



Dual Language Learners Research Informing Policy

Dina C. Castro
Eugene E. García
Amy M. Markos

Center for
Early Care and Education Research
Dual Language Learners

Suggested citation

Castro, D. C., García, E. E., & Markos, A. M. (2013). *Dual language learners: Research informing policy*. Chapel Hill: The University of North Carolina, Frank Porter Graham Child Development Institute, Center for Early Care and Education—Dual Language Learners.

CECER-DLL is supported by Grant# 90YR0041 from the Office of Planning, Research and Evaluation within the Administration for Children and Families, U.S. Department of Health and Human Services. The contents of this brief are solely the responsibility of the authors and do not necessarily represent the official views of the Office of Planning, Research and Evaluation, the Administration for Children and Families, or the U.S. Department of Health and Human Services.

The initiative targets children who are dual language learners (birth–age 5) and their families across settings such as: early care and education center-based programs, home-based and family child care providers, and Head Start and Early Head Start Programs

Additional Resources: Visit <http://cecerdll.fpg.unc.edu> for related references, papers and briefs.



UNC
FRANK PORTER GRAHAM
CHILD DEVELOPMENT INSTITUTE



Introduction

When federal, state and local public and private resources are “invested” to enhance our over-all human services, research is often called upon to serve as a foundation for structuring those fiscal and human “investments.” Significantly, we realize that research in and of itself does not directly inform policy. Informing policy requires an important and separate analysis of the conceptual foundation(s), empirical evidence, and specific relevance to how, when and under what circumstances research is relevant to policy (Henry and Mark, 2003).

We applied these understandings for addressing the relevant research that can inform policy and practice related to the major population addressed in this paper—Dual Language Learners (DLLs): children 0–5 years of age who are exposed to and learning through two distinct languages during a critical period of development. Our effort here is to highlight the work of the national Center for Early Care and Early Education Research-Dual Language Learners (CECER-DLL) at The University of North Carolina at Chapel Hill, an initiative funded by the Administration for Children and Families in the U.S. Department of Health and Human Services. Over the past four years, research related work of the CECER-DLL has produced several key conceptual and empirical research products identifying relevant evi-

dence-based implications for the current federal, state and local policy climate and circumstances. The intent of this paper is to provide an analysis of the Center’s research efforts, including their potential relevance to some general areas of policies along with some very specific recommendations related to federal, state and local policy agendas.

Given that the population of children growing up with two languages who are entering school in the United States (U. S.) has grown by 40% in the last decade (Garcia & Jensen, 2009) and that there continues to be no appreciable reduction in the achievement gap for these children as compared to their monolingual, English-speaking peers (Wiley, Lee, & Rumberger, 2009; Gandara and Hopkins, 2010), early care and learning environments for children from linguistically and culturally diverse families continues to be a major concern of all human service systems serving this population. While the education of these children and students¹ in the U.S. is a continuous story of inequities and unrealized poten-

¹Throughout various contexts such as research, litigation, legislation, and practice, a range of terms has been used to describe children who come to school with a primary language other than English. Limited English proficient (LEP) is the term most commonly found in legislation and litigation to refer to children whose primary language is a language other than English. English language learner, bilingual learner, English learner are terms more commonly found in the research literature and at times in educational settings. Further distinctions can be made based on ethnicity (Latino, Asian, etc.); primary language (Spanish, Mandarin, Vietnamese, etc.); nation of origin and other categories.

tials (Gandara & Hopkins, 2010; García & Frede, 2010), it need not be in the future. The current challenge is to improve overall developmental and learning outcomes, and as such, policies must focus on understanding and marshaling the evolving research base to inform policy and practice.

Key policy “players” in the early care and education of these children have included the federal courts, the U.S. Congress, state related agencies and state level legislative actions (Wiese & García, 2001; Garcia, Arias, Harris Murray & Serna, 2010). Still, while the education of these young children from age 5 (Kindergarten) and age 10 (grade 3) has drawn significant policy attention, their *early* care and learning environments (ages birth to five) have not (García & Frede, 2010). In this paper, we describe the historical trends of both federal and state policy, focusing on the emerging research base related to DLLs and its role in informing policy and related practice in early care and education environments. We outline the major sections of this paper below:

In the first section of this paper we provide the reader with a foundational understating about DLLs. To do so, we present a conceptual framework that will lead to better understandings of the development of DLLs and research on DLLs; findings from current research on DLLs’ language and literacy; and the cognitive benefits of being bilingual. Together, these three areas serve as the foundation for improved understanding of how DLLs develop and learn. They also shed light on how research might best highlight federal and/or state/local policy pathways that influence DLL initiatives. In the next section of the paper we present an overview of the current policy system environment surrounding early care and education (ECE) settings. In this section we highlight two federal legislative efforts related to early learning: Head Start and the *Elementary and Secondary Education Act*, discussing the challenges that arise from the current disconnects between these separate pre-K and K–12 governing efforts. In the third section of

the paper we offer suggestions for how to better coordinate policies and practices aimed at supporting DLLs between and across early care education and K–12 settings. In the last section, we outline final suggestions for policy makers at the federal, state, and local level aimed at bettering research and practice efforts related to DLLs.

Towards A Foundational Understanding of DLLs

Currently, the majority of research on DLL development utilizes methodologies that compare DLLs’ development and learning outcomes to that of monolingual, majority language speaking children (Hammer et al. in press). In this vein, research aims to explain the low performance of DLLs, when compared to monolingual majority language populations, by focusing on what these children and their families are lacking. However, we assert that relying solely on a comparison methodology can lead to misinterpretations and biased conclusions about DLLs; we argue that, along with the current research and prevalent comparison methodology, understanding the development and learning of DLLs must focus on the factors and experiences specific to young children developing two or more languages in ECE settings. A focus on the particular circumstances of DLL experiences may lead to the identification of variables or constructs that would not otherwise have been examined/understood through a comparison methodology. In order to better understand and ultimately better support young DLLs, researchers and practitioners must consider the broad range of mutually defining features that characterize DLLs’ development and learning. Attention must also be paid to the recent research on DLLs’ language, literacy, cognitive, and social-emotional development. Finally, to understand DLLs we must also consider the cognitive and social benefits that can come from growing up bilingual.

A New Conceptual Framework for Understanding the Development of DLLs

Recently, Castro and colleagues (in press) advanced a conceptual framework for understanding the development of children growing up as DLLs, which integrates



the varied features of development within and outside of early care and education settings specific to the DLL experience. The framework is founded on socio-cultural and historical perspectives. As such it emphasizes that an individual's development cannot be understood isolated from the social, cultural, and historical contexts in which it occurs (Vygotsky, 1978) and that children approach developmental tasks in particular situations based on the cultural practices in which they have previously participated (Rogoff, 2003). This perspective is particularly relevant for understanding the development of DLLs because these children's experiences differ in many ways from those of young monolingual children.

We present this conceptual framework as a critical foundation for policy generation, believing it is helpful for determining factors that need to be taken into consideration when designing policies in a comprehensive manner that best address DLLs. It moves policy away from assumptions and expectations about developmental competencies rooted in monolingual perspectives and mainstream cultural practices. Most importantly, it challenges the notion that differences in development (between DLLs and their monolingual peers) equate to deficiencies (Genesee, 2010). The framework includes a constellation of interrelated features that may facilitate or impede DLLs' optimal development across society, community, and family contexts; individual child characteristics; and early care and learning contexts. While

most research and practice related to DLLs in ECE settings takes into account features related to ECE contexts and child characteristics, we appreciate that the framework forwarded by Castro and colleagues broadens the view of development beyond the ECE classroom.

With regard to features of development included in the societal context, Castro and colleagues note that understanding DLL development must include attention to social and educational policies and the immigration and integration history of a DLLs' family. Social policies, such as anti-immigrant policies, can have detrimental effects on DLL development, negatively shaping the way young children form their own psychological and social identities (Chaudry, Capps, Pedroza, Castañeda, Santos & Scott, 2010; Yoshikawa, 2011). They advise that researchers critically examine educational policies, even those that promote high quality early care and education, noting that many times such initiatives do not include explicit provisions to address the cultural, linguistic, and educational needs of DLLs. Also within the societal context, whether the DLL is a child of an immigrant or native born parent (CECER-DLL, 2011c), and the extent to which the DLL's family has integrated into mainstream society (Wong-Fillmore, 1991) are both associated with DLLs' development and learning (Castro et al. in press).

Features included in the community context are more immediate to DLLs' daily experiences. For example, one feature highlighted in the conceptual framework is the presence and valuing of different languages in a community as observed in spaces where community members come together and interact (Urzúa & Gómez, 2008). It is within these community spaces that DLLs and their families have more or fewer opportunities to hear different languages, to interact with speakers of different languages, and to observe social and academic uses of language and literacy.

Opportunities for diverse and frequent linguistic interactions increase the likelihood that DLLs will become bilingual, while limited opportunities to use a language within their community can hinder a DLL's development in that language (Castro, et al., in press). Along with language use, values related to bilingualism and multiculturalism and the feelings of acceptance are features of development included in the community context.

The development of DLLs' cannot be understood without consideration of features within the family context. While family demographics are usually relied on to discuss family level influences on development, Castro and colleagues emphasize that overreliance on demographic characteristics may be insufficient for describing how family features influence development. One example they give is how DLLs are more likely to live in homes with grandparents, other relatives, or non-relatives, than their monolingual English-speaking peers (Blank, 1998). While such living environments may initially be viewed as overcrowded (and a detriment to develop-

ment), upon further investigation, the more people living in the home may be found to provide DLLs with additional learning opportunities for enriched language and other cultural experiences (Castro et al., in press). Beyond family demographics, other features in the family context include culture specific parenting practices, beliefs, and goals, as well as the language and literacy practices promoted in the home in both the home language and English.

The conceptual framework (Castro et al., in press) provides guidance for policy makers and advocates by encouraging the consideration of the complexity of features, both within and outside of early education settings, to fully understand the development and learning of DLLs. In concert with the evidence that educational achievement patterns of virtually all racial/ethnic groups are established during the early years of school (and change little thereafter)

and the significant population growth of DLLs (García, Jensen, Miller & Huerta, 2005), is critical to understand the complexities surrounding DLL development and learning in ECE settings, including the features that characterize development in the society, community and family contexts. Without attention to these interrelated features of the DLL experience, the school readiness and later achievement gaps between DLLs and monolingual English speakers will continue to grow.

Language and Literacy Development

Partnered with the conceptual framework presented above, important findings from research on DLLs' language, literacy, cognitive and social-emotional devel-

Opportunities for diverse and frequent linguistic interactions increase the likelihood that DLLs will become bilingual, while limited opportunities to use a language within their community can hinder a DLL's development in that language.

opment add to a foundational understanding of DLLs and policies that may relate to their circumstances. Research on DLLs' language and literacy development is relatively new in comparison to the research that exists on the language and literacy development of monolingual language users. However, based on two recent, comprehensive reviews of the literature there are some things we know about DLLs' language and literacy development. A review conducted by the CECER-DLL (Hammer et al., in press) note four key findings from their review of 131 peer-reviewed articles. First, through studies investigating phonology, grammar, vocabulary and pragmatics, strong evidence indicates DLLs have two separate language systems from very early in life; the two languages influence each other; and DLLs are not negatively impacted from exposure to and use of two languages during the early developmental years—in fact many advantages are associated with bilingualism. Second, developments of DLLs' skill levels in the two languages vary depending on when they were exposed to each language and opportunities to use both languages. Third, when compared to monolinguals, DLLs' language and literacy development differs in some important ways. With regard to phonological abilities, as infants DLLs' are behind monolinguals, but then make significant progress during the preschool years and eventually, reach the same skill level as their monolingual English speaking peers during the early grades. Also, while DLLs' vocabularies in their individual languages are smaller than monolinguals', when conceptual vocabularies in both languages are combined DLLs' vocabularies are often equal to that of monolinguals. Finally, in relation to overall literacy development, there is evidence to suggest that DLLs enter preschool with literacy skills in English that are lower than those of monolinguals. Hammer and colleagues end their review by noting that there is still much to learn about the language and literacy development of DLLs and that more research is needed on the specific factors that influence dual language development (Hammer et al., in press).

The second review, by Dixon and colleagues (2012), focused on literature surrounding second language acquisition. Their review synthesized information from 71 empirical studies across four bodies of work: foreign language education, child language research, sociocultural studies, and psycholinguistics to highlight an integrated understanding across typically isolated perspectives on the optimal conditions for second language acquisition. While this review focused on second language acquisition more broadly (studies included participants of all ages, infants to adults), there are implications from the review that can inform our understandings about DLLs' language and literacy development. First, findings from the review suggest that strong home literacy practices in a learner's first language (L1) and strong L1 skills are characteristics of a successful second language (L2) acquisition experience. This is consistent with one of the key findings stated above, that the development of two language systems does not hinder DLL development, but rather, that a learner's language and literacy in their first language can strengthen their language development in a second language. Dixon and colleagues also report that effective teachers of English language learners are proficient in their students' first language. Transferred to the ECE setting, when developing children's dual language and literacy abilities, effective teachers and caregivers know and use all the languages of their young learners. Lastly, the review found that younger learners typically take longer to become proficient in a second language. This finding is pertinent to ECE contexts (and correlates with the review by Hammer and colleagues) as it shows that while DLLs are developing two languages from birth to age 5, they may need additional time to reach proficiency in their two languages.

Even though at the start of kindergarten, DLLs may appear behind their monolingual English-speaking peers, with time and opportunities for exposure and use of both languages, DLLs will acquire proficiency in multiple languages; they will eventually achieve English lan-

guage and literacy proficiency as well as the benefits of becoming bilingual. Problems with DLLs' development arise when they are not provided sufficient language learning opportunities and support for both languages. When ECE classrooms place emphasis solely on English development, DLLs' development in their first language can decline and their abilities in English continue to fall behind those of their English-speaking peers. Unfortunately, the disconnect between ECE policies and practices and those typically used in K–12 classrooms often means that once they enter kindergarten, DLLs' accomplishments and abilities in both of their languages are not identified and built upon; they are not provided with the time and support they need to reach their optimal development in either language (Wiley, et al., 2009).

Are There Benefits of Being Bilingual in Early Childhood?

Given the specific issues related to young children developing two languages during the early years, attention to the potential positive or negative cognitive and social impacts of bilingualism and the implications for instruction has historically been a critical part of this discussion. From a research perspective, it has become evident that the cognitive consequences associated with bilingual development need to be considered as ECE instruction is designed and implemented. While all DLLs in early learning contexts do not end up fully bilingual or biliterate, we present the research on the cognitive and social benefits of bilingualism to stress that when ECE settings support bilingualism, DLLs experience important benefits.

For example, findings from a review conducted by the CECER-DLL indicate that across multiple research studies young bilinguals have shown an enhanced ability to control their attention while engaged in nonverbal and linguistics tasks, such as mathematical problem solving and use of vocabulary with meaning (Barac & Bialystok, 2013). In doing so they are more capable of attending or controlling their attention to selective

aspects of their environment (to focus on important and critical aspects of their surroundings that assist in making meaning), an inherent task in using two languages to communicate effectively. From an instructional design perspective, using two languages during interactions and instructional activities should be part of ECE design for DLLs. In addition, access to working memory seems to be enhanced for bilinguals. The ability to inhibit one language while using the other increases the efficiency of working memory indicating that rigorous implementation of instructional curriculum that draws on working memory can be quite beneficial for DLLs. For example, DLLs, in their communication activity, must determine what language and code within a language is needed to achieve a particular communication result. In some cases DLLs may even switch between their two languages, identified as “code-switching,” to achieve more meaningful communication outcomes. Later in their educational careers in instructional settings that require the use of particular language structures, such as the “language” of Science, versus the “language” of Social Studies, bilinguals will have an advantage in understanding the existence and the use of such differences.

Bilinguals also show advanced abilities to problem solve. This is particularly the case in executive control functions like planning, rule acquisition, abstract thinking and cognitive flexibility. Since bilinguals must choose between two languages and all the complexities related to the use of those languages, these executive functions are enhanced. Similarly, bilinguals have been identified with advantageous learning characteristics related to creative and divergent thinking and symbolic reasoning. Communicating in two languages often requires switching within those languages and the cognitive structures that underlie those languages. This may be related to the symbolic reasoning advantages for bilinguals. Instructionally, the use of various symbolic systems in mathematics, science and other content areas could be emphasized so as to leverage these advantages.

In short, developmental science in its study of bilingualism in DLLs suggests strongly that exposure to and acquisition of two languages in the early years has limited, if any, detrimental effects and can have important positive effects. Those positive effects can come in areas of metalinguistic awareness, cognitive flexibility and enhanced executive functions (Bialystok et al. 2005; Barac & Bialystok, 2013).

The Current Policy System Environment Affecting DLLs

It is important to admit at the outset of a discussion of research informing policy, that policies affecting DLLs, and all young children in the U.S., reside in a highly fragmented policy system environment (García & Frede, 2010). Therefore, a primary reason why early care, prekindergarten (pre-K) and K–12 teachers and administrators do not collaborate closely is because they have different funding, regulatory, and monitoring systems (Shultz, in press). Policies and funding for early care and education services emanate from state pre-K program agencies (most, but not all are state departments of education), the Department of Health and Human Service’s Office of Head Start & Office of Child Care, and Department of Education’s Office of Special Education Programs (OSEP). While policies for K–12 education are generated by the U.S. Congress, state legislatures, local school boards and charter schools. Other structural divides between early care, pre-K and K–12 educators abound (e.g., K–12 schooling is governed by local education agencies, whereas services for children prior to Kindergarten are not governed through one unified structure).

This bifurcated fiscal, policy and governance system has led to separate systems for serving DLLs (children ages 0–5 in ECE settings) and English language learners in K–12 classrooms. First, while public schools enroll sizeable numbers of 3- and 4-year-olds, the majority of preschool-aged children attend a diverse mix of private, for-profit and non-profit community-based agencies.

These service areas do not always correspond to the boundaries of local elementary schools. This means that most elementary schools enroll Kindergarten students from a broad and shifting constellation of early education providers. Simultaneously, many large early education agencies are preparing children to enter Kindergarten in many different elementary schools—or even several different school districts. So, even if early educators are highly motivated to work together, they face daunting challenges in simply locating their counterparts.

More specifically, we argue that policy variables should be a component of comprehensive DLL services for several reasons. First, many of the core standards of early care and learning related to DLLs are currently determined by state and federal policies; they are not issues where local practitioners have the discretion to develop their own solutions or the authority to make their own decisions. However, although all states have adopted early learning guidelines for preschool-aged children and programs serving them, and the vast majority of states have adopted the Common Core Standards for K–12 students, few states have adopted practices tailored to address the characteristics and needs of DLLs. Among those including provisions for DLLs, there is great variability in the approaches used. Furthermore, while at the federal level, the Office of Head Start and OSEP have developed additional standards that are more responsive to DLLs, there is currently little to no correlation between these standards and the standards informing practices in K–12 classrooms.

Second, federal and state program management systems are a powerful influence on key attributes of early care and learning. Yet these management systems are presently not aligned. Linking systems and related data requires multiple state and federal agencies to coordinate their data systems, reporting requirements, and technology platforms. Third, state and federal funding and fiscal policies can provide powerful support for programs. For example, the capacity of local communities



to provide universal access to high quality, voluntary pre-K and full-day kindergarten is heavily dependent on obtaining resources from state and federal agencies. Similarly, cost per child rates of funding for early care and education programs and per pupil expenditure rates for K–12 classrooms are huge influences on the ability of communities to provide levels of teacher compensation that will attract and retain high quality, well-trained teachers.

Before addressing broader issues of policy articulation, we turn to two major federal efforts that have great influence on the education of young DLLs. The two federal legislative efforts, Head Start and the *Elementary and Secondary Education Act*, have a long history of defining the role of the federal effort with regard to early learning and formal education of young children (García & Frede, 2010).

Head Start

Improving Head Start for School Readiness Act of 2007 (Public Law 110-134) was the first reauthorization of Head Start in nearly ten years. Given the growing diversity and rapidly changing demographics across the country, DLL children and families had a lot at stake in the reauthorization process of the nation’s premier early childhood education program. As such, the reauthorization of Head Start played an important role in a broader effort to enhance oval early educational attainment of

a more diverse child and family constituency. Various provisions were included in the new law which will help to ensure that DLL children—the vast majority of whom are Latino—fully benefit from Head Start’s services.

Historically, DLL’s have been underrepresented in all forms of early learning provided in the private sector or in the public sector (state and locally funded efforts) (García & García, 2012). However, in Head Start, their participation rates are steadily increasing and Latino children are reaching rates of parity in the program. Although data on DLL participation in Head Start have not been consistently collected, in 2007, DLLs were reported to be 30% of Head Start enrollment nationally, with 85% of DLLs being from Latino Spanish-speaking families (Office of Head Start, 2007). The percent of Latino children in Head Start has grown steadily since 1992 when only about 19% of Latino children were served in the program. By the 2007 school year, this increased to more than 32%. Notwithstanding this steady progress, participation in Head Start remains a challenge for DLL children, particularly those who reside in states where immigrants have not traditionally taken up residence. In addition, a lack of resources to expand the Migrant and Seasonal Head Start (MSHS) and Early Head Start (EHS) programs thwarts the participation of hundreds of thousands of eligible DLL children.

The *Improving Head Start for School Readiness Act of 2007* provides a framework for expanding Head Start in two important ways. First, it creates a mechanism for accurately determining the percentage of eligible children compared to the number children served on a consistent basis. Second, the legislation requires that the HHS Secretary ensure a plan be developed to identify and alleviate enrollment barriers to programs. The reauthorization and more recent investments in Head Start quality improve the funding structure for programs over the next five years. This expansion and stability in Head Start could offer more opportunities related to early learning specifically for the growing population of DLLs.

Accompanied with these opportunity enhancements the Office of Head Start has developed standards within the Head Start Program Performance Standards requiring programs to address the needs of DLLs and their families across multiple developmental and service areas. More recently, the *Head Start Child Development and Early Learning Framework* (Office of Head Start, 2010), a revised version of the *Head Start Child Outcomes Framework*, added a domain on English Language Development that applies only to children who are DLLs (Castro, 2011). Also, Head Start Programs have established principles with regard to DLLs. In the revised Multicultural Principles for Head Start Programs, several principles are directed at Head Start's approach to DLLs (García & Frede, 2010):

- Every individual is rooted in their culture and language;
- Every individual has the right to maintain his or her own identity while acquiring the skills required to function in a diverse society; and
- Effective programs for children who speak languages other than English require development of the first language while the acquisition of English is facilitated.

Unfortunately, these principles are not adopted in many early learning venues that serve DLLs, outside of Head Start programs. In most cases, guidance, implementation and evaluation with regard to early learning and

care environments for DLLs are left unattended or unaddressed (Espinosa, in press). However, emerging research has begun to shed light on the circumstances and effectiveness of early childhood education for DLLs.

Elementary and Secondary Education Act

The reauthorization of the *United States Elementary and Secondary Education Act* (ESEA), known more prominently as the *No Child Left Behind Act*, is under consideration at the time of the writing of this paper (Hopkins, Thompson, Linqunti & Hakuta, 2013). As in previous reauthorizations, many issues will impact the education of young children. From a national policy perspective, there appears to be consensus regarding key inputs in early learning that maximize developmental and academic success in later years: literacy-rich environments, purposeful early childhood experiences to develop pre-literacy skills, qualified staff in early childhood settings, and quality professional development to provide educators with the competencies to recognize cognitive assets and learning needs of children from birth to age five (Castro, et al., in press; García & Frede, 2010). Current national policy proposals and draft legislation support comprehensive literacy programs, including a variety of state and local programs, that link learning from the birth to pre-K years through grade 12. Pedagogically this approach has great merit but structural realities serve as major roadblocks.

Coordination of Policies and Practices Across Pre-K–12th Grades

Despite the movement towards what may seem like a continuum of education from birth to K and beyond, the systems that provide early education and school-age (K–12th grade) public education remain uniquely distinct. The early childhood services and the public schools are governed by different statutes, rules and regulations, and are overseen by their respective state and federal agencies. Differing licensing authorities govern each segment and funding sources are distinct. Funding—particularly at the federal level—is authorized

in different legislation and overseen by different agencies. While legislation may encourage coordination, the operational reality of administering federal programs calls for continuing operation within “silos,” or in other words, independent of each other.

The child care services industry continues to respond to research calling for more early learning experiences and the market demand for pre-academic experiences. At the same time, an increasing number of public school systems are providing full day Kindergarten and moving into supporting pre-K early learning for children who eventually will attend the public schools. Still, accountability for academic progress is the engine for ESEA, which is only strengthened in the legislative proposals and frameworks currently being considered in the nation’s capital. Investing time and money from K–12 public education to coordinate and make stronger linkages to early learning is a challenge in these economic times and would require careful consideration as to how to help schools meet their accountability requirements.

The following three key areas lend themselves to exploring the possibilities of coordination of policies and practices (1) early and accurate identification of DLLs (2) strengthened human capital in early childhood education programs and (3) enhanced coherence of program components (Espinosa & García, 2012).

Early and Accurate Identification and Assessment of DLLs

A significant percentage of children aged 0 to 5 years old come from homes where a language other than English is spoken, yet it is rare to find formal coordina-

tion between the 0–5 year old service providers and the K–12 school districts regarding early identification of such students. A Home Language Survey is required for students entering K–12 (and pre-K, in some districts) but it seems to not be required in early learning programs. Depending upon the school district’s policy, if a Home Language Survey indicates that the child may have limited proficiency in English, a formal assessment of English proficiency may be required. Concerns arise

over testing children at such a young age as critics say such test may likely be meaningless for such young children, whose development is in enormous flux and is happening in two languages, not only English. To ensure appropriate instruction for young DLLs, it is important to identify the language abilities and prior knowledge they bring to early childhood education

settings, and in later years, to school (Bandel, Atkins-Burnet, Castro, Wulsin, & Putnam, 2012).

Federal guidance should promote well-designed, valid, reliable and linguistically appropriate assessments be used with DLLs. This means assessment tools, procedures, and purposes must consider the unique aspects of linguistic and cognitive development associated with growing up with two languages as well as the social and cultural contexts that influence overall development. Accordingly, those administering and interpreting assessments used with DLLs must be knowledgeable about children from culturally and linguistically diverse backgrounds so that they can make informed judgments about the appropriateness of specific assessment instruments for DLLs.

To ensure appropriate instruction for young DLLs, it is important to identify the language abilities and prior knowledge they bring to early childhood education settings, and in later years, to school.

Sharing assessment information between the early childhood education providers and K–12 schools would prove helpful. State Education Agencies (SEAs) could make funds available to Local Education Agencies (LEAs) and early childhood centers/providers to support coordination efforts to appropriately and accurately identify young DLLs. The funding could support professional development, software purchase/re-design, data management activities, and valid screening efforts.

Strengthened Human Capital in Early Childhood Education Programs

Despite the high proportion of young DLLs among the nation’s birth to five populations there is no strategic effort to prepare, hire and train individuals working in early childhood programs to acquire competencies to foster the language and literacy development of young DLLs (CECER-DLL,

2011a; Zepeda, Castro & Cronin, 2011). Even in school districts that have pre-K and Kindergarten programs, there is often no coordination or targeted effort in hiring practices or in professional development that will build the required competencies for teaching literacy skills to children who are learning English as a second language.

In the absence of a national policy or program to support the development of relevant competencies and skills in the early learning community, the early childhood programs could support such efforts at the local level. SEAs could make available funds to LEAs and early childhood centers/providers to collaborate on professional development efforts in this area. Given that school district resources for professional development resources are scarce, SEAs and the state agency respon-

sible for the oversight of child care and early childhood centers would need to invest funds to support such coordinated professional development opportunities.

Enhanced Coherence of Programmatic Components

Public education K–12 systems typically lack coordination of the instructional program for English learners (ELs) between their early childhood programs and later grades. Oftentimes, staffing and program require-

ments vary and do not support English language development in a coherent fashion. Some states (e.g., TX, NM) have voluntary guidelines for Preschool English learners. Some districts do recognize the language acquisition demands in early childhood program and have formally incorporated ESL into a pre-K and K instructional day. Other LEAs that support dual language programs are starting to

build pre-literacy skills in the first language and support the early stages of acquiring English during the pre-school years and Kindergarten.

Policy should encourage such programmatic coherence across fiscal and operational entities, while allowing room for intentional instructional support for English language development for DLLs in early childhood programs. At the very least, this would also call for attention to oral language development in the home language, expanding children’s vocabulary and language skills in both the home language and English, and engaging with families as partners (CECER-DLL, 2011b). LEAs that have pre-K and K should better coordinate the instructional services for students as soon as they enter the school district (CECER-DLL, 2011a).

Despite the high proportion of young DLLs among the nation’s birth to five populations there is no strategic effort to prepare, hire and train individuals working in early childhood programs to acquire competencies to foster the language and literacy development of young DLLs.

In summary, federal policy—legislation and litigation—continues to emphasize the teaching and learning of English without emphasis on the development of bilingual competencies for children who speak a language other than English. It is unclear whether this policy will “stay the course” as the proportion of bilinguals in the larger U.S. population increases significantly in coming years, despite the controversial nature of providing instruction in any language other than English. Current efforts at the federal level, such as Head Start policies to promote DLLs’ development and learning, should be expanded and accountability systems should be in place to ensure that practices respond to that policy framework (Castro, 2011). Also, acknowledging that development of DLLs’ English language skills will require support well into the elementary years, Hakuta, Butler, and Witt (2000) and more recently, Hopkins, Thompson, Linquanti and Hakuta (2013) urge that a more sensible policy would set aside the entire spectrum of the elementary grades as the realistic range within which English acquisition is accomplished, and [would plan] a balanced curriculum that pays attention not just to English, but to the full array of children’s linguistic and academic needs.

What Are Policymakers To Do?

Along with changes to how researchers and practitioners approach the understanding of DLL development and learning, there is a critical need for federal, state and local policies to directly address language development issues and appropriate curricular and instructional approaches for DLLs (Espinosa & García, 2012). While available evidence on learning, language development, and related policy remain limited—particularly in the development and measurement of classroom strategies for diverse segments of the DLL population—current evidence suggests that rich language environments, support for home language and English language development, universal pre-K programs, and high-quality teachers can improve learning opportunities and outcomes for these children (National Task Force on Early Childhood Education for Hispanics, 2007). In light of such, below we touch on recommendations for each area of government.

Federal Government

There are specific activities through which the federal government can generally improve early learning environments for DLLs. These are focused on implementing evidence-based practices at scale, as well as directed efforts to expand the available knowledge base of best practices. East must be taken into account in new U. S. Department of Education initiatives (Early Childhood Race to the Top and partnerships with states in Preschool for All and Preschool Development). Here we offer four related recommendations. First, the federal government should underwrite tests of programs designed to produce large increases in the number of bilingual/bicultural preschool and early elementary teachers (CECER-DLL, 2011a). The most fundamental element to the provision of rich language environments and high-quality programs for DLLs across the pre-K–3RD grade spectrum is high-quality teachers (García & García, 2012). This means teachers are bilingual and knowledgeable regarding the cultural and linguistic circumstances of DLLs families, particularly the developmental and educational strengths and needs of DLL children. Indeed, research shows that the transfer of academic skills between languages is heightened and early learning outcomes increased for young DLLs when teachers use a child’s home language in the classroom. The most successful teachers are fluent in both languages, understand learning patterns associated with dual/second language acquisition, have a mastery of appropriate instructional strategies (e.g., strategic use of the home language, explicit English language instruction, rich teacher-child and peer language interactions, multi-dimensional and ongoing assessments) and have strong organizational and communication skills (Castro, Espinosa & Pérez, 2011).

Second, we recommend that the federal government fund and experiment with teacher preparation programs to recruit more bilingual undergraduates and to prepare ALL teachers (bilingual and monolingual) to work effectively with DLL children (Zepeda, Castro & Cronin, 2011). Given the increasing proportion of DLLs

enrolled in ECE programs across the nation, most teachers will have DLLs in their classrooms. Caring for and educating these young children is no longer the exclusive responsibility of a specialist or ESL teacher. Thus, teacher licensure regulations and teacher education accreditation criteria requiring coursework in second language acquisition and in specific teaching strategies to support DLL children and their families, combined with at least minimal proficiency in a second language should be promoted (Castro, Páez, Dickinson & Frede, 2011).

In addition, as a professional development approach, some teachers could be trained as language specialists to provide classroom support to teachers who lack adequate preparation (Espinosa & García, 2012). The responsibility of “language specialists” is to help classroom teachers in preschools with substantial numbers of DLLs to be responsive to children’s linguistic and academic needs. Language specialists serve as consultants to teachers and aides in the classroom to help DLLs learn and achieve, recognizing and leveraging existent strengths. Having a language specialist in school can also help monolingual teachers make essential links with parents and families of DLLs who speak a language other than English (CECER-DLL, 2011a). Ongoing relationships with parents are an invaluable resource to connect educational practices between the home and school and thereby increase children’s engagement and learning.

Third, we recommend that the federal government (through Head Start, Early Head Start, Title I and other programs, such as President Obama’s Preschool for All program announced in his FY 2014 budget) continue to explore dual-language programs. DLLs should have access to high-quality programs that explicitly support

Evidence suggests that high-quality early education programs improve school readiness for DLL children and decrease school readiness differences between racial/ethnic groups at Kindergarten entry.

their home language and English. Dual language models used in Head Start and Early Head Start have shown promising results in this approach. Dual Language programs teach English and home language skills through content. These programs integrate monolingual

English speaking and dual language learners in the same classroom, thereby fostering linguistic and ethnic equity among children. Dual language programs have been shown to support literacy development in English for DLLs while also supporting home language skills (Barnett, Yarosz, Thomas, & Blanco, 2006). More research is needed on the various approaches to support DLLs, but regardless of the type of approach, programs should support the use of DLLs’ home languages for instructional purposes as much as possible.

Finally, we recommend that the federal government expand the scope of the national and international databases developed to assess children’s development and academic performance. We recommend expanding national, longitudinal studies (e.g., ECLS-B, ECLS-K) to allow for more extensive analysis of DLLs by national origin, SES (e.g., parent education), nativity, immigrant generation status, and language exposure and use in various contexts (i.e., home, ECE program). Additionally, we recommend that U.S. participation in international assessments of student performance be expanded to allow for more detail in monitoring how segments of the DLL population compare to students in other nations, particularly in areas in other countries with high populations of DLLs (Espinosa & Garcia, 2012).

State Governments

In most cases the sort of work needed from state governments necessitates meaningful collaborations with



school districts and other community-based organizations. First, we recommend state governments collaborate with local communities to offer high-quality educational experiences with a variety of schedule options (CECER-DLL, 2011a). DLLs ages 3 and 4 years should be given access to free, state-funded preschool whose enrollment is done on a volunteer basis. Evidence suggests that high-quality early education programs improve school readiness for DLL children and decrease school readiness differences between racial/ethnic groups at Kindergarten entry (Castro, et al., in press). As mentioned, these programs should have high quality teachers and staff (those that are bilingual and culturally responsive) to effectively engage children and to develop partnerships with family members. As DLL enrollment in some types of preschool programs remains low compared to other racial/ethnic groups, state governments would be particularly wise to work alongside immigrant integration organizations and other community institutions to provide information to parents on these programs and encourage meaningful collaborations between the home and school (CECER-DLL, 2011a). In states where access to state-funded pre-K is not yet universal (i.e., available to all children) policymakers and program administrators should expand definitions of eligibility and outreach efforts to focus on DLLs. This should be an intermediate step, intended to increase DLL enrollments until the larger goal of universal access is attained.

Second, we recommend state governments provide pay and benefits to qualified preschool teachers that are equal to those of public school teachers (CECER-DLL, 2011a). This would provide the economic incentive to recruit and maintain a well-educated, reasonably stable group of preschool professionals. Third, along with the federal government, we recommend that state governments continue to fund and experiment with teacher preparation programs to recruit more bilingual/bicultural undergraduates and to prepare ALL teachers to work effectively with DLLs. Also, recruit teachers who are trained on dual/second language acquisition and instructional strategies for DLLs, to work as language specialists.

Fourth, we recommend that state governments establish information systems to be used by child care resource and referral agencies, school districts and state education and health departments to disaggregate children into subpopulations defined simultaneously in terms of race/ethnicity, parent education level, family income, immigrant generation status, national origin, and languages spoken at home. With this information states could monitor the developmental and academic progress of children by subpopulation group more effectively. Moreover, longitudinal data can assist evaluation efforts of program (and policy) effectiveness over time, and determine important differences across mentioned DLLs' background variables (Bandel, Atkins-Burnet, Castro, Wulsin, & Putnam, 2012; Espinosa & García, 2012).

Lastly, as states continue to implement their early care and education Quality Rating and Improvement Systems (QRIS), we recommend that they include indicators focusing on assessing whether the care and education needs of DLL children and their families are being met. This is important given that there are features of high quality early education for DLLs that are distinct from those needed for monolingual children. They include availability of bilingual/bicultural teachers and staff, offering professional development on working effectively with DLLs, and using instructional and assessment practices that are linguistically and culturally responsive, among others (Castro, 2011).

Local Governments

As DLL enrollment in high quality ECE services remains low compared to other groups of young learners, there is a substantial gap between what we currently know to be best educational practices for DLLs and what is actually implemented in schools throughout the country. Local governments (including school districts and other community organizations) could serve as liaisons between families and state governments. To this end, we offer two recommendations. First, we recommend that local governments collaborate with state governments and the federal government to provide information to parents on child care, pre-K, Head Start, and Early Head Start programs in order to increase DLL enrollment (CECER-DLL, 2011a). Continuing to increase preschool enrollment remains important considering available evidence demonstrating improvements in school readiness for young DLL children, and thus, decreasing the school readiness gap at kindergarten entry.

Second, local government should propose plans to governments on particular strategies to develop the workforce needs (CECER-DLL, 2011a). Suggestions from the community to improve teacher recruitment, for example, could serve as a means to engage the families and local institutions on ways state governments might increase the number of high-qualified teachers and language spe-

cialists. The mere engagement between families, schools, local, and state governments is meaningful.

We hope that the data shared, interpretations rendered, and the stated recommendations provide sufficient impetus for the federal, state, and local governments to give serious consideration to the developmental and educational well-being of DLLs. With our best efforts, improvements occur incrementally. The design, testing, and evaluation of programs and strategies require calculated investment and time. Moreover, successful implementation of programs and practices are facilitated as research and policy initiatives are pursued jointly. We remain optimistic that innovative collaborations can expedite improved developmental and learning outcomes among DLLs. We conclude by offering some recommendations for innovative research, including activities in which non-governmental actors (i.e., private foundations, policy and advocacy organizations, and developmental and educational researchers) might involve themselves.

Beyond Government

In addition to the recommended research agenda to the federal and state governments, we recommend private foundations fund long-term efforts to design, test, and evaluate language and academic development strategies for DLLs in early learning settings from all SES groups (particularly across levels of parent education and immigrant status). These include systematic, value-added studies to explore, develop, and determine the efficacy and scalability of instructional and curricular approaches (Atkins-Burnett, Bandel, & Aikens, 2012; Castro, et al., in press). In order to maximize the chances of determining if the strategies are able to contribute to improvements in school readiness at scale, formal grant programs should be designed to provide ten or more years of support for promising approaches. Additionally, private foundations should seriously consider creating two or three new foundations specialized

in funding these areas, thereby ensuring that sustained investments in strategy development are made in the long term. These new foundations would be chartered to support strategy development for other groups that continue to lag academically, in addition to DLLs.

Conclusion

This paper has provided an overview of a conceptual framework, a review of key empirical research and related policy implications at various level of the human service sector—and in particular the role of languages of DLLs in the articulation of those policies, which will continue at the forefront of future policy activity (García & Frede, 2010). As the U. S. advances policy for children and families in an increasingly diverse population, serving DLLs poses a particular set of challenges and opportunities. Both must be considered as policy makers look to formulate interventions for realizing the overall developmental and learning well-being for all children and families. Wiley, Lee and Rumberger (2009) remind us that many nation-states deal with issues of children entering early care and education settings, as well as public schools, not speaking the language of the schools. The U. S. is not a unique case. The United Nations began to speak directly to the rights of a minority group to its language over 60 years ago, by explicitly indicating, “Prohibiting the use of the language of a group in daily discourse or in schools or the printing and circulation of publications in the language of the group falls within the agreed upon constraints regarding linguistic genocide” (United Nations, Convention on the Prevention and Punishment of the Crime of Genocide, e794, 1948). In 1994, the United Nations Human Rights Committee spoke again to this international issue (United Nations, 1994). It is the most far-reaching human rights articulation of an international body addressing linguistic rights:

In those states in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with other members of their group,

to enjoy their own culture, to profess and practice their own religion, or to use their own language.

Skutnabb-Kangas (2002) has summarized this United Nations position as: (1) protecting all individuals on the State’s territory or under its jurisdiction such as immigrants and refugees irrespective of their legal status, (2) recognizing the existence of a linguistic right, and (3) imposing positive obligations on the State to protect that right.

Whether the U.S. considers the language of the child as her/his right, recent theoretical, conceptual and empirical research efforts have strongly indicated that:

- dual language learning is inherently a socially-embedded process;
- the acquisition of two languages in young children has no inherent negative social, linguistic or cognitive consequences, and has been linked to advantages in specific social, linguistic and cognitive domains;
- those engaged in providing early care and learning opportunities are necessarily linguistic, social, cognitive and cultural brokers;
- family engagement is pivotal to understanding and potentially bridging the divides in early care and learning opportunities;
- ways in which children participate in day-to-day activities should inform the design and implementation of early care and learning opportunities/environments; and
- quality of early care and learning environments should be understood in terms of the structural, affective, and instructional elements that promote development and learning in a particular socio-cultural context.

These conceptual and empirical underpinnings have great import for all who serve the growing number of DLLs in the U.S. Table 1 p summarizes the policy to practice parameters related to our discussion of research informing policy. A cohesive and integrated approach is required as we all move forward in meeting our goal of generating environments that ensure positive developmental and early learning outcomes for DLLs. ●

Table 1. Policy to Practice Parameters

State/Federal Policy Factors/Pathways							
Leadership to Make DLLs a Priority		Funding/ Fiscal Policies		Policy on Instructional Practices/ Family Engagement		Human Resource Policies & Systems	
↓							
Core DLL Policy to PPractice Requirements							
Aligned standards for children & classroom quality	Aligned curriculum & pedagogy	Children & program quality assessment	Curriculum & teaching strategies	Using assessment data for improvement	Workforce quality, training, experience	Joint professional development	Family engagement efforts
↓							
Aligned, DLL Continuum of High Quality Early Care and Learning Opportunities							
Quality early care, center and non-center based	→	Universal, full-day pre-K for 3- & 4-year olds	→	K-3rd Grade			
↓							
Enhanced DLL Development/Improved Student Outcomes							
Health & Physical Development	Social & Emotional Development/ Executive Functioning	Approaches to Learning		Language/ Literacy Development	Cognitive Development/ Mathematics/ Science/ Social Studies		

(Adapted from Shultz, in press)

References

- Atkins-Burnett, S., Bandel, E., & Aikens, N. (2012). *Research brief #9: Assessment tools for the language and literacy development of young dual language learners (DLLs)*. Chapel Hill: The University of North Carolina, FPG Child Development Institute, CECER-DLL.
- Bandel, E., Atkins-Burnet, S. Castro, D. C., Wulsin, C. S., & Putnam, M. (2012). *Examining the use of language and literacy assessments with young dual language learners*. Retrieved from <http://cecerdll.fpg.unc.edu/document-library>
- Barac, R., & Bialystok, E. (2013). *Cognitive development of young bilingual children: A review of literature*. Under review.
- Barnett, W. S., Yarosz, D. J., Thomas, J., & Blanco, D. (2006). *Two-way and monolingual English immersion in preschool education: An experimental comparison*. New Brunswick, NJ: National Institute for Early Education Research.
- Bialystok, E., Craik, F. I. M., Grady, C., Chau, W., Ishii, R., Gunji, A., & Pantev, C. (2005). Effect of bilingualism on cognitive control in the Simon task: Evidence from MEG." *NeuroImage* 24, p. 40-49.
- Blank, S. (1998). Hearth and home: The living arrangements of Mexican immigrants and U.S. born Mexicans. *Sociological Forum*, 13, 35 – 59.
- Castro, D. C. (2011). High quality early education for young dual language learners: What can be done? *NHSA Dialog*, 14(2), 1-8.
- Castro, D. C., Espinosa, L., & Páez, M. (2011). Defining and measuring quality early childhood practices that promote dual language learners' development and learning. In M. Zaslow, I. Martinez-Beck, K. Tout, & T. Halle, (Eds.). *Quality measurement in early childhood settings* (pp. 257-280). Baltimore, MD: Brookes Publishing.
- Castro, D. C., García, E. E., Espinosa, L. M., Genesee, F., Gillanders, C., Hammer, C. S. ... Tabors, P. (in press). *Conceptual framework for the study of dual language learner development*.
- Castro, D. C., Páez, M., Dickinson, D., & Frede, E. (2011). Promoting language and literacy in dual language learners: Research, practice and policy. *Child Development Perspectives*, 5, 15-21.
- Center for Early Care and Education Research—Dual Language Learners (CECER-DLL; 2011a). *Research brief #2. Policy and practice issues related to serving dual language learners: Summary from listening sessions* Chapel Hill: The University of North Carolina, FPG Child Development Institute, Author.
- Center for Early Care and Education Research—Dual Language Learners (CECER-DLL; 2011b). *Research brief #6: Language and literacy development in dual language learners: A critical review of the research*. Chapel Hill: The University of North Carolina, FPG Child Development Institute, Author.
- Center for Early Care and Education Research—Dual Language Learners (CECER-DLL) (2011c). *Research brief #8. Factors associated with development of dual language learners: Results from a secondary analysis of the ECLS-B*. Chapel Hill: The University of North Carolina, FPG Child Development Institute, Author.
- Chaudry, A., Capps, R., Pedroza, J., Castañeda, R. M., Santos, R., & Scott, M. M. (2010). *Facing our future: Children in the aftermath of immigration enforcement*. Urban Institute. Retrieved from <http://www.urban.org/publications/412020.html>

- Dixon, L. Q., Zhao, J., Shin, Y., Wu, S., Su, J., Burgess-Brigham, R., ... Snow, C. (2012). What we know about second language acquisition: A synthesis from four perspectives. *Review of Education Research* 82(1), 5-60.
- Espinosa, L. M. (2010). Assessment of young English-language learners. In E. E. García, & E. Frede (Eds.), *Young English-language learners: Current research and emerging directions for practice and policy*, pp. 119-142. New York: Teacher's College Press.
- Espinosa, L. M. (in press). Supporting the learning and development of young dual language learners. In *Balanced home language development*. Sacramento: California Department of Education.
- Espinosa, L. M., & García, E. E. (2012). *Developmental assessments of young dual language learners with a focus on Kindergarten entry assessment: Implications for state policies*. Retrieved from <http://cecerdll.fpg.unc.edu/document-library>
- Gándara, P., & Hopkins, M. (Eds.). (2010). *Forbidden languages: English learners and restrictive language policies*. New York, NY: Teachers College Press.
- García, E. E. (2005). *Teaching and learning in two languages: Bilingualism and schooling in the United States*. New York, NY: Teachers College Press.
- García, E. E., Arias, M. B., Harris Murri, N. J., & Serna, C. (2010) Developing responsive teachers: A challenge for a demographic reality. *Journal of Teacher Education*, 61, #1-2,132-143.
- García E. E., & Frede E.C. (Eds.). (2010). *Young English language learners: Current research and emerging directions for practice and policy*. New York: Teachers College
- García, E. E., & García, E. H. (2012). *Understanding the language development and early education of Hispanic children*. New York: Teachers College Press.
- García, E. E., & Jensen, B. T. (2009). Early educational opportunities for children of Hispanic origins. *Social Policy Report*, 23(2), 1-20.
- García, E. E., Jensen, B. T., Miller, L. S., & Huerta, T. (2005). *Early childhood education of Hispanics in the United States*. Tempe, AZ: The National Task Force on Early Childhood Education for Hispanics. Available online at http://www.ecehispanic.org/work/white_paper_Oct2005.pdf
- Genesee, F. (2010). Dual language development in preschool children. In E. E. García, & E. C. Frede (Eds.), *Young English language learners* (pp. 59-79). New York, NY: Teachers College Press.
- Hakuta, K., Butler, Y. G., & Witt, D. (2000). *How long does it take English learners to attain proficiency?* Los Angeles: University of California Linguistic Minority Research
- Hammer, C. S., Hoff, E., Uchikoshi, Y., Gillanders, C., & Castro, D. C. (in press). *The language and literacy development of young dual language learners: A critical review*.
- Henry, G. T., & Mark, M. M. (2003). Beyond use: Understanding evaluation's influence on attitudes and actions. *American Journal of Evaluation*, 24(3), 293-314.
- Hopkins, M., Thompson, K. D., Linqianti, R., & Hakuta, K. (2013) Fully accounting for English learner performance: A key issues in ESEA reauthorization. *Educa-*

- tional Researcher*, 42(2). 101-108.
- National Task Force on Early Childhood Education for Hispanics (2007). *Para nuestros niños: Report of expanding and improving early education for Hispanics—Main report*. Tempe, AZ: National Task Force on Early Childhood Education for Hispanics. Available online from http://www.ecehispanic.org/work/expand_MainReport.pdf
- Office of Head Start. (2007). *Dual language learning: What does it take?* Washington, DC: Administration for Children and Families, U. S. Department of Health and Human Services.
- Office of Head Start. (2010). *The Head Start Child Development and Early Learning Framework. Promoting positive outcomes in early childhood programs serving children 3–5 years old*. Washington, DC: Administration for Children and Families, U. S. Department of Health and Human Services.
- Rogoff, B. (2003). *The cultural nature of human development*. Oxford: Oxford University Press.
- Skutnab-Kangas, T. (2002). American ambiguities and paranoias. *International Journal of the Sociology of Language*, 155/156, 179-186.
- Tseng, V. (2012). The uses of research in policy and practice. *Social Policy Report*, 26(2), 1-20.
- United Nations. (1948). *The convention of the prevention and punishment of the crime of genocide*. New York, NY: Author.
- Urzúa, A., & Gómez. E. (2008). Home style Puerto Rican: A study of language maintenance and use in New England. *Journal of multilingual and multicultural development*, 29(6), 449-466.
- Vygotsky, L. S. (1978). *Mind in society. The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wiese, A., & García, E. E. (2001). The bilingual education act: Language minority students and US federal educational policy. *International Journal of Bilingual Education and Bilingualism*, 4(4), 29-48.
- Wiley, T. G., Lee, J. S., & Rumberger, R. W. (2009). *The education of language minority immigrants in the United States*. Buffalo, NY: Multilingual Matters.
- Wong-Fillmore, L. (1991). When learning a second language means losing the first. *Early Childhood Research Quarterly* 6, 323-46.
- Yoshikawa, H. (2011). *Immigrants raising citizens: Undocumented parents and their young children*. New York, NY: Russell Sage Foundation.
- Zepeda, M., Castro, D. C., & Cronin, S. (2011). Preparing teachers to work with young English language learners. *Child Development Perspectives*, 5(1), 10-14.

FPG is one of the nation's oldest multidisciplinary centers devoted to the study of children and families. Our mission is to cultivate and share knowledge that enhances child development and family well being.



UNC
FRANK PORTER GRAHAM
CHILD DEVELOPMENT INSTITUTE