cognitive, cultural, and economic advantages. Finally, it is becoming increasingly clear that the first six years of life are an ideal time for children to acquire a second language, as it is the critical period for language development; it is the period when all young children are actively attending to the sounds, grammar, and meanings of language. Thus, there are many compelling reasons to give young DLLs opportunities to develop high levels of proficiency in both of their languages because the advantages are significant and life-long.

### **Current Policies and Practices for Young Dual Language Learners in the United States**

In the United States the important elements of high quality early childhood programs that serve monolingual English speakers have been extensively studied over the past 30 years. Findings from this extensive research conducted

with monolingual children have formed the basis for state early learning standards across the United States, assessment tools, as well as classroom quality monitoring instruments and procedures (Barnett, Yarosz, Thomas, Jung, & Blanco, 2007; Camilli, Vargas, Ryan, & Barnett, 2010; Dickinson & Neuman, 2006; Dickinson, 2011; Espinosa, 2003; Mikulski, 2011). In general, in the United States, research has established the important elements of high quality early childhood programs that serve monolingual English speakers; we know how to reliably assess and monitor these features; and we can make connections between quality features to later school performance.

Unfortunately, there is not a comparable research base when it comes to ECE programs that serve cultural and linguistic minorities in the United States. Most of the influential studies of ECE efficacy in the United States have either not included DLLs as a distinct subgroup or administered language and cognitive assessments exclusively in English. Consequently, we are in the early stages of compiling a robust research base that can offer guidance on how to design early childhood services that promote academic achievement in the short and long-term as well as provide culturally and linguistically responsive and effective education for DLLs. The scarcity of research evidence in the United States is even greater when focusing on care for infants and toddlers who are DLLs.

In the United States there are several different language approaches in ECE settings. In English-only programs, DLL students are expected to learn English from the beginning and any support for the child's home language is intended to merely help the child cope with an all-English classroom. In these classrooms English is used almost exclusively and most print is also in English. The child may have some English as a second language (ESL) instruction, individually or in small groups, to promote rapid acquisition of enough English to

comprehend English instruction (Espinosa, 2015). In some English preschool classrooms, DLL children are offered home language support by support staff or through translations, multi-lingual materials, and active family involvement practices. However, the primary goal of these programs is the rapid acquisition of English and the attainment of learning expectations in English. In practice, there is much variability in how much support and attention is paid to the home language in English dominant preschool programs (Chang et al., 2007).

Bilingual programs can be transitional, maintenance of home language, one-way or two-way, dual language bilingual programs. In all bilingual classrooms instruction is divided between English and the child's home language. The goals in a transitional program focus on using the home language to "bridge" into English while in a two-way dual language program a portion of the students are native English-speakers and all participants are expected to become bilingual and bi-literate in a second language, for DLL students it is English and for English-speaking students it is usually Spanish. One-way developmental bilingual programs typically include only DLL students although they share the goals of bilingualism and bi-literacy for the DLL participants.

Bilingual programs also differ in the amount of classroom time spent using English and the non-English language for instructional purposes. The two most common approaches are 90-10 and 50-50. In 90-10 models, students receive 90% of their instruction in a language other than English (usually Spanish) and 10% of their instruction in English initially while gradually increasing the amount of English over several years. In 50-50 models the classroom time is divided roughly equally between English and the non-English language throughout the duration of the program (CAL, 2003).

In the United States it is difficult to determine with any precision the most common type of program model available for

linguistically diverse children during the early childhood years. While Head Start does document the racial/ethnic and linguistic status of its young enrollees, most states do not systematically record this information. Two recent studies on the early care experiences and developmental outcomes of dual language learners that both used the nationally representative Early Childhood Longitudinal Study-Birth Cohort (ECLS-B) data set (Winsler, et al., 2014; Espinosa, et al., 2013) have shed some light on the early language exposure of DLLs. Preschool DLLs who attend non-parental ECE are unlikely to hear their home language used in child care settings—particularly those DLLs who attend center-based ECE programs. DLL families in general and those with mothers with more education are more likely to rely on the informality of relative care as opposed to center-based care; young DLLs are more likely to experience interactions in their home language in this type of ECE setting. This cultural and linguistic consistency may be one reason DLL mothers with more education more frequently choose relative care for their young children.

There are several published studies of carefully implemented dual language programs and a growing literature on English language preschool approaches for DLL children (Barnett et al., 2007; Espinosa, 2013). However, when one reviews the state early childhood standards and the state and national preschool program evaluations, it appears that most programs do not implement a systematic approach to English acquisition with careful attention to home language proficiency and development (Espinosa, et al., under review; Gormley et al., 2005; Chang, et al., 2007; Head Start FACES, 2003; Early Head Start Evaluation, 2002; Rodriguez et al., 1995; Winsler et al., 1999). In fact as of 2012, only nine states (AZ, CA, ID, LA, ME, MA, MS, NJ, NY) address best practices for dual language learners in some detail in their guidelines for early childhood education while

20 states mention DLLs in some of their developmental domains and seven states do not mention DLLs at all. In many states, ECE educators are encouraged to respect and incorporate the diversity of families' languages and cultures into the learning environment as the children make progress in acquiring English. However, almost no states provide detailed guidance on when to introduce English, how much English, by whom and for what purposes. Further, few states provide detailed guidance to ECE teachers on how to support home language while they are promoting English language development or offer professional development on specific instructional and interaction strategies.

The decision of which type of program to offer DLL children can be influenced by state regulations, (e.g., Proposition 227 in California which severely limits bilingual programs in K-12), federal regulations, (e.g., Head Start Child Development and Early Learning Framework), program and staff understanding of dual language development, program capacity to support multiple languages, and local parent/community values and priorities. It is clear that almost all ECE state and federal policies and guidelines promote approaches that support both English acquisition and home language development as fundamental to school readiness. What is less clear is the extent to which local ECE programs are able to implement practices that give equal time, attention, and value to each language.

### **Family Engagement Approaches**

Given the diversity of linguistic and cultural backgrounds of U.S. families combined with the realities of a monolingual ECE workforce and some restrictive language policies, many researchers and policy experts are recommending stronger family engagement practices as a way to support home language maintenance. Families can play a critical role in preserving their home language and culture

(Schwartz, 2010). Strong connections between DLL families and ECE programs have also been shown to promote positive academic achievement (Halgunseth, Jia, & Barbarin, 2013). While immigrant and non-English speaking families face many obstacles in forming successful partnerships with schools, there is emerging research on specific strategies that foster mutually respectful relationships between DLL families and schools.

It is essential that all families be recognized for their strengths and their unique contributions to their children's learning and achievement. Family strengths include their home language(s), their cultural background as well as their personal beliefs, values, and talents. As U.S. ECE programs learn to recognize, embrace, and incorporate these strengths, the goals of early bilingualism and biliteracy can be shared between families and educators. When families are viewed as valuable collaborators and sources of knowledge, strong partnerships can be established. Bilingual families are a great and largely untapped resource in the United States for promoting DLLs' development and improved academic success.

## Summary and Conclusions

In conclusion, we have current and compelling scientific evidence in the United States that young DLL children are quite capable of learning multiple languages during the early childhood years. In fact, they benefit socially, linguistically and cognitively from the language processing skills inherent in acquiring two or more languages. While all children in the United States need to learn English in order to be prepared for rigorous K-12 schooling, it should not supplant or replace ongoing development of the child's home language. There is an urgent need in the United States to provide all ECE providers with professional development on the characteristics of young DLL children, their developmental needs, successful family engagement strategies, and most importantly,

specific instructional and assessment strategies that they can implement across ECE settings.

Based on the research reviewed above and these conclusions, the implications for United States' educational policy at the federal, state, and local level are clear and have been summarized well by Castro & Espinosa (2014) and Espinosa (2013):

1) **ECE programs in the United States should intentionally and explicitly promote both the English language development (ELD) of young DLLs and also support continued development of DLLs' home language.**

All young children are capable of learning more than one language if they receive sufficient high quality input in each language; compelling research has shown that becoming bilingual has long-term academic, linguistic, cognitive, social, cultural, and economic benefits—it is an asset.

2) **All state early learning and development standards (ELDS) should be reviewed** to determine if they are appropriate for DLLs. If necessary, state ELDS should be revised to reflect the current research on the development and learning of young dual language learners and eliminate any linguistic or cultural bias to ensure all ECE standards are fair, unbiased, and appropriate for young DLLs.

3) **ALL ECE programs and professional development systems need to systematically integrate the topics of meeting the instructional, academic, social-emotional, and linguistic needs of young DLLs.** In addition, programs will need support in meeting the needs of DLLs with special needs and designing appropriate assessment and accountability systems.

4) **Explicit policies that support bilingualism for all children whenever possible will promote a globally**

**prepared student population should be adopted.** Dual language programs have proven to be an effective language approach for DLL children while also providing many benefits to native English speakers.

5) **Early childhood programs should adopt family engagement practices** that recognize the unique linguistic and cultural strengths of dual language families and learn specific school-home strategies that foster important bilingual and biliteracy goals.

6) **Young DLLs should be assessed in each of their languages** because assessing the DLL child only in English will underestimate the child's knowledge, linguistic competence and true abilities. This may require investment in recruiting and retaining both a workforce and assessment specialists who are qualified to conduct bilingual assessments. In addition, linguistically, culturally, and developmentally appropriate assessment tools for young DLLs across all domains of development will need to be developed.

## Notes

1. Education in the United States is funded and regulated primarily by state departments of education. The federal government has a limited role in setting standards or providing funding for prekindergarten programs, therefore each state early care and education system is somewhat unique.

## References

- Barac, R., Bialystok, E., Castro D., & Sanchez, M. (2014). *The cognitive development of young dual language learners: A critical review*. Center for Early Care and Education Research-Dual Language Learners, Research Brief #11, Available online at: <http://cecerdll.fpg.unc.edu/sites/cecerdll.fpg.unc.edu/files/imce/documents/3015-Research-Brief-11.pdf>
- Barnett, W. S., D. J. Yarosz, J. Thomas, K. Jung, & Blanco, D. 2007. Two-Way and Monolingual Immersion in Preschool Education: An Experimental Comparison. *Early Childhood Research Quarterly* 22 (3), 277–93.

- Byers-Heinlein, K., Burns, T., & Werker, J. F. (2010). The roots of bilingualism in newborns. *Psychological Science*, 21, 343–348.
- Camilli, G., S. Vargas, S. Ryan, & Barnett, W. S.. 2010. Meta-Analysis of the Effects of Early Education Interventions on Cognitive and Social Development. *Teachers College Record* 112 (3), 579–620.
- Castro, D., Garcia, E., Espinosa, L., Genesee, F., Gillanders, C., Hammer, C., LaForett, D., Peisner-Feinberg, E., & Tabors, P. (Under review). *Conceptual framework for the study of dual language learners' development*. Center for Early Care and Education Research-Dual Language learners (CECER-DLL).
- Castro, D. & Espinosa, L.M., (2014, January). Developmental Characteristics of Young Dual Language Learners: Implications for Policy and Practice In Infant and Toddler Care. *Zero to Three*.
- Chang, F., G. Crawford, D. Early, D. Bryant, C. Howes, M. Burchinal, O. Barbarin, R. Clifford, & Pianta, R.. 2007. Spanish Speaking Children's Social and Language Development in Pre-Kindergarten Classrooms. *Early Education and Development* 18 (2), 243–69.
- Conboy, B. (2013). Neuroscience Research: How Experience with One or Multiple Languages Affects the Developing Brain. In *California's Best Practices for Young Dual Language Learners: Research Overview Papers*, Child Development Division, California Department of Education (CDE). Available online at <http://www.cde.ca.gov/sp/cd/ce/documents/dllresearchpapers.pdf>
- Conboy, B. T., & Kuhl, P. K. 2011. Impact of Second-Language Experience in Infancy: Brain Measures of First- and Second-Language Speech Perception. *Developmental Science* 14, 242–48.
- Dickinson, D.K. & Neuman, S. (Eds.), (2006). *Handbook of early literacy research: Vol II*. New York: Guilford Publications.
- Dickinson, D.K. (2011). Teachers' language practices and academic outcomes of preschool children. *Science*, 333, 964 – 967.
- Espinosa, L. (2003). Preschool program quality: What it is and why it matters. National Institute of Early Education Research Policy Brief, 1(1), 1-12.
- Espinosa, L. (2006). The Social, Cultural, and Linguistic Components of School Readiness in Young Latino Children. In L. M. Beaulieu (Ed.), *The Social-emotional Development of Young Children from Diverse Backgrounds*. Baltimore, MD: National Black Child Development Institute Press.
- Espinosa, L. (2007). Curriculum and assessment considerations for young children from culturally, linguistically, and economically diverse backgrounds. *Psychology in the Schools* 423 (8), 837-854.
- Espinosa, L. (2010; 2015 2nd edition). *Getting it Right for Young Children from Diverse Backgrounds*:

- Applying Research to Improve Practice*. Upper Saddle River, NJ: Pearson.
- Espinosa, L. M., Burchinal, M., Winsler, A., Tien, H., Castro, D. C., & Peisner-Feinberg, E. (2013). Child care experiences among dual language learners in the U.S.: Analyses of the Early Childhood Longitudinal Survey-Birth Cohort. San Francisco, CA: Paper presented as part of the symposium Dual Language Learners in Early Care and Education, American Education Research Association Annual Meeting.
- Espinosa, (2013, August). *Challenging Common Myths About Dual Language Learners: An Update to the Seminal 2008 Report*. Foundation for Child Development, Policy Brief No. Ten. Available at, <http://fcd-us.org/resources/prek-3rd-challenging-common-myths-about-dual-language-learners-update-seminal-2008-report?destination=resources%2Fsearch%3Ftopic%3D3%26authors%3DEspinosa%26keywords%3D%26subtopic%3D0>
- Garcia, E.E. & Frede, E. (Eds; 2010) *Young English-language learners: Current research and emerging directions for practice and policy*. New York: Teacher's College Press.
- Garcia E.E. & Nañez, J., (2011). Bilingualism and cognition: Informing research, pedagogy, and policy. (pp. 57-77). Washington, DC, US: American Psychological Association, vi, 242 Available online at, <http://dx.doi.org/10.1037/12324-003>
- Gormley, W., & Phillips, D. (2005). The Effects of Universal Pre-K in Oklahoma: Research Highlights and Policy Implications. *The Policy Studies Journal* 33, 65–82.
- Halgunseth, L.,Jia, G., & Barbarin, O. (2013). *Family Engagement in Early Childhood Programs: Serving Families of Dual Language Learners*. In *California's Best Practices for Young Dual Language Learners: Research Overview Papers*, Child Development Division, California Department of Education (CDE). Available online at <http://www.cde.ca.gov/sp/cd/ce/documents/dllresearchpapers.pdf>
- Hernandez, D.J., Denton, N.A. & McCartney, S.E. (2009). Children in Immigrant Families: Looking to America's Future. *Social Policy Report* 22 (3), 3–23.
- Hernandez, D. J., & Napeirala, J. S. (2012). Children in immigrant families: Essential to America's future. FCD Child and Youth Well-Being Index (CWI) Policy Brief. New York, NY: Foundation for Child Development.
- Hoff, E., Core, C., Place, S., Rumiche, R., Señor, M., & Parra, M. (2012). Dual language exposure and early bilingual development. *Journal of Child Language*, 39, 1-27.
- Kuhl, P., Stevens, E., Hayashi, A., Deguchi, T., Kiritani, S., & Iverson, P. (2006). Infants show a facilitation effect for native language phonetic perception between 6 and 12 months. *Developmental Science*, 9, F13-F21.
- Magnuson, K.A., & Waldfogel, J. (2005). Early childhood care and education: Effects on ethnic and racial gaps in school readiness. *The Future of Children*, 15(1), 169-196. doi:10.1353/foc.2005.0005
- Marchman, V. A., Martinez-Sussmann, C., & Dale, P. S. (2004). The language-specific nature of grammatical development: Evidence from bilingual language learners. *Developmental Science*, 7, 212–224.
- Migration Policy Institute. (June 2014). Critical choices in post-recession California: Investing in the educational and career success of immigrant youth. Available online at <http://www.migrationpolicy.org/research/critical-choices-post-recession-california-educational-career-success-immigrant-youth>
- Mistry, R. S., Biesanz, J., Chien, N., Howes, C., & Benner, A. D. (2008). Socioeconomic status, parental investments, and the cognitive and behavioral outcomes of low-income children from immigrant and native households. *Early Childhood Research Quarterly*, 23, 193-212.
- National Institute for Early Education Research. (2012). *The State of Preschool 2012*. Rutgers: NIEER.
- Office of Head Start (2011). Head Start Program Facts. Fiscal Year 2011. Washington, DC: Administration for Children and Families, U. S. Department of Health and Human Services. <http://eclkc.ohs.acf.hhs.gov/hslc/mr/factsheets/docs/hs-program-fact-sheet-2011-final.pdf>.
- Pearson, B. Z., Fernandez, S. C., Lewedeg, V., & Oller, D. K. (1997). The relation of input factors to lexical learning by bilingual infants. *Applied Psycholinguistics*, 18, 41–58.
- Perreira, K., Chapman, M., G. Stein. (2006). Becoming an American Parent: Overcoming Challenges and Finding Strength in a New Immigrant Latino Community. *Journal of Family Issues*, 27(10), 1383-1414.
- Petitto, L. A., M. S. Berens, I. Kovelman, M. H. Dubins, L. J. Williams, and M. Shalinsky. 2011. The 'Perceptual Wedge Hypothesis' as the Basis for Bilingual Babies' Phonetic Processing Advantage: New Insights From fNIRS Brain Imaging. *Brain Language* 121 (2): 130–43. doi:10.1016/j.bandl.2011.05.003.
- Rodríguez, J. L., R. M. Díaz, D. Duran, & Espinosa, L. 1995. The Impact of Bilingual Preschool Education on the Language Development of Spanish-Speaking Children. *Early Childhood Research Quarterly* 10 (4), 475-90.
- Rumberger, R. W., and I. Tran. 2006. *Preschool Participation and the Cognitive and Social Development of Language-Minority Students*. CSE Technical Report 674. Los Angeles: CRESST, UCLA.
- Sandhofer, C. & Uchikoshi, Y. (2013). The Relationship between Dual Language Development and Development of Cognition, Mathematics, Social-emotional Development, and Related Domains. In

*California's Best Practices for Young Dual Language Learners: Research Overview Papers*, Child Development Division, California Department of Education (CDE). Available online at <http://www.cde.ca.gov/sp/cd/ce/documents/dllresearchpapers.pdf>

- Schmidt, S., Matthews, H., Smith, S. & Robbins, T. (2013). *Investing in Young Children: A Fact Sheet on Early Care and Education Participation, Access, and Quality*. New York: NCCP.
- Schwartz, M. 2010. Family Language Policy: Core Issues of an Emerging Field. *Applied Linguistics Review* 1, 171–92. doi: 10.1515/9783110222654.171.
- Winsler, A., R. M. Díaz, L. Espinosa, and J. L. Rodriguez. 1999. When Learning a Second Language Does Not Mean Losing the First: Bilingual Language Development in Low- Income, Spanish-Speaking Children Attending Bilingual Preschool. *Child Development* 70 (2), 349–62.
- Winsler, A., Burchinal, M. R., Tien, H., Peisner-Feinberg, E., Espinosa, L., Castro, D. C., Laforett, D. R., Kim, Y. K. & De Feyter, J. J. (2014). Early Developmental

Skills of Diverse Dual Language Learners: The Roles of Home Language Use, Cultural Heritage, Maternal Immigration, and Sociodemographics in the ECLS-B.

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