

CHAPTER **11**

Defining and Measuring Quality in Early Childhood Practices that Promote Dual Language Learners' Development and Learning

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The number of young dual language learners (DLLs)¹ enrolling in early childhood programs has increased steadily over the last 15 years, a trend that is expected to continue. A factor contributing to this trend is the rapid growth of the immigrant population. As of 2005, one in four, or 25%, of young children in the United States were children of immigrant families (Hernandez, Denton, & Macartney, 2008). Although a large percentage (62%) of children in immigrant families live in five states (California, Florida, Illinois, New York, and Texas), their percentages have increased in most of the other states, with children of immigrants accounting for at least 10% of children in 26 states (Hernandez et al., 2008). There is enormous diversity in the origin of immigrant families. Among immigrant parents of children under 6 years of age, the largest percentage come from Mexico and other Latin American countries and the Caribbean (64%), and smaller percentages come from countries in Asia (23%), Europe and Canada (7%), and Africa and the Middle East (6%) (Capps et al., 2005).

The majority of children in immigrant families grow up in bilingual environments. Data from the U.S. Census Bureau indicate that 84% of immigrants ages 5 and older speak a language other than English at home (Pew Hispanic Center, 2009). The linguistic diversity among young children is evident in the increase of young DLLs' enrollment in Head Start programs, over 30% nationally; almost 85% of those children are from families who speak Spanish as their primary language (Office of Head Start, 2007). The percentage of DLLs is larger among the youngest children in the public education system. In 2000–2001, the average percentage of DLLs in prekindergarten (pre-K) through grade 12 education was 10%; however, 44% of all DLLs were enrolled in pre-K to third grade (Kindler, 2002).

Although immigrant families account for most of the families who speak a language other than English at home, not all DLLs are children of immigrants. There are U.S. native-born families who speak English and also speak a language other than English at home; for example, among U.S. born Latinos² ages 18 and older, 63% speak a language other than English at home (Pew Hispanic Center, 2009). Also, many children in Native American and Pacific Islander families are part of the DLL population.

There are positive characteristics of immigrant families that can support their children's healthy development and learning, such as the fact that a larger percentage (84%) of children in immigrant families live with two parents as compared with children in native-born families (76%; Hernandez et al., 2008) and the high value that these families give to their children's education (e.g., Zarate & Perez, 2006). On the other hand, there are a number of challenges confronted by immigrant families, including that they are more likely to live in poverty than native-born families (National Center for Children in Poverty, 2007) and a larger percentage of immigrant parents have less than a high school education as compared with native-born parents (Capps, Fix, Ost, Reardon-Anderson, & Passel, 2004). However, averages hide a wide range of differences when attempts are made to characterize a group that is diverse across many dimensions. For example, whereas some immigrant parents have come to the United States with college or graduate degrees, others have less than a high school education. Factors such as employment status, occupation, income level, English proficiency, and social status will influence immigrant parents' access to and utilization of early childhood care and education services, as well as their abilities to communicate with educators and to get involved in their children's early care and education (ECE) in the ways traditionally expected by program administrators and educators.

The negative effects of poverty environments on children's development and school achievement have been well documented in the research literature (see Knapp & Woolverton, 2003, for a review), with fewer studies examining this relationship in DLL populations (see Lindholm-Leary & Borsato, 2007, for a review). Similarly, empirical studies report the positive impact of high-quality early education for low-income children, particularly low-income minority young children (Bowman, Donovan, & Burns, 2001). National data show that children of immigrants are less likely to attend an early education program than children in the U.S.-born population (Matthews & Ewen, 2006). The combination of living in poverty and having limited access to early education increases the vulnerability of young DLLs to negative outcomes.

These contextual factors, along with the lack of adequate preparation of early childhood programs and teachers to successfully educate DLLs, create the conditions for the existing school readiness gap. Nationally, the majority of early childhood educators are monolingual English speakers; few have bilingual teacher assistants; and even when there is a bilingual assistant in the classroom, the lead teacher may not know how to incorporate that resource into her teaching practices. A national survey of state administrators of early childhood programs reported that the limited number of bilingual educators and the lack of appropriate preparation and training of early childhood educators were among the most urgent challenges facing ECE programs that serve the growing Spanish-speaking birth-to-age-5 population (Buysse, Castro, West, & Skinner, 2005). Only a small proportion of institutions of higher education offer academic training programs designed to prepare educators to work with DLLs; academic training programs offering this content to early childhood educators are even rarer (Maxwell, Lim, & Early, 2006; Menken & Antunez, 2001).

Given the demographic changes in the country and the role of high-quality educational practices in promoting young children's development and learning, it is urgent to address issues of quality in the early education of DLLs. It is necessary to rethink what quality means for educating young DLLs. New indicators of quality should take into account the specific developmental characteristics of DLLs as well as the challenges they are facing. This is a vulnerable population at risk of school failure, not only because of family risk factors many share such as poverty and low parental education, but also because early education practices have not been designed to address the linguistic and broader developmental needs of DLLs. Thus, instructional practices need to be modified or changed and measures need to capture whether or not those modifications or changes are being implemented. Also, measures of quality need to assess practices that respond to both short-term and long-term learning goals (i.e., practices that promote development of skills needed to succeed in kindergarten and beyond).

The purposes of this chapter are 1) to discuss important considerations for the development of measures of quality practices to promote DLLs' development, including early bilingual development and how it affects children's cognitive, language, literacy, and socioemotional development; 2) to discuss the elements of high-quality early education for DLLs, including program and teacher characteristics, curriculum and instructional practices, and family involvement; and 3) to review available quality measures and measures in development and propose components of new early childhood quality measures that assess the quality of practices to promote development and learning in DLLs.

Considerations for the Design of Measures of Quality Practices to Promote DLLs' Development

The impact of dual language learning on children's cognitive, language, literacy, and socioemotional development has important implications for programs that are trying to create high-quality educational environments for this population. As noted by Chang et al., early childhood programs are faced with the challenge of educating young children "who are simultaneously trying to develop proficiency in their home language and in English, all the while gaining the pre-academic knowledge and social skills they need to be ready for formal schooling" (2007, p. 244). In this section we discuss important considerations for advancing quality measures of early childhood practices that promote DLLs' development. We focus on four areas related to early bilingual development and learning that should be considered when developing measures of quality in early childhood education: 1) the process of second-language acquisition, 2) the importance of oral language skills, 3) the role of first language in learning English, and 4) the particular language contexts that promote development and learning for these children.

Process of Second-Language Acquisition

Dual language learners are faced with the difficult task of transitioning from their home to the school environment and learning English in a short amount of time. Although there are a variety of early childhood program options for young DLLs, the most typical classroom situation for these children is to attend an English-language classroom (Tabors, 2008). In this type of classroom, English is the main language of interaction and instruction for both the children and the educators. If children have no support for their

home language, they might find it very difficult to understand or speak English and become active members of the classroom. This is what Tabors has defined as “the double bind of second-language learning: to learn a new language, you have to be socially accepted by those who speak the language; but to be socially accepted, you have to be able to speak the new language” (2008, p. 33). Early childhood educators often are faced with this challenge in trying to understand and integrate DLLs into their classrooms. Fortunately, most children develop strategies for coping with this “double bind” and can adjust and learn a new language in early childhood settings. However, early childhood educators should be aware of the possible “social isolation and linguistic constraints” that children face when placed in settings where their home language is not available to them (Tabors, 2008, p. 34). In addition, early childhood educators can facilitate the process by learning about the developmental sequence of second-language acquisition and implementing effective practices for working with these children.

Research has shown that young children who are exposed to a second language in an English-language early childhood classroom move through a specific four-phase developmental sequence (Tabors, 2008). Initially, children *speak their home language* as they learn to distinguish between their first language and the new language that is being used in the setting. This is followed by a *nonverbal, or observational, period* where children use alternative methods of communication. During this time, children acquire receptive understanding of the new language and they watch, listen, and rehearse in preparation for its use. Children then begin to use *telegraphic and formulaic language*, which involves labeling and employing common phrases, allowing them to get into the flow of the activities in the classroom and begin to sound like members of the group. As they engage in the process of creating new sentences, children build up to the point where they are able to *productively use the new language*. This developmental sequence is cumulative, and there are individual differences in children’s rates of acquisition. Tabors and Snow (2002) have identified at least four factors—motivation, exposure, age, and personality—that may affect how quickly young children acquire a second language.

In addition to these factors, second language acquisition research has focused on societal, familial, and individual factors that can have an impact on language and literacy development (August & Hakuta, 1997; August & Shanahan, 2006). As noted by Snow (2006), stronger research evidence is needed in this area to disentangle the complex factors that are relevant to the development of DLLs. However, we can expect that the process of learning a second language is not the same for all children (Bialystok, 2001). For DLLs, the development of language and literacy involves the integration of component skills (e.g., sound-symbol awareness, grammatical knowledge, vocabulary knowledge), as well as more elusive sociocultural variables critical to the development of reading and writing. Thus, DLLs in early childhood programs could display a variety of skills in each language depending on the child’s age, when the languages were learned, and how these languages are supported at home, at school, and in the community. Moreover, there are interactions of linguistic knowledge between the languages that children know and are learning so that skills in a first language can facilitate learning a second language. There is also considerable research evidence concerning the role of individual factors in predicting second-language outcomes. Individual differences, including cognitive abilities, previous learning experiences, cultural background, and knowledge, can all play an important role in the dynamic process of learning a second language (August & Shanahan, 2006). Thus, early childhood programs need to collect information about DLLs’ background, including culture, language(s) knowledge, and skills, so that they can know and support these children as bilingual/bicultural learners (Brisk & Harrington, 2007).

Importance of Oral Language Skills

Research has shown that language experiences and early exposure to literacy are important precursors for children's language development and reading success (Snow, Burns, & Griffin, 1998; Dickinson & Tabors, 2001). In particular, several language skills have been identified as important during the early childhood years, including a strong vocabulary, phonological awareness, letter knowledge, background knowledge, and understanding of print concepts (Dickinson & Neuman, 2006; National Reading Panel, 2000; see also Neuman & Carta, Chapter 4, this volume). A report from the National Early Literacy Panel (2008) presented a meta-analysis of research and recommendations for early childhood educators on promoting foundational literacy skills. The report identified the skills and abilities of young children (age birth through 5 years or kindergarten) that predict later reading, writing, or spelling outcomes, and the types of early literacy interventions that promote children's early literacy skills. Their findings support the importance of alphabet knowledge, phonological awareness, rapid auto-naming of letters or digits, rapid auto-naming of objects or colors, writing or writing one's name, and phonological memory as predictive skills for literacy development. An additional five early literacy skills were identified as potentially important variables, including concepts of print, print knowledge, reading readiness, oral language skills, and visual processing.

Research with bilingual populations supports the importance of these critical dimensions of language and literacy for DLLs in early childhood. The National Literacy Panel on Language Minority Children and Youth (August & Shanahan, 2006) concluded that instruction in the key components of reading, as identified by the National Reading Panel (2000), including phonological and phonemic awareness, phonics, fluency, vocabulary, and text comprehension, has clear benefits for DLLs. However, the reviewers added that

Instruction in the key components of reading is necessary—but not sufficient—for teaching language-minority children to read and write proficiently in English. Oral proficiency in English is critical as well—but student performance suggests that it is often overlooked in instruction (August & Shanahan, 2006, p. 4).

In light of these findings, oral language skills, including vocabulary and listening comprehension, have received particular attention from both educators and researchers who are trying to meet the learning needs of DLLs. Research with both monolingual and bilingual populations recognizes that vocabulary is one of the best predictors of reading comprehension, that it is a complex construct that has many components, and that it is learned in multiple contexts both at home and at school (August, Carlo, Dressler, & Snow, 2005). Research with DLLs has also identified vocabulary skills as a domain of particular weakness for this population (Carlo et al., 2004).

Findings from a longitudinal study with young Spanish-speaking children from low socioeconomic backgrounds has found that these children might be at risk for delays in their early literacy development due to their poor oral language abilities, particularly their low levels of vocabulary in both languages—English and Spanish (Páez & Rinaldi, 2006; Páez, Tabors, & López, 2007; Tabors, Páez, & López, 2003). Results from this study showed limited English vocabulary skills when children in the sample were first assessed as 4-year-olds, with the gap between monolingual norms and the sample persisting through first grade. These findings are corroborated by other research with young Spanish-speaking children, such as the studies by Lindsey, Manis, and Bailey (2003) and Manis, Lindsey, and Bailey (2004) and research with young Spanish-speaking

children from high socioeconomic backgrounds (Umbel, Pearson, Fernández, & Oller, 1992). Moreover, a more recent research review of vocabulary and second language acquisition found that Spanish–English DLLs lag behind their monolingual English-speaking peers in both depth and breadth of vocabulary knowledge (August et al., 2005). Recent comparative research with various bilingual populations also has found this deficit in vocabulary with Hebrew–English, Spanish–English, and Chinese–English bilingual students in first grade (Bialystok, Luk, & Kwan, 2005).

There are two important points to note regarding these research findings on vocabulary development. First, uneven vocabulary knowledge is common for young DLLs during this stage in their development. Second, there is a lack of data disaggregated by socioeconomic status, as the majority of studies have focused on bilingual children from low socioeconomic backgrounds. The language gap experienced by young DLLs could be explained by multiple factors including demographic factors such as living in poverty (Hart & Risley, 1995). The limited research with DLLs from high socioeconomic backgrounds indicates that children catch up to monolingual norms during the elementary grades and some even exceed their monolingual peers' achievements in English (Espinosa, Laffey, & Whittaker, 2006; Umbel et al., 1992). More research is needed to specifically address these underlying factors, such as socioeconomic status, and how they influence literacy learning for DLLs (Hart & Risley, 1995; National Early Literacy Panel, 2008).

In sum, research with DLLs demonstrates the importance of oral language development and supports instructional approaches that focus on developing these skills by providing rich and engaging language environments, while at the same time focusing on building early literacy skills. Therefore, it is essential for quality indicators in early childhood programs to recognize the critical importance of oral language and vocabulary development for successful instruction and literacy development.

The Role of First Language in Learning English

Past research with bilingual populations has supported the interdependency theory, or the notion that first-language skills transfer and support the learning of a second language (Cummins, 1979, 1991; Royer & Carlo, 1991). Although studies on the transfer of reading-related skills from one language to another have not been numerous, the evidence for transfer or cross-language relationships of skills related to reading (i.e., phonology, vocabulary, grammar, and discourse-level skills) between first and second languages has been growing (August & Shanahan, 2006).

Specifically, recent studies with bilingual Spanish–English children have shown transfer in vocabulary (Ordóñez, Carlo, Snow, & McLaughlin, 2002; Snow, 1990) and phonological awareness (Lindsey et al., 2003; López & Greenfield, 2004). Focusing on the phonological awareness of 123 Spanish–English bilingual preschool children attending Head Start, Dickinson, McCabe, Clark-Chiarelli, and Wolf (2004) found that phonological skills were stable across the preschool year and showed transfer across languages. Cross-language effects also have been useful in predicting English reading and comprehension skills (Manis et al., 2004; Proctor, August, Carlo, & Snow, 2006). In addition, longitudinal research with Spanish-speaking bilingual children has shown that first language skills and growth in Spanish contribute to the development of reading skills in English (Hammer, Lawrence, & Miccio, 2007; Pérez & Rinaldi, 2006; Rinaldi & Pérez, 2008). More research is needed in this area of second language acquisition to better understand which language and early literacy skills do and do not transfer and under what conditions (Snow, 2006). Also, more research focused on preschool-age and

younger DLLs would be an important contribution to the literature. New research is further examining the role of early bilingualism on children's cognitive processing (e.g., Bialystok, 2009; Carlson & Choi, 2009; de Villiers, de Villiers, & Hobbs, 2009; Yoshida, 2008). Findings from those studies will help develop a deeper understanding of issues such as cross-linguistic transfer and other aspects of young children's dual language learning processes.

To date, the majority of research on linguistic transfer has been conducted with Spanish-speakers learning English. However, transfer of language and literacy skills might vary according to similarities and differences among linguistic features of the first and second languages (August & Shanahan, 2006). Bialystok et al. (2005) examined these cross-linguistic relationships among bilingual children from different language groups such as Chinese, Spanish, and Hebrew and found that the extent of transfer of these skills depends on the relation between languages and the relation between the writing systems. Additional research including diverse groups of DLLs is needed to increase our understanding of the dynamics of transfer across different language systems.

It also is important to note that most of the studies which document transfer are correlational studies. It could be that what researchers have called transfer of language skills might be due to other underlying competencies that explain the relationships between languages. As noted by Snow (2006), intervention studies designed around the concept of linguistic transfer would be able to provide "stronger proof" for this phenomenon while testing hypotheses to further develop theory (p. 637).

Although more research is needed, there is already some knowledge that can guide the development of high-quality early education programs for DLLs. On the basis of the increasing evidence of linguistic transfer from research studies on language and literacy development, experts believe that approaches that support and develop children's first language skills may have important advantages (Barnett, Yarosz, Thomas, Jung, & Blanco, 2007; Páez, Tabors, & López, 2007; Tabors et al., 2003). Further, the review of research on the relationship between first and second language acquisition by the National Literacy Panel concluded that access to bilingual programming can assist young DLLs in their language and literacy development (August & Shanahan, 2006).

In addition to facilitating English learning, there are many benefits to knowing two (or more) languages and encouraging children to maintain and develop their home language as they learn English. Children who know more than one language have personal, social, cognitive, and economic advantages throughout their lives. Children who are proficient in their home language (or 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).

Another important reason for home language support in programs serving young DLLs is the vulnerability of these children to losing their first language. Children develop and learn in their home contexts with family members who foster a sense of identity and belonging through language and communication. As children grow, it is important for them to continue to develop their home language. Children who do not develop and maintain proficiency in their home language may lose their ability to communicate with parents and family members (Wong Fillmore, 1991). In addition, loss of the home language could have a potentially negative impact on children's thinking and reasoning skills as well as on development of their self-concept (Bialystok, 2001). Thus, home language support provides benefits for learning English while promoting and supporting children's development at home.

In sum, definitions and measures of quality in early childhood programs need to consider the special case of DLLs by considering the process of second-language development and learning, and the particular language contexts that promote development and learning for these children.

Elements of High-Quality ECE for DLLs

As noted at the beginning of this chapter, the demographic composition of early childhood programs is changing with increasing enrollment of children who are linguistically and culturally diverse. Although diversity in children's backgrounds can enhance the learning environment, it also can create new or increased challenges to accommodating the needs of a wide variety of children.

Research on early childhood education programs indicates that high-quality early childhood experiences can have positive effects on children's early development and learning (see Snow & Páez, 2004, for a review). Moreover, research has also shown that young children at risk for school failure, such as children from poor and minority backgrounds, are significantly more likely to succeed in school when they have attended high-quality early childhood programs (Bowman, Donovan, & Burns, 2001). It is important to note, however, that much of the research on the long-term effects of high-quality early education has been conducted with children who are not DLLs. For example, the Abecedarian and Perry Preschool studies were primarily conducted with African American children (e.g., Campbell, Ramey, Pungello, Sparling, & Miller-Johnson, 2002; Schweinhart et al., 2005). Furthermore, these early childhood studies were comprehensive interventions that included strong family support and the provision for and access to health care and social services, in addition to high-quality educational practices. Therefore, their positive effects are attributed to all intervention components, making it impossible to untangle the effect of individual components.

Although there is emerging evidence of the positive impact of high-quality early education on Latino children's school readiness (e.g., Gormley & Gayer, 2005), studies focusing on early education practices and their effects on DLLs' development and learning are few, assess a limited set of children's developmental outcomes, and most important, do not use longitudinal designs.

In this section we review the literature on the elements of early childhood quality that can promote development and learning among DLLs, including curriculum and instruction, program and teacher characteristics, and family engagement. It is necessary to acknowledge that most ECE research with this population has been conducted in center-based settings and with preschool-aged children. There is an urgent need to address the gap in knowledge about the early childhood experiences of infants and toddlers who are DLLs and those attending home-based programs.

Curriculum and Instructional Practices

The National Association for the Education of Young Children (NAEYC) and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE) in a joint position statement about early childhood curriculum, assessment, and program evaluation support the recommendation that high-quality early childhood programs use a curriculum that is "thoughtfully planned, challenging,

engaging, developmentally appropriate, culturally and linguistically responsive, comprehensive, and likely to promote positive outcomes for all young children” (NAEYC & NAECS/SDE, 2003, p. 2). What does this mean for the early education of DLLs? Early childhood programs that serve DLLs should use research-based curricula and instructional practices that support first and second language and literacy development, incorporate elements of children’s diverse cultures and languages into the curricula (Gay, 2000), implement activities that view children’s emergent bilingualism as an asset rather than as a deficit, and build on children’s prior knowledge (Moll, 2000; Zentella, 2005).

Regarding specific instructional practices, a major research review conducted by the National Literacy Panel on Language-Minority Children and Youth (August & Shanahan, 2006) found that, even though there are instructional practices that are beneficial to both monolingual and bilingual children, they may not be sufficient to support a comparable level of academic success among bilingual children, suggesting that instructional enhancements are needed, particularly in classrooms where instruction is provided only in English (Goldenberg, 2008). Research on effective instructional and intervention practices to promote development and learning in young DLLs is limited when compared with the research that has been conducted with monolingual English-speaking children; however, although more research is required to expand our knowledge, there is a growing body of knowledge that provides a basis for the development of interventions with this population. Key principles that have been found to be effective in promoting DLLs’ cognitive, language, literacy, and social-emotional development and learning are presented next.

Creating a Supportive and Organized Early Childhood Environment

It is widely acknowledged in the field of early education that effective practices are those that build on children’s previous knowledge and experiences. As stated by NAEYC,

For the optimal development and learning of all children, educators must accept the legitimacy of the children’s home language, respect (hold in high regard) and value (esteem, appreciate) the home culture, and promote and encourage the active involvement and support of all families, including extended and nontraditional family units. (1995, p. 2)

An environment that is supportive of all children’s culture and languages is an environment in which educators carefully maintain the cultural continuity between home and the early childhood setting, where children can share and maintain their home culture and language. Ways to put these recommendations into practice include providing books in multiple languages; bilingual posters and labels; bilingual music and audio stories; stories that reflect the diverse cultures of children in the classroom or family care setting; as well as room decorations, toys, and dramatic play materials that represent diversity and create positive self-images for the children in the classroom or family child care setting.

How the classroom or family care setting is organized and managed will influence children’s comfort levels and provide an environment that is supportive of development and conducive to learning. There are certain characteristics of the classroom that will be particularly helpful for young DLLs. For example, providing a space where children can go when they feel the need to be by themselves will help young DLLs, who may at times be tense or tired and might want to be alone. The space may have a table

with manipulatives or may be a quiet corner with pillows and books. Also, providing consistency in classroom routines will be useful for children who are DLLs, because it will help them follow what is happening in the classroom, even when they may not be able to understand every word the educator or the other children are saying in English. Also, it will help them to develop a sense of belonging with the group in the classroom or family care setting (Castro, Ayankoya, & Kasprzak, 2010; Tabors, 2008).

Positive Educator–Child Interactions

For early educators who are not bilingual, interacting with DLLs may be challenging, especially when these children are at the beginning of the process of learning English. Using gestures, visual aids, and props along with words will help educators in communicating with young DLLs, as well as in building their vocabulary and increasing their comprehension. It is very important for educators to be observant and follow closely children's phases of second language learning so that they can provide the support that is appropriate. For instance, during the early phases in which the child knows no or very little English, using visual aids and speaking the child's primary language have been shown to be important. As children progress to the telegraphic and formulaic stages of English acquisition, repetition and modeling have been recommended (Castro, Gillanders, Machado-Casas, & Buysse, 2006).

Positive educator–child interactions can promote DLLs' socioemotional development, positively affecting the social status of children who are DLLs and their inclusion in the classroom or family care community (Gillanders, 2007). Educators can create positive relationships with young DLLs when they are consistent and firm, and support children's positive behaviors (Howes & Ritchie, 2002). Being purposeful in creating positive educator–child relationships becomes especially important when monolingual English-speaking educators are working with children who are DLLs, because the language barriers can strain such relationships. An important aspect of the educator–child relationship is the interpretation of challenging behaviors. Some common behaviors of DLLs that are related to the process of second language acquisition often are misinterpreted as challenging behaviors (e.g., not talking, difficulty expressing ideas and feelings, difficulty following directions). To the extent that educators understand the process of second language acquisition and learn effective strategies for dealing with challenging behaviors, they will be better able to establish positive relationships with children who are DLLs (Santos & Ostrosky, 2004).

Increased Opportunities for Peer Interactions

Increasing these opportunities has been proposed as a strategy to promote English language learning among DLLs. However, peer interaction studies suggest that "creating such opportunities and producing positive oral language outcomes involve more than simply pairing [DLLs] with native or fluent English speakers" (Saunders & O'Brien, 2006, p. 28). It involves, in addition, planning, which includes identifying specific tasks and preparing both the native English-speaking child and the DLL to participate (e.g., Peck, 1987). An important consideration when planning peer interactions is the developmental phase of second language acquisition of the DLL, so that activities are prepared in a way that will provide a positive and rewarding experience to both children.

Strategic Use of a Child's First Language

Recent research syntheses (August & Shanahan, 2006; Rolstad, Mahoney, & Glass, 2005; Slavin & Cheung, 2005) have found that, for DLLs, teaching reading skills in the first

language is more effective in terms of English reading achievement than immersing children in English. As described in previous paragraphs, the use of the primary language in the classroom or family care setting has been found to be related to educators' negative perceptions of children's behavior and social competence (Chang et al., 2007). Instructing DLLs in their primary language will offer them opportunities to have rich language interactions and close relationships with their educators. Educators need to know when, how, and for which purposes to use the primary language in the classroom or family care setting, and that will require competence development and planning. The amount and frequency of primary language use may vary depending on the language(s) of instruction in the early childhood program, but even in programs in which instruction is provided only in English, some use of the primary language should be incorporated to support DLLs (Castro et al., 2006).

Explicit Vocabulary Instruction

As stated earlier in the chapter, vocabulary is a skill essential to becoming a reader. For most English-speaking children, vocabulary learning in English occurs incidentally. For DLLs, vocabulary development in English requires a combination of direct teaching of words and incidental learning that occurs in multiple exposures to words in a variety of meaningful social contexts (Carlo et al., 2004). Therefore, an important enhancement for DLLs in early childhood programs is to use instruction time to address, in the context of play, the meanings of everyday and content words, phrases, and expressions not yet learned. Furthermore, educators can promote vocabulary knowledge strategically by using the children's primary language in storybook reading activities (Gillanders & Castro, 2007). Even if educators are not fluent in the children's primary language, learning and using specific core words in the primary language can further support children's learning of the same concepts in English (Castro et al., 2006).

Ongoing and Frequent Assessments of Children's First and Second Language Development and Other Developmental Domains

Assessments are used to inform instruction and to improve the outcomes for young DLLs. For example, measures of phonological processing, letter and alphabetic knowledge, and the process of second language acquisition can help educators plan specific instructional enhancements, such as the use of extra support in small-group instruction (Lesaux & Siegel, 2003). One of the most serious challenges for conducting valid and reliable assessments of DLLs' development and learning is the lack of appropriate measures (see Espinosa & López, 2007, for a review). Even though some measures are available in Spanish and English, few are available in other languages. Furthermore, among available translated instruments, most have been normed on monolingual speaking populations of the non-English language so that they are not comparable to the experience of bilingual children. There is a need for an array of instruments that can reliably assess DLLs' development for different purposes, including screening, monitoring, and classroom planning. In addition, assessments should be multidimensional, gathering information about the child from different sources and utilizing various methods (e.g., observational, direct child assessments, family reports).

Small-Group and One-to-One Activities

Small-group and one-to-one activities will help provide individual children who are DLLs support according to their specific needs as determined by the assessment results.

Randomized control trials of reading interventions for struggling DLLs in Grades K–5 have indicated that small-group and peer-assisted interventions allow children multiple opportunities to respond to questions, to practice reading skills, and to receive explicit instruction on vocabulary and phonological awareness (e.g., Vaughn et al., 2006; McMaster, Shu-Hsuan Kung, & Cao, 2008). These practices will have to be adapted to meet the developmental needs of young DLLs.

Program Characteristics

As mentioned earlier, the research reviewed in this chapter corresponds mostly to DLLs' experiences in center-based programs. Quality indicators in early childhood care and education include both process and structural elements. *Process quality* focuses on the experiences that occur in the early childhood setting such as provider/teacher–child and peer interactions, and types of activities that have been described in previous paragraphs. *Structural quality* refers to conditions that need to be in place in a program to support the implementation of high-quality practices such as class size, provider/teacher–child ratios, qualifications of educators and staff, and availability of materials (Espinosa, 2002). Research studies have found a relationship between process and structural quality; for example, in small classes educators are more likely to have positive and supportive interactions with children (NICHD, 2002).

Providing high-quality early education experiences to young DLLs will require a revision of the indicators of quality being used. Regarding structural quality, adult–child ratios may need to be smaller to allow educators time to conduct small-group and one-on-one activities with DLLs. Also, to implement classroom activities in the children's primary language, to conduct valid and reliable assessments in children's primary language and English, and to plan activities that are responsive to young DLLs' individual developmental and learning needs, programs will need to increase the number of bilingual and qualified staff, as well as offer ongoing professional development. The availability of appropriate teaching resources (e.g., written and audio materials in DLLs' primary languages and English; props; pictures) to work with DLLs is also an important condition. Also, the implementation of outreach and communication strategies that take into account families' diverse cultures and languages will be facilitated by the availability of bilingual, bicultural, qualified staff.

Early Educator Knowledge and Skills

National professional organizations are increasingly acknowledging the importance of specific instructional practices to address cultural and linguistic diversity in early childhood care and education, emphasizing diversity as an important element of quality programs (Association for Childhood Education International, 2006; Hyson, 2003; NAEYC, 1995; NCATE, 2008). Professional organizations have concluded that to be effective educators of DLLs, educators need to be knowledgeable in five major content areas: 1) understanding the structural aspects of language development (e.g., syntax, phonology) and the development of both the first and the second language; 2) understanding the role of culture and its linkage to language development; 3) acquiring knowledge and developing skills about effective instructional practices to promote development and learning in DLLs; 4) understanding the role of assessment and how to implement appropriate assessment strategies with DLLs; and 5)

understanding the teacher's role as a professional in the education of DLLs (Zepeda, Castro, & Cronin, 2010).

In order to plan and implement instructional activities that are effective in promoting DLLs' development, educators need to know how language and literacy development unfolds in children growing up in bilingual environments and how the process of learning a second language affects young children's social-emotional and cognitive development. Also, in order to meet the needs of DLLs, educators must be effective in making cultural and linguistic enhancements to the curriculum when teaching the various content areas and must have the ability to conduct assessments that provide valid and reliable information about these children's developmental levels and school readiness. In addition, educators must demonstrate a caring attitude and high expectations toward DLLs' academic learning (Castro et al., 2006).

Family Engagement

The importance of developing strong partnerships with families is recognized widely in the field of early education (e.g., Henderson & Berla, 1994; Marcon, 1999; Miedel & Reynolds, 1999). Providing high-quality early education to DLLs implies that there is a strong connection between DLLs' experiences in the early childhood setting and at home. Families' child-rearing beliefs and practices will influence the ways in which children are socialized and supported at home; for children from diverse cultural and linguistic backgrounds, it becomes essential that educators learn about their families' child-rearing beliefs and practices, which may be different from those of children in the mainstream. In high-quality early childhood settings, educators engage in a dialogue with the families, understand families' expectations, and effectively communicate program and educator expectations with regard to children's learning and families' support of their children's early development and education (Delgado-Gaitán, 2004; Reese & Gallimore, 2000). Families are able to participate on their own terms and are willing to incorporate new activities into their daily routines related to what their children learn in the classroom. Some challenges to engaging families of DLLs include the lack of bilingual staff, differences in communication styles, as well as differences in families' expectations about their children's development and learning.

When teaching children who are DLLs in an English-dominant environment, the building of family-school partnerships becomes especially critical, because the family can provide first language support that children may not receive at school. One way of garnering this support is by providing academic learning materials in the primary language that families can use with children at home. Several intervention studies have found that sending literacy materials to families' homes can increase the frequency of literacy events and, in turn, the literacy achievement of young DLLs (e.g., Goldenberg, Reese, & Gallimore, 1992; Hancock, 2002).

Measures that Capture Quality of ECE Practices for Dual Language Learners

As previously described, ECE quality measures which adequately assess practices that promote DLLs' development and learning will need to address specific dimensions of the learning environment that have been shown to be important for this population.

The program characteristics, early childhood program staffing, educator qualifications and characteristics, as well as certain instructional and assessment practices that are best suited for DLLs may vary from those identified as significant for monolingual English-speaking populations. In particular, dimensions of environmental and structural quality (e.g., physical and material environment, child–staff ratios, staff qualifications, collaboration with parents), as well as dimensions of curriculum and teaching (e.g., language of interactions and instruction, support of primary language of child, assessment practices, individualization of instruction) will need to be adapted. Whereas traditional ECE quality measures capture those dimensions that have been linked to language and literacy outcomes for monolingual English speakers (see Neuman & Carta, Chapter 4, this volume) only a handful of measures has been designed or adapted for early childhood settings that include DLLs.

On the basis of the preceding literature review and recent research reports, we conclude that the following features of quality ECE practices are important for young DLLs:

1. Classroom and family care environments that incorporate the cultures and languages of the children enrolled (e.g., print, books, posters, pictures, stories that reflect the languages and cultures of the children)
2. Educators and related staff who are fluent in the children’s primary languages and familiar with the family cultural beliefs, practices, and values
3. Educators and related staff who are knowledgeable about first and second language development and instructional practices that promote both maintenance of home language and English acquisition
4. Amount and type of support for primary language development
5. The quantity and quality of language interactions (e.g., language of interaction, educator responsiveness to child language initiation, richness and context of interactions)
6. Amount and nature of explicit instruction in English language acquisition (e.g., targeted vocabulary instruction; storybook reading; use of cues, props, and gestures; scaffolding of existing knowledge for DLLs)
7. Educators’ ability to adapt level of English instruction according to knowledge of child’s stage of English acquisition
8. Opportunities and support for DLLs to communicate in their home language
9. Positive educator–child interactions that support the social-emotional development of children who are DLLs
10. Arrangements for small-group and individualized instruction
11. Active teacher support for peer social interactions
12. Appropriate and multidimensional assessments (e.g., observational, direct child assessments, family reports) conducted frequently in both the home language and English
13. Educators’ knowledge of each child’s early language learning background (e.g., first language spoken to child, by whom, extent of English exposure and usage)
14. Linguistically and culturally appropriate outreach to, and engagement of, families

There are few, if any, valid and reliable ECE quality measures that incorporate these dimensions for DLLs. Whereas many measures that have been commonly used in the past 15 years do address some of these quality dimensions in general—for example, opportunities for small-group and individualized instruction, and level of emotional responsiveness (see the description of CLASS that follows)—these measures do not specifically address the quality enhancements that have been shown to be important for DLLs. Several current measures that are in development or are being validated for dual language populations are addressed next.

Early Language and Literacy Classroom Observation Addendum for English Language Learners

This Early Language and Literacy Classroom Observation (ELLCO; Castro, 2005) adaptation was designed to “obtain information about specific classroom practices related to promoting language and literacy development among children who are English Language Learners” (Castro, 2005, p. 2). The ELLCO Addendum focuses specifically on Latino DLLs who speak Spanish as their primary language. It has 10 items in a Literacy Environment Checklist that rates the amount and quality of literacy materials (e.g., books, tapes, word cards, puzzles, labels, posters) available in Spanish and English in the classroom, eight classroom observational items, and eight items on Literacy Activities (e.g., book reading) that rate the appropriateness of the classroom environment and curriculum for DLLs.

This measure was designed as a complement to the ELLCO for classrooms that had children who were DLLs; each item should be completed first for the ELLCO, then for the ELLCO Addendum, with the same scoring procedures. The classroom observational items are based on corresponding items for the ELLCO and are scored on a five-point scale anchored by ratings of 1 (*deficient*), 3 (*basic*), and 5 (*exemplary*). The ELLCO Addendum was used in a randomized, control, intervention study of teacher professional development called the *Nuestros Niños Early Language and Literacy Project*. The ELLCO Addendum was able to detect significant changes in teacher practices related to supporting preschool Spanish-speaking DLLs’ language and literacy development (Buysse, Castro, & Peisner-Feinberg, 2010) that could be attributable to the professional development intervention implemented.

The internal reliability of the ELLCO Addendum derived from the initial study appears quite high, ranging from 91.1% (Classroom Observation Scale) to 100% (Literacy Activities Rating scale). Internal consistency is .78 for the Classroom Observation Scale, 0.57 for the Literacy Environment Checklist, and .30 for the Literacy Activities Rating Scale. At this time, we do not know how well this measure predicts short-term or long-term child outcomes for Spanish-speaking DLLs.

The Language Interaction Snapshot

The Language Interaction Snapshot (LISn) (Sprachman, Caspe, & Atkins-Burnett, 2009) is a time-sampling classroom observation tool that captures the extent to which English or other languages are used in conversations between adults and children. The observation items focus on what language educators use with children in the classroom, the types of language interactions across settings, and which adults interact with DLLs. The LISn specifically addresses four aspects of verbal interactions: 1) language use, 2) child initiation of language use and teacher response, 3) types of adult utterances, and 4) language context. The language codes include the extent to which an educator repeats or confirms child talk

and responds to child language; the types of language used by the teacher (e.g., requests, gives directions, provides information contextualized or decontextualized); and whether the language context is reading, singing, or other.

Classroom observers code language interactions at the utterance level for a 20-second period over 10 intervals. Interrater reliability of the LISn was strong in the pilot study, ranging from 85% to 96% across the separate components. The pilot study was conducted in two large urban areas and included 117 children in 44 classrooms. The DLLs in the samples came from both Spanish-speaking and Cantonese-speaking homes. Preliminary analyses of the pilot data suggest strong internal consistency of the measure. Further analyses of the pilot data will examine the relationship of teacher language interactions and child outcomes associated with school readiness.

Observation Measures of Language and Literacy: Quality Rating of Language and Literacy Instruction, Classroom Literacy Opportunities Checklist, Snapshot

The Observational Measures of Language and Literacy (OMLIT)-Quality of Instruction in Literacy and Language (QUILL) (Goodson, Layzer, Smith, & Rimdzius, 2006) is one of the six instruments included in the OMLIT; the total group of instruments was designed as a battery of measures that captured the instructional practices and environmental supports for language and literacy in early childhood classrooms. The OMLIT-QUILL, OMLIT-CLOC, and the OMLIT-Snapshot contain items that focus on the classroom quality for DLLs. Specifically, the OMLIT-QUILL has 4 out of 10 items that address DLLs' needs. The 10 items address the following areas (DLL items in bold):

- Opportunities to engage in writing
- Attention to and promotion of letter and word knowledge
- Opportunities for and encouragement of use of oral language to communicate ideas and thoughts
- Attention to the functions and features of print
- Attention to sounds in words throughout the day
- Attention to and promotion of print motivation
- **DLLs intentionally included in activities, conversations**
- **Development of both primary language(s) and English supported for children who are DLLs**
- **Primary language(s) of young DLLs integrated into language and literacy activities**
- **Language and literacy materials and methods appropriate for children who are DLLs**
- Opportunities for dramatic play and play planning
- Integration of children with special needs into the classroom

The OMLIT-CLOC includes a question on whether there is cultural diversity in literacy materials, and the OMLIT-Snapshot includes a question on whether adults and children are speaking in English or another language. In addition, the OMLIT Classroom Description asks the observer to indicate the proportion of time English, Spanish, or

another language was used during instruction with the children. The observer also indicates whether there was at least one adult in the classroom who spoke the language of every child. This group of instruments was designed as a research tool and has been used in several large child care, pre-K, and Even Start studies. The interrater reliability of the OMLIT-QUILL for the four items focusing on activities for young DLLs has not been calculated. The validity of the OMLIT is based on experts' opinion; Abt Associates convened a conference on measuring the quality of language and literacy instruction in early childhood programs in 2003, and items on the OMLIT were derived from the research presented at that conference.

Classroom Assessment of Supports for Emergent Bilingual Acquisition

The Classroom Assessment of Supports for Emergent Bilingual Acquisition (CASEBA) (National Institute for Early Education Research, 2005) is a newly developed research tool designed to assess the degree to which preschool teachers and classrooms are providing support for the social, cognitive, and linguistic development of DLLs (or ELLs), with a focus on language and literacy. Based on an earlier instrument, the Support for Early Language Learners Classroom Assessment (SELLCA; National Institute for Early Education Research, 2005), the CASEBA has been revised to better assess teacher and classroom supports for both first and second language acquisition. The instrument consists of 26 rating scale items that cluster around six broad aspects of the early childhood curriculum: 1) collection of child background information, 2) supports for home language development, 3) supports for English acquisition, 4) social-emotional supports and classroom management, 5) curriculum content, and 6) assessment. Each of the 26 items measures one component of a high-quality classroom environment and instruction on the basis of research about effective language and emergent literacy supports for 3- to 5-year-old children who speak a language other than English at home, and who are in the process of acquiring English as a second language. Each item is rated on a 7-point Likert scale, on which 7 indicates that a specific form of support and accompanying practices are present in a nearly ideal form, whereas 1 represents the total absence of any such practices. The CASEBA currently is undergoing research on the psychometric properties of the instrument, including concurrent and predictive validity. Results from this research are expected by the end of 2010.

The CASEBA is designed to be used by researchers trained to reliability by the developers and is not publicly available. The developers are completing the design of a complementary instrument to be used for systematic professional development that involves self-assessment and coaching. The coaching follows a specific protocol that researchers at the National Institute for Early Education Research (NIEER) used in previous professional development research in math, literacy, and other domains, based on the cognitive coaching cycle (Costa & Garmston, 2002). The NIEER version of this cycle begins with teachers' self-assessment of their teaching practices, using the CASEBA Checklist for Professional Development. The Checklist includes criteria for self-assessment that complement the full research instrument, but call for teachers and coaches to provide specific evidence that a particular criterion has been met. The teacher and coach review the results and set specific objectives for improvement. Within each coaching session, a similar cycle is followed with a planning conference to review focus areas, an observation by the coach, and a review of the observation with specific plans for improvement. In some cases, the coach teaches alongside the teacher

if understanding a specific technique is an objective of the session. A heavy emphasis of the coaching is to focus on children's activities and what they imply for the child's understanding and for further teaching.

Some measures developed to assess the quality of practices, without particular emphasis on DLLs (e.g., CLASS and ECERS-R), have been commonly used during the last 15 years in early childhood settings serving the DLL population. They provide useful information about overall classroom quality, although they may lack the specificity that we are arguing is necessary in order to fully capture the extent to which early childhood practices address the needs of children who are DLLs. Next, we describe, as an example, one of the measures that is being studied and that should yield results about its appropriateness for DLLs by end of 2010.

Classroom Assessment Scoring System™

The Classroom Assessment Scoring System™ (CLASS) (Pianta, La Paro, & Hamre, 2008) assesses three domains of child-teacher interactions: social-emotional, organization/management, and instructional. The focus of this observational measure is both on what the teachers do with the materials that they have and on child-teacher interactions. The CLASS™ has four scales: 1) emotional support for children (e.g., class climate, teacher sensitivity, regard for student perspectives), 2) organization of the classroom (e.g., learning format used, time use and productivity, behavior management), 3) support for instruction (e.g., level of concept development, quality of feedback to children, modeling of language), and 4) student engagement. Trained observers rate pre-K classrooms on nine dimensions of child-teacher interactions every 30 minutes during a typical morning. The interrater reliability of trained CLASS observers is reported as 87%. The support for instruction scale was the most robust predictor of children's growth over time, whereas the CLASS emotional support scale was associated with growth in children's expressive and receptive language scores. Although the CLASS has been used widely in large national studies of pre-K classroom quality (Early et al., 2005) and has shown relationships to important child outcomes on tests of language and literacy for English speakers, its utility for DLL populations is still under investigation.

An ongoing study (2010) is examining how well the CLASS functions for classrooms heavily populated with Spanish-speaking DLLs and the extent to which the CLASS is associated with DLL school outcomes assessed in both English and Spanish. The study is part of the National Center for Early Development and Learning's (NCEDL) Multi-State Study of Pre-Kindergarten, and the NCEDL-NIEER State-Wide Early Education Programs Study that included 2,966 children, 23% of whom spoke Spanish. A preliminary analysis of the data shows that the CLASS operated similarly in classrooms with 75% or more young DLLs and those with 74% or fewer. The means, standard deviations, and internal consistencies for each of the scales (i.e., emotional support, classroom organization, and instructional support) were not significantly different across classrooms. Additional analyses will examine the extent to which the CLASS is associated with the school readiness of children who are DLLs.

Summary

Our professional knowledge about the features of early childhood programs that are essential to the growth and development of young DLLs has grown rapidly in the last decade—and continues to be the focus of ongoing research. Concurrently, our early

childhood programs are experiencing rapid growth in the numbers and proportions of children participating who are not native English speakers. The most recent achievement data continue to reveal the chronic academic vulnerability of children who are challenged with learning a new language while also mastering cognitive and academic content. As our knowledge about high-quality early childhood practices for young DLLs grows, so must our ability to accurately capture the adequacy of ECE settings. Whereas all of the quality measures described herein show promise for capturing the quality of ECE practices for DLLs, none adequately measures all of the dimensions that have been shown to be important for this population and are available for program evaluation.

Future research and development efforts will need to focus on the qualifications and characteristics of early childhood educators that are linked to effective practices for young DLLs, the methods programs employ to involve and engage families who speak a language other than English in the home, specific instructional enhancements important for children who are DLLs (e.g., more individual and small-group instruction, presentation of material in child's home language prior to presenting it in English, teacher scaffolding of concepts and explicit teaching of vocabulary and literacy skills, adapting expectations and scaffolds on the basis of the child's stage of English acquisition, amount of support for home language), and linguistically and culturally appropriate assessment approaches. Some measures appear quite promising, but have yet to be used in large-scale program evaluations. Others, such as the CLASS, may be suitable for DLL populations, but have yet to be rigorously tested with this group of children. In addition, we need to develop and validate quality assessment tools that can work in family and home care settings for children who are DLLs.

From the information and discussion presented in this chapter, it seems appropriate to conclude that the definition of high-quality practices in ECE programs needs to be expanded to incorporate practices that directly address the needs of the growing numbers of young DLLs attending these programs. As emerging research findings suggest (Buisse et al., 2010), improving the quality of practices to support young DLL's language and literacy development will improve the overall quality of practices, thus benefiting *all* children.

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Endnotes

¹The term *dual language learner* refers to children who are learning English and a language other than English either simultaneously or successively, independently of the settings in which they use each language and the language(s) used in the early childhood program. In this chapter we use the term DLL, but when citing research from

other authors we use the terms originally used by the authors (i.e., ELL, bilingual).

²The terms *Latino* and *Hispanic* are used interchangeably to refer to individuals with heritage in Mexico, countries in Central and South America and the Caribbean, and Spain.