



Center for Early Care and Education Research Dual Language Learners

Evaluating Early Care and Education Practices for Dual Language Learners: Annotated Bibliographies from a Critical Review of the Research

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.

The purpose of the study was to compare the effects of English/Spanish two-way immersion (TWI) versus monolingual English instruction for English and Spanish speaking pre-kindergarten children using a quasi-experimental design. One hundred thirty one children were randomly assigned to either the two-way immersion group or the English only instruction group. Two-way immersion classrooms alternated between English and Spanish instruction weekly. Spanish-speakers in the TWI group showed significant increases in Spanish vocabulary. English-speaking children in the intervention group also showed gains in Spanish skills. No differences were found between groups on English language measures.

Barnett, W., Jung, K., Yarosz, D., Thomas, J., Hornbeck, A., Stechuk, R., et al. (2008). Educational effects of the Tools of the Mind curriculum: A randomized trial. *Early Childhood Research Quarterly, 23*(3), 299-313.

The purpose of the study was to determine the effects of Tools of the Mind curriculum on preschool children's social behavior, language development, and literacy growth. Using an experimental design, 274 children (93% Latino) were randomly assigned to Tools of the Mind curriculum classrooms or control classrooms which consisted of district developed curriculum. Teachers were stratified according to years of licensure, then randomly assigned to either the control group or experimental group to ensure equal teacher training. The intervention curriculum was found to produce lower scores on children's problem behaviors and improve classroom quality.

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.

The purpose of the study was to determine if exposure to bilingual literacy activities promotes early bilingual literacy development and learning in preschool children. Using an experimental design, 367 children (48% Latino, 44% African/Caribbean/Haitian) were randomly assigned to either the Early Authors Program (EAP) experimental group, or the control group. EAP intervention consisted of supporting preschoolers in writing and illustrating their own dual-language books. Children in the EAP group made greater gains in language development than children in the control group.

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*(1), 84-97.

The purpose of the study was to assess the effects of the Nuestros Niños Early Language and Literacy Program on teachers' classroom practices and Latino DLL preschoolers' language and literacy skills in both English and Spanish. Using an experimental design, 193 Latino children were random assignment to either the Nuestros Niños intervention group, or the control group. The professional development program complemented the core curriculum by providing monolingual English-speaking teachers with specific accommodations for DLL (e.g., visual cues and props, pre-reading activities, systematic observation of second-language learning). Results indicated that intervention classrooms had greater gains than control classrooms on language and literacy instructional activities and the classroom environment. Children in intervention classrooms also had greater gains on phonological awareness tasks in their primary language. No differences between groups were found on measures of English language and literacy.

- Collins, M. (2010). ELL preschoolers' English vocabulary acquisition from storybook reading. *Early Childhood Research Quarterly, 25*(1), 84-97.
- The purpose of the study was to determine if explicit explanation of target vocabulary words has an effect on DLLs' vocabulary learning. The researchers used an experimental design with three conditions: (a) the experimental group, (b) the control group, and (c) a "no-story" group. Eighty children were stratified according to L2 receptive language scores randomly assigned to the experimental or control groups. Ten children from the treatment group were randomly selected for the "no-story" group. The English language intervention consisted of the following each time a target English word was read: (a) pointing to the target word, (b) providing a simple definition, (c) providing a synonym, (d) making a gesture of the word, and (e) using the word in a different context. Children in the intervention group, who received rich explanation in English, learned more English vocabulary words than the control group and no-story group. Treatment accounted for more variability in vocabulary scores than factors such as home reading and L2 receptive vocabulary.
- 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.
- The purpose of the study was to compare the effects of English only (EO) instruction to Transitional Bilingual Education (TBE) on language and literacy development in low-income, Spanish-speaking preschoolers. Using an experimental design, 31 Spanish-speaking children in two classrooms were randomly assigned to either Transitional Bilingual Education or English-only instruction. This study only presented data on the first year when instruction in the TBE classroom was Spanish-only and the transition to English component was not implemented. Significant gains in Spanish vocabulary and letter-word identification were observed for children in the TBE group. No group differences were found on English measures.
- 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.
- The purpose of the study was to compare a transitional/bilingual model of instruction with an English-only model on DLLs' literacy skills in both Spanish and English. Using an experimental design, 94 children were random assignment to one of three conditions: a control group with High/Scope Curriculum only, an experimental group with High/Scope Curriculum and Literacy Express Preschool Curriculum in English only, or an experimental group with High/Scope Curriculum and Literacy Express Preschool Curriculum using Spanish transitioning to English. Findings showed that English-only and transitional group children had significantly higher English language assessment scores than controls. The Transitional group made greater gains on Spanish measures of language and literacy skills than the English-only group and control group.
- Gormley, W. (2008). The effects of Oklahoma's pre-K program on Hispanic children. *Social Science Quarterly, 89*(4), 916-936.
- The purpose of the study was to determine the effects of Oklahoma's Universal Pre-K program on educational outcomes of Latino children. Using an experimental regression-discontinuity design, 607 children (59% Spanish-speaking) were categorized as either alumni from the pre-k program (intervention group), or children subsequently enrolled in the pre-k program (control group) who had yet to participate in the program. Latino children who participated in the pre-k program made greater gains in cognitive skills than Latino children in the control group. Children in the intervention group whose primary home language was Spanish (vs. English) had significant gains over pre- and post- test scores on an achievement test administered in Spanish. However, gains on English measures were greater than gains on Spanish measures for Latino children.
- Jackson, B., Larzelere, R., St. Clair, L., Corr, M., Fichter, C., & Egertson, H. (2006). The impact of HeadsUp! Reading on early childhood educators' literacy practices and preschool children's literacy skills. *Early Childhood Research Quarterly, 21*, 213-226.
- The purpose of the study was to examine the impact of HeadsUp! Reading (HUR) on preschool children's language and literacy skills. The study used a quasi-experimental design with the following three conditions: the HUR intervention, the HUR intervention plus mentoring, and the control group. Intervention teachers were selected based on their interest in participating in HUR. Control teachers were matched on the basis of student demographics. Teachers in the HUR only group and HUR plus mentoring group improved their classroom practices significantly more than control teachers. Results also indicated that Spanish-speaking children improved as much as the English-speaking children and made more gains on receptive language in Spanish.

Lugo-Neris, M., Jackson, C., & Golstein, H. (2010). Facilitating vocabulary acquisition of young English language learners. *Language, Speech, and Hearing Services in Schools, 41*, 314-327.

The purpose of the study was to compare the effects of English-only storybook reading to storybook reading enhanced with Spanish bridging on children's vocabulary skills. An experimental design with a stratified random design based on language proficiency was used to randomly assign 22 Spanish-speaking children to participate in either storybook reading in English only, or storybook reading in English with supplemental Spanish instruction. The study found that the Spanish-bridging group made greater gains on English measures of expressive definitions, but no effects were found for English measures of receptive vocabulary and picture naming. The greatest gains were found for children with higher initial language proficiency in Spanish.

Magnuson, K., Lahaie, C., & Waldfogel, J. (2006). Preschool and school readiness of children of immigrants. *Social Science Quarterly, 87*(5), 1241-1262.

A secondary data analysis on ECLS-K data using estimated multivariate regression models was used to determine the effects of preschool on school readiness of 12,626 immigrant and non-immigrant children. Results indicated that children of immigrant mothers were less likely to be enrolled in center-based programs. Children of immigrants who attended preschool made greater gains in English language proficiency than those who remained at home with their parents. Preschool attendance raised reading and math scores as much for immigrant children as it did for non-immigrant children. In addition, Head Start program attendance was associated with better school readiness outcomes for children of immigrants whose mothers had low levels of education.

Mendelsohn, A.L., Mogilner, L.N., Dreyer, B.P., Forman, J.A., Weinstein, S.C., Broderick, M., ... Napier, C. (2001). The Impact of a clinic-based literacy intervention on language development in inner-city preschool children. *Pediatrics, 107*(1), 130-134.

The purpose of the study was to determine the effects of a clinic-based literacy intervention on the language development of preschool children. A quasi-experimental design with two conditions and a convenience sample were used. Depending on which clinic families used for pediatric care, 122 children (86% Latino) either received the Reach Out and Read (ROR) literacy intervention or no literacy intervention. Children and their families in the intervention group were shown how to use reading activities, reminded of the importance of reading, and provided with developmentally-appropriate books. Intervention families reported reading together with their children about one more day per week than control families. Latino children in the ROR intervention group scored significantly higher on measures of receptive language and expressive language vocabulary tests than Latino children in the control group.

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.

The purpose of the study was to determine the effects of oddity and seriation games on children's mathematical skills. Using an experimental design, 34 children (27 DLLs) were randomly assigned to either the experimental or control group. Children in the experimental group played oddity and seriation games, whereas children in the control group played numeracy games. Results indicated that children who played the oddity and seriation games had greater gains than for controls on the researcher-developed measure. No differences were found between groups on the standardized measures.

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.

The purpose of the study was to determine the effects of the Chicago School Readiness Project (CSRP) on children's behavior. Using a clustered, randomized controlled trial design, 18 Head Start sites (449 children) were randomly assigned to either the CSRP intervention group, or the control group. The Chicago School Readiness Project (CSRP) has 4 components including classroom management training, a Mental Health Consultant (MHC), a stress reduction workshop, and child focused mental health services. Results indicated that Latino children had lower levels of internalizing problems than non-Hispanic children. In addition, Latino children in the intervention group had greater reductions in externalizing behavior than Latino children in the control group.

Restrepo, M.A., Castilla, A.P., Schwanenflugel, P.J., Neu-harth-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.

The purpose of the study was to examine the effects of supplemental Spanish language instruction on Spanish-speaking preschoolers' Spanish language proficiency. A quasi-experimental design with two conditions, English-only instruction and Spanish supplemental instruction, was utilized. Spanish instruction classrooms were selected based on the proximity of their schools. English-only classrooms were selected from other schools that were demographically similar. Results indicated that DLLs in the Spanish language instruction group made significant gains in Spanish sentence length and complexity over DLLs in the English-only instruction group.

Roberts, T. (2003). Effects of alphabet-letter instruction on young children's word recognition. *Journal of Educational Psychology, 95*(1), 41.

The purpose of the study was to determine the effects of instructional techniques on word recognition. Using an experimental design, 33 preschool children (60% Hmong, 27% Spanish-speaking) were randomly assigned to either the letter-name or comprehension group. Letter-name instruction included alphabet song, letter introduction and activities, and rhyming activities. In comprehension lessons, children watched video tapes of books and matched illustrations to the text, read books, listened to vocabulary instruction, and completed story sequencing activities. Children who received letter-name instruction learned words spelled phonetically better than other words, whereas children who received comprehension instruction performed better on words with visually distinct spellings.

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.

The purpose of the study was to test the effects of explicit literacy instruction in English on DLL's skill development. An experimental design was used to randomly assign 33 DLL children to either the comprehension treatment group, or the letter/rhyme treatment group. The comprehension group received instruction emphasizing interactive storybook reading, vocabulary, and comprehension. The letter/rhyme group received instruction on naming and writing letters, and recognizing and generating rhymes. Children in the letter/rhyme group outperformed the comprehension group children on letter naming and writing. However, children in the comprehension group outperformed the letter/rhyme group on vocabulary and print concepts. Overall, English oral proficiency was more strongly correlated with comprehension instruction than with letter/rhyme instruction.

Roberts, T. (2008). Story homebook 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.

The purpose of the study was to determine the effects of an intervention which incorporated Spanish and English instruction in home and classroom storybook reading using an experimental design. Thirty-three DLL participants were randomly assigned to one of the two treatment groups and counterbalanced by language (Spanish or Hmong). The intervention consisted of home storybook reading in either L1 (Spanish or Hmong) or L2 (English) and then in the alternate language (either L1 or L2) from the first half of the intervention. Classroom instruction in English enhanced the learning of target vocabulary words for both groups. Regardless of the order in which the children received home readings, all children's English vocabulary acquisition increased after the intervention.

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, 3*, 45-65. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

The purpose of the study was to determine the effects of a Montessori Pre-k program on English and Spanish reading achievement for DLL's. A Quasi-experimental design was used to randomly select 200 Spanish-speaking children who had either participated in a pre-k Montessori bilingual program or who had participated in a traditional pre-k bilingual program. Instruction was provided initially in L1, with L2 gradually introduced. Analyses found that DLL students who participated in the Montessori bilingual pre-k program had higher 2nd grade reading achievement scores in English and Spanish than their peers who attended a traditional pre-k bilingual program.

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.

The purpose of the study was to determine whether the Even Start program improved literacy outcomes for preschool students, as compared to preschool students in the Title 1 program. A quasi-experimental, non-equivalent groups design with self-selection based on families' enrollment in either Even Start (all Spanish-speaking) or Title I (55% DLL) was used. The Even Start program included bilingual instruction, home visits, and parent education. Results indicated that Even Start students made greater gains in English language proficiency than Title I students.

Silverman, R., & Hines, S. (2009). The effects of multimedia-enhanced instruction on the vocabulary of English-language learners in pre-kindergarten through second grade. *Journal of Educational Psychology, 101*(2), 305-314.

The purpose of the study was to investigate the effects of adding video to traditional vocabulary instruction as a part of read aloud activities. Using an experimental design, matched pairs of 85 DLL children were randomly assigned within grades to either a non-video enhanced instruction group, or a video enhanced instruction group. DLLs in the video-enhanced group learned more target words and showed greater gains in general vocabulary skills than DLLs in the non-video group. There were no program effects on general vocabulary skills for non-DLLs.

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.

The purpose of the study was to determine the effects of the Learning-in-Two-Languages (LITL) program on English- and Spanish-speakers, and to determine whether the program had differential effects on the basis of age. The study utilized an experimental design with two conditions, including a LITL program instruction and an English-only instruction. All native Spanish-speakers were placed in the LITL program. Native English-speakers were randomly assigned to either the LITL program or the English-only program. LITL teachers provided language instruction in English for Spanish-speakers and language instruction in Spanish for English-speakers. Overall, there were few differences in the academic gains of native English-speakers in the English-only group and native Spanish-speakers in the bilingual program. Younger DLLs made substantially more progress on developing English language proficiency than older DLLs.

U.S. Department of Health and Human Services, Administration for Children and Families (January 2010). *Head Start Impact Study: Final Report*. Washington, DC. (3-year old cohort)

The purpose of the study was to determine the impact of Head Start on the cognitive, social and emotional, and health outcomes of children who were enrolled, as well as on the parental practices of their parents. From each of 378 Head Start centers randomly selected, 27 children were randomly selected and assigned to either the program or control group. DLLs in the three-year old cohort had higher vocabulary and spelling scores than DLLs in the control group during the first year of Head Start. During their second year, DLLs in the intervention group had higher scores on measures of phonological awareness, letter and word identification, and counting knowledge than DLLs in the control group. No long-term treatment effects were detected for DLLs in the three-year old cohort groups in the kindergarten or first grade years. Results for the four-year old cohort indicated that DLLs in the intervention group had higher vocabulary scores than DLLs in the control group during the Head Start year. In Kindergarten, DLLs in the intervention group had higher math ability skills than DLLs in the control group. No treatment effects were detected for DLLs in the first grade. More parents of DLLs in the three-year old Head Start group as compared to controls were reported to communicate with the school. For the four-year old cohort, significantly fewer parents with children in the intervention group reported themselves as having neglectful parenting styles.

U.S. Department of Health and Human Service, 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 I: Final technical report*. Washington, DC.

The purpose of the study was to determine the extent to which Early Head Start intervention can be effective for low-income families and infants/toddlers. The study also investigated how Early Head Start intervention programs affect children and families whose primary home language is not English. The Early Head Start program provides center-based care, home visits, health and nutrition services, and parent education services. The study used an experimental, longitudinal design with two conditions. Once centers identified eligible participants, 3,001 families were randomly assigned to one of the two conditions, either Early Head Start (EHS) or the control group. The only statistically significant result indicated that parents of DLL children who attended Early Head Start gave their children higher quality of assistance during a challenging Task.

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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