

**Research Based on Best Practices for DLLs in PreK-3rd grade:
Instructional Strategies and Language of Instruction Approaches¹**

Dina C. Castro, M.P.H., Ph.D.

University of North Texas

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The increased linguistic diversity of the United States population that has occurred in the last two decades is reflected in early education classrooms nationwide. A report from the U. S. Census indicates that in 2011, twenty six percent of people ages 5 and older spoke a language other than English, and among them 62% spoke Spanish. The next most spoken language other than English was Chinese (4.8%). Other languages, including Arabic, Hebrew, Indo-European, Asian and Pacific Island, Native American and African languages ranged in percentage between 2.6 and 0.2 percent (U.S. Census, 2013). Related to young children, over a third of children enrolled in Head Start programs, nationally, are dual language learners, and 84% of those DLLs are Latinos; for Early Head Start, 26% of children enrolled are DLLs and 91% of those DLLs are Latino children (OHS, 2006). Even though, Spanish is by far the non-English language most spoken in the U.S., there are many communities characterized by their multilingualism.

This paper discusses the knowledge based to provide high quality education to this diverse group of children during the critical early years of schooling (Pre-K to third grade). First, developmental and contextual considerations when designing instruction for dual language learners are discussed. Second, research-based instructional strategies and language of instruction approaches for the education of dual language learners PreK-3rd grade are described, followed by a discussion of instructional approaches in multilingual classrooms.

Developmental and Contextual Considerations

An understanding of the developmental trajectories of dual language learners is critical to make instructional decisions that will address the educational needs of these

children. Recent reviews of the research on the cognitive, language, literacy and socio-emotional development of dual language learners from birth to age 5 (Barac, Bialystok, Castro, & Sánchez, 2014; Hammer, Hoff, Uchikochi, Gillanders & Castro, 2014; Halle, Whittaker, Zepeda, Rothenberg, Anderson, et al, 2014), as well as, reviews of developmental research with school-aged dual language learners (Bialystok & Barac, 2011) have concluded that the development of monolingual and bilingual children differs in many ways across domains and that those differences are typical characteristics and not a sign of disability. For example, comparisons between successive or sequential bilinguals and monolinguals have indicated that there is considerable variation in the rate and patterns of development among these children, and that this variation is often associated with the age of onset of second language acquisition, and the amount and quality of exposure to each language (Hammer, Hoff, Uchikochi, Gillanders & Castro, 2014; Paradis, Genesee, & Crago, 2011). Similarly, the cognitive advantages of bilingualism have been well established in the research literature, in particular in the areas of executive function, and the advantages are larger in children with advance skills in their two languages (Barac, et al, 2014). Differences in socio-emotional development have been found between dual language learners and their monolingual English-speaking peers, with DLLs obtaining higher scores on measures of self-control, interpersonal skills, and fewer internalizing and externalizing behaviors (Han, 2010).

To be effective, instructional approaches should take into account not only children's individual characteristics but also, their family and community experiences. It is widely accepted that children's experiences at home, and in their communities will contribute to shape development (Bronfenberner, 1979). From a socio-cultural

perspective of development, children approach developmental tasks in particular situations based on the cultural practices in which they have previously participated (Rogoff, 2003). The experiences of DLLs are unique culturally, linguistically, and socially (e.g., bilingual & bicultural households, variation in parents' proficiency in L1 & L2, immigration circumstances), therefore, using a monolingual/mono-cultural perspective in instruction could fail to provide the appropriate supports and the opportunities for dual language learners to reach their potential.

Quality of early education and instructional strategies to support dual language learners

The positive effects of high quality education on children's early development and learning have been well documented in the research literature (Barnett, 2011; Schweinhart et al. 2005). Furthermore, research has also shown that young children at risk for school failure, such as children from low income and ethnic minority backgrounds, are significantly more likely to succeed in school when they have attended high-quality education programs (Bowman, Donovan, & Burns, 2001). However, there is still a persistent school readiness gap affecting mostly children from low-income families, the majority of whom are from diverse language, ethnic and cultural backgrounds (Aud, Fox & Ramani, 2010; Layzer & Price, 2008). This school readiness gap exists even among children who attended early education programs (Manguson & Waldfogel, 2005).

Research focusing on dual language learners (DLLs) have shown that high-quality early education practices (as defined from a monolingual perspective) are as beneficial for DLL children as they are for their monolingual peers; but they are not sufficient to support an equal level of academic success among DLLs (August & Shanahan, 2006; Goldenberg et

al, 2013); therefore, instructional enhancements are necessary to support DLLs' development and learning (Goldenberg, 2008). Because of the need to improve developmental and educational outcomes of DLLs, researchers in the field of early education are arguing that there is a need to define what constitutes high quality early education practices for DLL children (Castro, Espinosa & Páez, 2011). Even though there is still a need for further research, the current knowledge base allows us to identify some elements of high quality early education for DLLs, and those are related to program characteristics, educators' dispositions, knowledge, and skills, and curriculum and instruction. In this section, the discussion focuses on the strategies that can enhance instruction for DLLs.

Considering the potential benefits of bilingualism the focus to improve DLLs educational outcomes should be on the educational experiences offered and the extent to which bilingualism is used as a resource for learning or seen as a problem or barrier for learning. Considerable research evidence indicates that the use of children's first language in instruction leads to higher social, cognitive, and academic achievement levels for bilingual learners (García, Kleifgen, & Falchi, 2008). How is the first language used in instruction, however, should depend on children's proficiencies in both their first and second language, and the goals of the language of instruction approach used (i.e., English-only, bilingual transitional, two-way instruction) which will be discussed in the next section. Also, it will vary according to the availability of bilingual staff. When providing instruction only in English, it may seem daunting for monolingual English-speaking teachers to consider supporting DLLs in their first language; however, it can be done. Several studies have identified instructional strategies to support DLLs:

(1) Conduct ongoing and frequent assessments to monitor DLLs' development in both their first and second language, as well as monitoring progress in all other developmental domains (Lesaux & Siegel, 2003). In particular, close monitoring of DLLs language development is important to inform instructional planning so that practices are tailored to children's levels of proficiency and are targeting specific areas in which they may need additional support. A major challenge to conduct valid and reliable assessments of DLLs development and learning progress is the limited availability of measures normed on this population, thus, the selection of assessment tools will be an important consideration to avoid misinterpretations based on the use of inappropriate tools, specially when standardized instruments are used. Recommendations to assess DLLs include to use a combination of standardized measures and systematic observational methods, as well as portfolios of children's work to obtain the most accurate information about DLLs' academic performance, gathering information across settings and types of interactions (NAEYC, 2005) (see Espinosa, 2014 commissioned paper for a discussion on assessment of DLLs).

(2) Provide focused small-group activities. DLLs need opportunities for additional exposure to and use of new concepts and words in their second language. Randomized controlled trials of reading interventions for struggling dual language learners 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 instruction and phonological awareness (Vaughn et al., 2006; McMaster et. al., 2008). Small group activities should be conducted with no more than 4-5 children and planned in conjunction with classroom wide activities (Castro, Gillanders, Franco, & Zepeda, 2010).

(3) Provide explicit vocabulary instruction. For monolingual children, most vocabulary learning occurs incidentally from conversations and by listening to words in their everyday routines. Children who are learning a second language will not be able to take advantage of incidental vocabulary learning until they become proficient in that language. Moreover, since DLLs are learning vocabularies in two languages, exposure to a word in one language will be limited to the amount of opportunities that the word is used in that particular language. Therefore, teachers need to create conditions in which words are learned in an effective and efficient manner and this will require that teachers purposefully plan for repeated exposure to specific words and opportunities for children to use these words multiple times in a variety of settings (Gillanders, Castro & Franco, 2014). Explicit instruction will accelerate vocabulary learning for DLLs, that can be done through read-alouds, and direct teaching of core vocabulary, using the primary language strategically (Carlo et. al., 2004; Gillanders & Castro, 2011).

(4) Ensure development of academic English. To be successful in school, dual language learners need to develop the specialized language of academic discourse that is different from conversational skills. Lack of proficiency in academic English can interfere with learning other academic content. As an example, although children might learn mathematical concepts and skills using manipulatives, they also need to learn the language of mathematics in order to be successful in school. Therefore, the curriculum should incorporate opportunities to provide explicit instruction of the academic language related to basic mathematics concepts and skills (Francis, Rivera, Lesaux, Kieffer and Rivera, 2006).

(5) Promote socio-emotional development through positive teacher-child relationships and facilitating children's participation in the socio-cultural group of the classroom (Castro, Gillanders, Franco, & Zepeda, 2010; Gillanders, 2007; Howes & Ritchie, 2002). The preschool environment may represent DLLs first unknown social environment as well as their first time in a different cultural environment, and for children receiving instruction only in English, there will be the additional challenges of having difficulties communicating, following directions, expressing ideas and feelings, and responding to questions consistently. DLLs may feel withdrawn, insecure, and will likely be under stress (Santos & Ostrosky, 2002). No much attention has been given to this aspect of DLLs development in the research literature (Halle, et al, 2014), but research with monolingual children indicates that children who feel rejected by their peers in their early years face higher risk of lower academic achievement, a greater likelihood of grade retention and/or dropping out of school, and a greater risk of delinquency and of committing juvenile offenses in adolescence (Jimerson, Egeland, Sroufe, & Carlson, 2000).

Goldenberg and colleagues (2013) present additional instructional strategies, identified as "sheltered instruction", that can be effective in promoting development and learning of DLLs from PreK-3rd Grade, those include:

- "Using pictures of vocabulary words to illustrate word meanings (Roberts and Neal 2004)
- Using hand puppets and game-like activities to illustrate concepts and actions and to engage children physically (Pasnak et al. 2006).
- Offering multimedia-enhanced instruction in the form of videos to enhance vocabulary instruction with nonfiction texts (Silverman and Hines 2009), and

- Using materials with familiar content to promote comprehension and facilitate learning new concepts and skills (Kenner 1999)” (p. 106).

The implementation of these instructional practices requires adequate program policies and resources, as well as specific teacher characteristics and an appropriate curriculum. For example, programs will need to allow the use of the primary language in instruction, hire qualified bilingual staff, provide ongoing professional development and materials (e.g., bilingual books, music), and engage families of DLLs in partnering with the program/teacher to support their children in both their primary language and English (Castro, Espinosa, Páez, 2011). Teachers (bilingual and non-bilingual) will need to be knowledgeable about how development unfolds in DLL children and about effective instructional practices to support development and learning among DLLs (Zepeda, Castro & Cronin, 2011; Zepeda, 2014). Finally, the curriculum will need to support the use of first and second language development, providing opportunities to incorporate instructional enhancements targeting DLL children, in an intentional and systematic manner.

Language of instruction approaches for dual language learners

A key issue in the education of dual language learners is the use of their first language in instruction. Instructing dual language learners in their primary language will offer them opportunities to have rich language interactions and close relationships with their teachers (Chang, et al, 2007). Educators will need to learn when, how and for which purpose the primary language will be used in the classroom and that will require planning and competence development. Most of the research on language of instruction approaches for DLLs has been conducted with school-age children (e.g., Cheun & Slavin, 2012; Thomas & Collier, 2004); while very few studies have examined the effectiveness of various

language of instruction approaches with preschool-aged DLLs (Buysse, Peisner-Feinberg, Hammer, Paez & Knowles, 2014).

Three distinct approaches to language of instruction for DLLs can be identified, as described by Goldenberg and colleagues (2013) (p. 97-98):

- English immersion programs. All or mostly all instruction and teacher interactions are in English. The goal of these programs is English acquisition and development; there is no intent to develop children's home languages nor is the home language used to a significant degree to support children's learning. Children are not necessarily forbidden from speaking the home language, but its use is not encouraged nor actively supported. One advantage of English immersion programs is that they can accommodate children from many home languages. English immersion preschools, however, they are not consistent with best practices based on research (see below).
- Maintenance or developmental programs. Such programs are at the opposite end of the spectrum. These programs use the children's home language and English extensively in the classroom. The goals are to (1) maintain and develop the home language and (2) help children to acquire and develop English proficiency. A classroom might include all DLLs from the same language background, or both DLLs and monolingual English-speaking children. In the latter case, these are called dual language programs; their goal is to promote bilingual competencies for both DLLs and their monolingual English-speaking peers.

- Transitional programs. Transitional programs lie between English immersion and maintenance programs. They use the home language to one degree or another, but the goal is not necessarily maintenance or further development of the home language. The home language is used to help children acquire concepts and content, learn how to function in preschool, and engage in all classroom activities. Children can also learn songs, rhymes, and games or participate in science lessons carried out in the home language, but the goal is generally to help children transition to an all-English classroom environment, if not in preschool then certainly in kindergarten and early elementary school.

In recent years, major research reviews have concluded that DLL children in bilingual programs typically score higher on tests of English than do DLLs in all-English immersion programs (Francis, Lesaux, & August, 2006; Genesse, Lindolm-Leary, Sunders, & Christian, 2005; Cheung & Slavin, 2012; Rolstad, Mahoney, & Glass, 2005). Despite the accumulating evidence that bilingual and first language education are at least as effective as English immersion in promoting English language learning, these approaches remain controversial (Barnett et al., 2007).

Studies on the language and literacy development of DLL children denote that bilingual programs and approaches that support and develop children's first language skills may have important advantages (Barnett et al., 2007; Páez, Tabors, & López, 2007). Current research on the relationship between first and second language acquisition suggests that access to bilingual programming can assist DLLs in their language and literacy development (August & Shanahan, 2006). For example, 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; Rinaldi & Páez, 2008). These findings support the approach that language programs for Spanish-speaking bilingual children should provide the opportunity for the maintenance and development of Spanish language and literacy skills, whenever possible.

Among language of instruction approaches in bilingual education, two-way bilingual immersion (TWI) is emerging as an effective and increasingly common approach to address the needs of bilingual learners (Barnett et al., 2007; Howard, Sugarman, & Christian, 2003). Also referred to as dual language programs, TWI provide dual language learners and native English speakers with an education in two languages. A study by Barnett and colleagues used random assignment of both dual language learners and monolingual English speakers to either a TWI or an English immersion preschool program, to compare the educational effectiveness of these two approaches. Their findings indicate that both, TWI and English immersion approaches boosted the learning and development of children including dual language learners. More importantly, TWI also improved the Spanish language development of dual language learners and native English speakers without losses in English language learning. This study shows that both approaches to early education can be successful in improving children's academic skills, while the TWI program additionally provided better support for Spanish language development. This study introduces promising approaches for dual language learners, but, as noted by Barnett et al. (2007), more research is needed to provide a sound basis for policy and practice in the early education of DLLs.

There is a type of dual language program that offers instruction in two languages to children from one language group, and that is called a *bilingual one-way program*. This type of program is usually offered to children whose first language is not English, with the goal of maintaining and developing their two languages. There are variations in the way dual language programs are implemented with regards to time allocated for instruction in each language, and how subject-area instruction in a respective language is organized. Depending on the population group involved and the goals of the program, most commonly dual language programs use a 90-10 or a 50-50 models. In the 90-10 model the language other than English is used 90% of the time in the early grades with an increasing proportion of instruction in English used until 6th grade when the two languages begin to be used 50% of the time. In 50-50 models instruction is conducted in the two languages half of the time from the beginning of the program, which could be in PreK or Kindergarten depending on the school (Gómez, Freeman, & Freeman, 2005).

Multilingual classrooms

Classrooms enrolling children speaking not one but several different home languages are increasing. In general, instruction in those classrooms is offered only in English, although, bilingual or two-way immersion programs can also enroll children speaking languages other than the two languages of instruction. This happens, for example, when Spanish and English are the languages of instruction in bilingual programs, and children speaking other languages at home are enrolled.

In English immersion classrooms enrolling children from multiple language backgrounds, support of children's first language should still be provided and be a priority for school administrators and teachers (Espinosa, 2008). Developing close collaborations

with families of DLLs will be essential as they can provide exposure to the first language. The goal of developing and maintaining the first language may not be fully reached, but increasing children's exposure and use of their first language in the school and classroom environment will support not only their English language acquisition and academic performance but also the development of DLLs' positive self-esteem and cultural identity. Using music in different languages, labeling the classroom with the different languages (using different colors per each language, or using different languages on alternate days or weeks), and making books in different languages available to children are some examples of ways in which various home languages can be present in the classroom.

In addition to supporting the home language, sheltered instruction strategies (mentioned above) could be used to assist with teaching new vocabulary and comprehension of content for all children whose first language is not English. They include the use of visual aids, such as props, pictures, and graphic organizers, as well as gestures, body movement and hands-on activities to demonstrate concepts (Goldenberg et al, 2013).

Conclusions

The type and quality of early education in programs serving dual language learners should be a concern given the documented school readiness gap and low academic performance of DLLs in the early years. Research has shown that there are differences in the development of children growing up bilingually when compared with their monolingual peers across all domains. Also, the contextual factors affecting these children's development and learning may differ from those experienced by monolingual children. These lead to the conclusion that instructional strategies and language of

instruction approaches should be designed to specifically target DLLs needs instead of using the traditional monolingual/mono-cultural approach.

There is evidence that approaches that use the first language in instruction can be more beneficial for DLLs, and not detrimental to their progress in English acquisition, than English immersion approaches. Furthermore, dual language programs have the additional advantage of promoting bilingual proficiency. Research also suggest that in any language of instruction approach offered to DLLs, a central consideration should be the quality of instruction, and the fidelity of implementation (Cheung & Slavin, 2012).

Finally, it is important to point out that most research related to the early education of DLLs is cross-sectional, pre-post test evaluations. There is a need for more longitudinal studies that examine children's outcomes overtime and the conditions under which instructional practices and language of instruction approaches work best.

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