



RESEARCH BRIEF #6

Language and Literacy Development in Dual Language Learners: A Critical Review of the Research

Introduction

Dual language learners (DLLs) are entering early care and education programs across the country at increasing rates. Currently, 30% of Head Start children speak a language other than English at home, with over 80% of DLLs being from Spanish speaking homes (National Head Start Training and Technical Assistance Research Center, 2008). As a result, there is a significant need to understand DLLs' language and literacy development as well as the environmental factors that impact children's development. Because research on monolinguals has demonstrated that children's early language and literacy abilities serve as the foundation for later reading and academic outcomes, it is reasonable to expect that DLLs' language and emergent literacy abilities also are fundamental for children's later success.

This brief report is a summary of a systematic review of the research literature examining the language and literacy developmental trajectories of DLLs birth to 5, with the goal of identifying knowledge gaps and determining future research directions. The review focused on peer-reviewed studies published 2000–2010. This included studies published in the US and Canada as well as other international articles that were published in English and available through academic databases available in the US. An exhaustive search of the literature produced 139 articles that were analyzed with respect to research methods and study results as described below.

Results

- 1. In general, DLLs' language development differed from that of monolingual peers.** When bilingual infants' vocabularies in their respective languages were compared to monolingual infants' vocabularies, bilingual children tended to have smaller vocabularies. However, bilingual infants and toddlers' conceptual vocabularies were comparable to those of monolinguals. Additionally, differences were observed between bilingual and monolingual children's grammatical development. For example, there was preliminary evidence that order of acquisition of English grammatical markers varied between DLLs and monolinguals. The exception to these findings was in phonological or speech sound development. Although differences were observed during infancy, bilingual children appeared to catch up to monolinguals during the preschool years and exhibit similar phonological abilities to those of monolinguals when they were older.
- 2. DLLs have two separate language systems.** The findings of both US/Canada and other international studies consistently showed that bilingual children were developing two separate language systems, although there was some interaction between the two languages. As children developed throughout the preschool years, cross-language influences continued to be observed. The direction of the interaction was inconsistent across studies. Some studies showed that the children's first language (L1) influenced their second language (L2), whereas other studies demonstrated the influence of L2 on children's L1, as well.
- 3. DLLs' abilities in two languages were affected by the amount of exposure they received in those languages.** In general, the amount of ex-

posure that children received in a particular language was related to their abilities in that language. Similarly, differences observed in children's abilities were dependent on when they were first exposed to the second language. The language development of DLLs who were exposed to two languages from birth varied from that of children who were not exposed to their second language until entry into preschool. There also was preliminary evidence that children's usage of their two languages affected their abilities, as well.

4. The vast majority of studies involving U.S. samples focused on Spanish-speaking children.

Relatively few studies involved children who spoke Asian languages. Additionally, many studies focused on children from low socioeconomic status (SES) backgrounds or did not report children's SES. As a result, it is difficult to differentiate the impact of bilingualism and SES on children's development.

5. Methodological issues limit the conclusions that can be drawn from research on the language and literacy development of DLLs.

The definition of DLLs and the types of information collected on DLLs were inconsistent across studies. Additionally, sample sizes generally were small and few longitudinal studies have been conducted. The lack of valid and reliable assessment instruments that have been standardized on DLLs represents another significant methodological limitation across studies.

Conclusions

This review revealed that much more information is needed about young DLLs' language and literacy development. A range of research questions have been asked about bilingualism and specific aspects of language development using a range of research methods, although the number of studies that addresses each of these research questions is quite limited. Studies with samples from the United States have primarily focused on Spanish-English populations, with relatively few studies having been conducted on other language groups. Most of the studies on DLLs targeted language development, with few focused on their literacy abilities. In general, it appears that DLLs have two separate language systems that influence each other. There is evidence of transfer between children's L1 and L2 in some areas of language and literacy. Additionally, DLLs engage in code switching as a pragmatic strategy. Differences between DLLs' and monolinguals' development have been documented in most areas, indicating that DLLs should not be expected to follow monolingual norms. Additionally, there is some evidence that children's oral language development in L1 and L2 supports literacy development in both languages. Findings based on a few studies indicate that environmental factors impact children's outcomes. In particular, maternal usage of L1 supports DLLs' L1 development and does not harm children's development of L2.

Additional research is needed on factors that influence language and literacy development among young DLL children. For example, studies are needed that examine the differential effects of bilingualism and SES, as well as the impact of the quantity and quality of language input. Studies that investigate children's development in various language contexts and communities also are needed, largely because language, communication, and culture are inextricably linked. ●

Method

The search parameters for this review included the following: published peer-reviewed journal articles from 2000–2010 with U.S., Canadian, and other international samples that included at least one direct child assessment or standardized ratings of DLL children's development prior to age 6. Search terms were defined in accordance with CECER-DLL guidelines and included terms related to dual language learners (dual language learner, English as a second language, limited English proficiency, English language learners) as well as terms related to language and literacy development and those that addressed influencing factors related to the family, home, or community.

Selected References of Studies Included in the Review

Studies on Language and Literacy Development in DLLs and Monolinguals

- Bland-Stewart, L., & Fitzgerald, S.M. (2001). Use of Brown's 14 grammatical morphemes by Hispanic preschoolers: A pilot study. *Communication Disorders Quarterly*, 22, 171-186.
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- Sen, R., & Blatchford, P. (2001). Reading in a second language: Factors associated with progress in young children. *Educational Psychology*, 21, 189-202.

Studies on the Development of Two Language Systems

- Anderson, R. (2004). Phonological acquisition in preschoolers learning a second language via Immersion: A longitudinal study. *Clinical Linguistics & Phonetics*, 18, 183-210.
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- Kupich, T. (2007). Determiners in bilingual German-Italian children: What they tell us about the relation between language influence and language dominance. *Bilingualism: Language and Cognition*, 10, 57-78.
- Marchman, V. A., Fernald, A., & Hurtado, N. (2010). How vocabulary size in two languages relates to efficiency in spoken word recognition by young Spanish-English bilinguals. *Journal of Child Language*, 37, 817-840.
- Marinova-Todd, S., Zhao, J., & Bernhardt, M. (2010). Phonological awareness skills in the two languages of Mandarin-English DLL children. *Clinical Linguistics & Phonetics*, 24, 387-400.
- Mishina-Mori, S. (2005). Autonomous and interdependent development of two language systems in Japanese/English simultaneous bilinguals: Evidence from question formation. *First Language*, 25, 291-315.
- Paradis, J. (2001). Do bilingual two-year-olds have separate phonological systems? *International Journal of Bilingualism*, 5, 19-38.
- Qi, R. (2010). Pronoun acquisition in a Mandarin-English bilingual child. *International Journal of Bilingualism*, 14, 37-64.

Studies on Exposure to Languages

- Bohman, T. M., Bedore, L. M., Peña, E.D., Mendez-Perez, A., & Gillam, R.B. (2010). What you hear and what you say: Language performance in Spanish-English bilinguals. *International Journal of Bilingual Education and Bilingualism*, 13, 325-344.
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About CECER-DLL

CECER-DLL is a national center that is building capacity for research with dual language learners (DLLs) ages birth through five years. CECER-DLL aims to improve the state of knowledge and measurement in early childhood research on DLLs, identify and advance research on best practices for early care and education programming, and develop and disseminate products to improve research on DLLs. CECER-DLL is a cooperative agreement between the Frank Porter Graham (FPG) Child Development Institute at The University of North Carolina at Chapel Hill and the Office of Planning, Research, & Evaluation (OPRE) in the Administration for Children & Families (ACF), in collaboration with the Office of Head Start and the Office of Child Care.

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Additional Resources: For additional information regarding this research brief, see <http://cecerdll.fpg.unc.edu>



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