Review

The language and literacy development of young dual language learners: A critical review

Carol Scheffner Hammer [a],[*], Erika Hoff [b], Yuuko Uchikoshi [c], Cristina Gillanders [d], Dina C. Castro [e], Lia E. Sandilos [a]

[a] Temple University, United States
[b] Florida Atlantic University, United States
[c] University of California, Davis, United States
[d] University of North Carolina, Chapel Hill, United States
[e] Arizona State University, United States

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ABSTRACT

The number of children living in the United States who are learning two languages is increasing greatly. However, relatively little research has been conducted on the language and literacy development of dual language learners (DLLs), particularly during the early childhood years. To summarize the extant literature and guide future research, a critical analysis of the literature was conducted. A search of major databases for studies on young typically developing DLLs between 2000 and 2011 yielded 182 peer-reviewed articles.

Findings about DLL children's developmental trajectories in the various areas of language and literacy are presented. Much of these findings should be considered preliminary, because there were few areas where multiple studies were conducted. Conclusions were reached when sufficient evidence existed in a particular area. First, the research shows that DLLs have two separate language systems early in life. Second, differences in some areas of language development, such as vocabulary, appear to exist among DLLs depending on when they were first exposed to their second language. Third, DLLs' language and literacy development may differ from that of monolinguals, although DLLs appear to catch up over time. Fourth, little is known about factors that influence DLLs' development, although the amount of language exposure to and usage of DLLs' two languages appears to play key roles. Methodological issues are addressed, and directions for future research are discussed.

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* Corresponding author. Tel.: +1 215 204 3971.
   E-mail address: carol.hammer@temple.edu (C.S. Hammer).

Children's oral language and early literacy development serve as the foundation for later reading abilities and overall academic success. It is well documented that children with low oral language abilities are at risk for poor outcomes as they progress through school (Snow, Burns, & Griffin, 1998). Much research has examined the language and literacy development of children learning one language. Unfortunately, insufficient attention has been paid to the language and literacy development of children learning two languages or dual language learners (DLLs), particularly during the early childhood years. This is a crucial issue, because children who are DLLs represent one of the fastest growing populations in the United States (Basterra, Trumbull, & Solano-Flores, 2010). Nearly 30% of children in Head Start are DLLs, with 85% being speakers of Spanish (Mathematica Policy Research, 2010). This percentage is expected to increase over the next several decades.

Children learning two languages vary widely in their early experiences with their two languages. As a result, they are extremely heterogeneous in the language and early literacy abilities they possess when they enter kindergarten. Given that children's academic success is dependent on children's early language and literacy abilities, understanding the abilities of this substantial segment of the population is essential. There is particular reason to be concerned about DLLs in this regard. On average, children in the U.S. who speak English and also are exposed another language at home show lower levels of academic achievement throughout school and graduate high school at lower rates than monolingual English-speaking children (National Center for Education Statistics, 2013; Oller & Eilers, 2002). Additionally, research has shown that DLLs' English language abilities in kindergarten predict their academic achievement trajectories through eighth grade (Halle, Hair, Wandener, McNamara, & Chien, 2012; Han, 2012).

Home language and literacy skills are also relevant to DLLs' long-term outcomes. In immigrant families, children's abilities to speak their families' home languages are related to the quality of relationships within the family and to measures of psychosocial adjustment (Tseng & Fuligni, 2000). Additionally, some literacy-related skills transfer across languages making strong home language skills of use in acquiring English literacy (Bialystok & Herman, 1999; Hammer, Davison, Lawrence, & Miccio, 2009; Riches & Genesee, 2006). Furthermore, DLLs have a unique opportunity to become proficient bilinguals as adults and enjoy the attendant cognitive, social, and economic benefits (Bialystok, 2009).

Improving the field's understanding of the language and literacy development of young DLLs' language and literacy skills is critical, given the importance of these areas to later academic success (Scarborough, 2001; Snow et al., 1998). Such information will assist educators, researchers, and policy makers in understanding the developmental trajectories of DLLs and can be used to help understand when DLLs have learning concerns. Therefore, this manuscript presents the results of a critical review of the research literature from 2000 to 2011 on the early language and literacy development of DLLs.

Critical reviews of DLLs' development have been done previously; however, none have focused on the language and literacy development of children from birth through age five. August and Shanahan's (2006) *Report of the National Literacy Panel on Language-Minority Children and Youth* reviewed research articles published between 1980 and 2002 that targeted elementary school children, with some studies of preschoolers being included. More recently, Dixon and colleagues (2012) synthesized information from 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. Studies included in the review targeted children of various ages from preschool through twelfth grade.

Therefore, this critical review fills an important need by analyzing the recent research literature on the language and literacy development of DLLs from birth through age five. Specifically, the purpose was to: (a) synthesize the research findings on the trajectories of DLLs' language and literacy development and factors that influence these areas of development, (b) identify methodological concerns, and (c) identify gaps in the research base and determine future research needs.

Method

For the purposes of the critical literature review on language and literacy development, dual language learners were broadly defined as children who were exposed to two languages during early childhood (Bialystok, 2001). This includes children who were exposed to two languages from birth as well as children who were exposed to their second language sometime during the preschool years. There are two primary reasons for this inclusive definition. First, the research community has not developed an agreed upon definition of who is a dual language learner. A researcher's theoretical perspective and associated research question(s) often dictate the definition of DLLs used in an investigation. Second, in much of the research on DLLs' language and literacy development, descriptions of existing research samples often do not include inclusion/exclusion criteria. Therefore, many valuable studies would have been excluded from the review if a strict definition of DLLs were applied.

The criteria used to identify articles included in this review were based on those defined by the Center for Early Care and Education Research-DLL. These included the following: published peer-reviewed journal articles from 2000 to 2011; a focus on typically-developing DLLs from birth through five years of age (with studies focusing only on kindergarteners excluded); a measurement plan that included at least one assessment point during this age span; analyses that focused on DLLs either exclusively or as a subgroup; and research designs that included case study, descriptive, cross-sectional, longitudinal, and qualitative methods. (Note that on a few occasions, findings on older children are reported when a study compared data on preschoolers to data on older children. In these instances, the findings on preschoolers would be meaningless without a discussion of the findings on children of older ages.)

Prior to searching the literature, a list of key search terms was developed by the team, which consisted of the four authors of this paper. The terms were divided into 40 superordinate terms or primary search terms and 143 subordinate or secondary terms. The superordinate terms consisted of terms that focused on the targeted population (e.g., dual language learn*, bilingual, English language learn*, English language learn*, limited English proficiency), age groups (infant*, toddler*, preschool*, early childhood, early development, Head Start), and languages and cultures (e.g., Spanish-speaking, Latino, Chinese-speaking, Mandarin, language minorit*). The subordinate terms consisted of terms specific to