



RESEARCH BRIEF #4

# Evaluating Early Care and Education Practices for Dual Language Learners: A Critical Review of the Research

## Introduction

Early childhood is a critical period for children who are dual language learners (DLLs), many of whom face the difficult task of simultaneously learning a new language while acquiring essential school readiness skills. To date, there has been little systematic attention in the literature to optimal early care and education programming for DLLs and the specific interventions that foster development and learning in this population.

This brief report is a summary of a systematic review of the research literature evaluating the effects of early care and education practices on the development and learning of dual language learners (DLLs) birth through 5 years of age. The review focused primarily on peer-reviewed studies published in the U.S. from 2000–2010. The purpose of the review was to describe the nature of the educational interventions used with DLLs and to determine the effectiveness of these approaches with this population, as well as to identify any moderators of these effects. A related purpose was to appraise the quality of the research, with a particular focus on the specific methodological issues that emerge in conducting research on DLLs. An exhaustive search of the literature produced 24 articles that were analyzed with respect to research methods and study results as described below.

## Results

1. **Studies evaluated a wide range of interventions that encompassed particular curricula, instructional approaches, various types of programs, and professional devel-**

**opment activities; these interventions were almost evenly divided in terms of whether the language of instruction or caregiving relied exclusively on English (2, 5, 8, 9, 11, 12, 13, 14, 16, 17, 21, 23, 24) or incorporated the home language (1, 3, 4, 6, 7, 10, 15, 18, 19, 20, 22).** Studies that incorporated the home language (in most cases Spanish) were inconsistent or lacked sufficient detail regarding the extent to which children were exposed to the home language in relation to English and the instructional or caregiving contexts in which children's home language was used.

2. **In general, interventions in which English was the primary language of instruction produced positive effects on children's skills in English (8, 5, 11, 16, 17, 21, 23). For interventions that incorporated the home language, some showed positive effects only in one language (either English or the home language; 1, 3, 4, 6, 10, 15, 20) and others showed positive effects in both English and the home language (7, 19).** Most studies focused on evaluating academic learning outcomes (primarily language and literacy skills). Few studies with English interventions also included outcome measures in the home language, whereas almost all studies with bilingual interventions included measures in both languages. None of the studies detected any negative effects of interventions on the development of language proficiency in English or Spanish for DLLs.

3. **Few studies examined variables such as initial language proficiency, child age, or home language and literacy practices that might have moderated the effectiveness of these interventions** (3, 5, 10, 22). Across all studies, there was relatively little attention paid to moderating factors, but findings from some studies suggested that factors such as higher initial proficiency in the home language and being exposed to interventions at younger ages resulted in more positive effects.
4. **The study samples were limited; almost all studies focused on Spanish-speaking children 3-5 years of age in center-based programs.** The vast majority of studies focused on children who spoke Spanish as their primary language. Few studies evaluated interventions targeting DLL infants and toddlers and their families or included settings other than center-based care. Small sample sizes in a number of the studies also limited the generalizability of the findings.
5. **Methodological inconsistencies across studies limit the ability to draw broad conclusions about the effectiveness of interventions with this population.** The methods used to determine children’s language status varied widely in terms of their reliance on parental or teacher report (1, 2, 3, 6, 7, 8, 10, 11, 12, 17, 18, 20, 21, 23, 24) versus standardized assessments (5, 15, 16); several studies did not report how language status was determined (4, 9, 13, 14, 19, 22). There also was considerable variability in how bilingual

interventions were defined and implemented, including the extent to which exposure to the home language occurred, when and how long it occurred, and whether it was combined with other approaches. There were also inconsistencies in how child outcomes were measured, with only one study employing a parallel assessment procedure (in both English and the home language) for the entire sample (4).

## Conclusions

A review of relevant research studies produced only 24 articles that evaluated educational interventions for DLLs birth to 5 years of age. Across all studies, the interventions were fairly evenly divided with respect to language of instruction or caregiving, but varied widely in terms of whether the focus was on specific instructional practices or broader programmatic effects. Methodological problems concerning restricted samples of children and settings, methods of determining DLL status, and the lack of parallel assessments in English and the home language make it difficult to draw broad conclusions about the effectiveness of specific early care and education practices for this population. A standardized taxonomy of interventions for DLLs that separates the effects of language of instruction from broader curricular and instructional approaches is needed to achieve greater consistency in how these interventions are defined and evaluated through research. Determining the differential effects of these interventions through future research is critical for identifying interventions that hold the most promise for improving educational and developmental outcomes for DLLs. ●

## Method

The search parameters for this review included all of the following: published peer-reviewed journal articles and reports of large-scale federally sponsored studies from 2000-2010; early care and education interventions targeting DLLs birth through 5 years old; studies that evaluated the effects of an intervention on DLLs’ learning and development; and studies that included at least one assessment of DLL children’s learning or development prior to age 6. Search terms were defined in accordance with CECER-DLL guidelines and grouped into the following categories: early care and education programs (e.g., pre-kindergarten, child care, Head Start), interventions (e.g., curriculum and instruction, specific instructional strategies, home visiting, family support, bilingual education), language status (e.g., bilingual, English language learner, dual language learner), children’s ethnicity or immigration status (e.g., Latino, immigrant, migrant), and age groups (e.g., infants, toddlers, preschoolers, birth to 5 years old).

## References of Studies Included in the Review

1. Barnett, W. S., Yarosz, D., Thomas, J., Jung, K., & Blanco, D. (2007). Two-way and monolingual English immersion in preschool education: An experimental comparison. *Early Childhood Research Quarterly, 22*, 277-293.
2. Barnett, W., Jung, K., Yarosz, D., Thomas, J., Hornbeck, A., Stechuk, R., & Burns, S. (2008). Educational effects of the Tools of the Mind curriculum: A randomized trial. *Early Childhood Research Quarterly, 23*(3), 299-313.
3. Bernhard, J., Cummins, J., Campoy, F., Ada, A., Winsler, A., & Bleiker, C. (2006). Identity Texts and Literacy Development Among Preschool English Language Learners: Enhancing Learning Opportunities for Children at Risk for Learning Disabilities. *Teachers College Record, 108*(11), 2380-2405.
4. Buysse, V., Castro, D., & Peisner-Feinberg, E. (2010). Effects of a professional development program on classroom practices and outcomes for Latino dual language learners. *Early Childhood Research Quarterly, 25*(2), 194-206.
5. Collins, M. (2010). ELL preschoolers' English vocabulary acquisition from storybook reading. *Early Childhood Research Quarterly, 25*(1), 84-97.
6. Durán, L., Roseth, C., & Hoffman, P. (2010). An experimental study comparing English-only and transitional bilingual education on Spanish-speaking preschoolers' early literacy development. *Early Childhood Research Quarterly, 25*(2), 207-217.
7. Farver, J., Lonigan, C., & Eppe, S. (2009). Effective early literacy skill development for young Spanish-speaking English language learners: An experimental study of two methods. *Child Development, 80*(3), 703-719.
8. Gormley, W. (2008). The effects of Oklahoma's pre-K program on Hispanic children. *Social Science Quarterly, 89*(4), 916-936.
9. Jackson, B., Larzelere, R., St. Claire, L., Corr, M., Fichter, C., & Egerston, H. (2006). The impact of the Heads Up! Reading on early childhood educators' literacy practices and preschool children's literacy skills. *Early Childhood Research Quality, 21*3-226.
10. Lugo-Neris, M., Jackson, C., & Goldstein, H. (2010). Effects of a conversation facilitating vocabulary acquisition of young English language learners. *Language, Speech & Hearing Services in Schools, 41*(3), 314-327.
11. Magnuson, K., Lahaie, C., & Waldfogel, J. (2006). Pre-school and school readiness of children of immigrants. *Social Science Quarterly, 87*(5), 1241-1262.
12. Mendelsohn, A., Mogilner, L., Dreyer, B., Forman, J., Weinstein, S., Broderick, M., Cheng, K., Magloire, T., Moore, T., & Napier, C. (2001) The Impact of a Clinic-Based Literacy Intervention on Language Development in Inner-City Preschool Children. *Pediatrics, 107*(1), 130-134.
13. Pasnak, R., Savage Greene, M., Ferguson, E., & Levit, K. (2006). Applying principles of development to help at-risk preschoolers develop numeracy. *Journal of Psychology, 140*(2), 155-173.
14. Raver, C., Jones, S., Christine, L., Zhai, F., Metzger, M., & Solomon, B. (2009). Targeting children's behavior problems in preschool classrooms: A cluster-randomized control trial. *Journal of Consulting and Clinical Psychology, 77*(2), 302-316.
15. Restrepo, M. A., Castilla, A. P., Schwanenflugel, P. J., Neuharth-Pritchett, S., Hamilton, C. E., Arboleda, A. (2010). Effects of a supplemental Spanish oral language program on sentence length, complexity, and grammaticality in Spanish-speaking children attending English-only preschools. *Language, Speech, and Hearing Services in Schools, 41*, 3-13.
16. Roberts, T. (2003). Effects of alphabet-letter instruction on young children's word recognition. *Journal of Educational Psychology, 95*(1), 41.
17. Roberts, T., & Neal, H. (2004). Relationships among preschool English language learner's oral proficiency in English, instructional experience and literacy development. *Contemporary Educational Psychology, 29*(3), 283-311.
18. Roberts, T. (2008). Home storybook reading in primary or second language with preschool children: Evidence of equal effectiveness for second-language vocabulary acquisition. *Reading Research Quarterly, 43*(2), 103-130.
19. Rodriguez, L., Irby, B., Brown, G., Lara-Alecio, R., & Galloway, M. (2005). An analysis of second grade reading achievement related to pre-kindergarten Montessori and transitional bilingual education. *Review of research and practice, Vol 3* (pp. 45-65). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
20. Ryan, A. (2005). The effectiveness of the Manchester Even Start program in improving literacy outcomes for preschool Latino students. *Journal of Research in Childhood Education, 20*(1), 15-26.

21. Silverman, R., & Hines, S. (2009). The effects of multimedia-enhanced instruction on the vocabulary of English-language learners and non-English-language learners in pre-kindergarten through second grade. *Journal of Educational Psychology, 101*(2), 305-314.
22. Stipek, D., Ryan, R., & Alarcón, R. (2001). Bridging research and practice to develop a two-way bilingual program. *Early Childhood Research Quarterly, 16*(1), 133-149.
23. U.S. Department of Health and Human Services, Administration for Children and Families (January 2010). *Head Start Impact Study*. Final Report. Washington, DC.
24. U.S. Department of Health and Human Services, Administration for Children and Families (April 2002). *Early Head Start. Making a difference in the lives of infants and toddlers and their families: The impacts of Early Head Start. Volume 1: Final technical report*. Washington, DC.

## 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.

### Suggested citation

Center for Early Care and Education Research—Dual Language Learners (CECER-DLL; 2011). *Research brief #4. Evaluating early care and education practices for dual language learners: A critical review of the research*. Chapel Hill: The University of North Carolina, FPG Child Development Institute, Author.

This brief summarizes results from a critical review of the literature sponsored by CECER-DLL conducted by a research team consisting of Virginia Buisse, Ellen Peisner-Feinberg, Mariela Páez, Carol Hammer, and Dina Castro. The work was supported by a cooperative agreement funded by the Office of Planning, Research, and Evaluation (OPRE), U.S. Department of Health and Human Services. Permission to copy, disseminate, or otherwise use information from this document for educational purposes is granted, provided that appropriate credit is given.

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

