

Use of Spanish in Head Start and Dual Language Learners' Academic Achievement: A Mixed-Methods Study

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Project Description

The number of Spanish-speaking Dual Language Learners (DLLs) is growing rapidly in the U.S., representing an increasing share (nearly 40%) of Head Start (HS) and Early Head Start (EHS) participants as well as other early care and education (ECE) attendees. Recent developmental policy reports and HS mandates stress the importance of supporting the home language of Spanish (L1) in English-dominant child care programs as well as promoting the linguistic context in which DLL children are served. Yet, little is known whether teachers actually use L1 in ECE settings and for what purposes, and prior research has not sufficiently investigated whether the effects of programs like HS vary based on such L1 use.

This mixed-methods study seeks to understand whether classroom instruction in L1 impacts Spanish-speaking DLL children's English language school readiness skills. Given current mandates that openly support classroom use of children's L1, primarily a HS sample will be used for the study, however the implications are relevant to other ECE settings as well.

Research Questions

1. What child, family, and institutional factors predict enrollment in HS environments that use L1?
2. Are there main effects of instruction in L1 on English academic school readiness skills?
3. Does HS differentially benefit children instructed in L1?
4. How is L1 used in local HS classrooms, for what purposes, and how does L1 contribute to children's school readiness?

Sample and Methods

Two large, nationally representative datasets on HS children, families, and programs were used to address the study's first three research questions.

The first was the Head Start Impact Study (HSIS; U.S. DHHS, 2002-2006; N = 1,141 DLL children), which was a random assignment experiment designed to estimate the impact of HS on children's school readiness skills and parenting practices, as well as to determine under what circumstances HS achieved its greatest impact and for which children (U.S. DHHS, Final Report, 2010).

The second dataset was the Head Start Child and Family Experiences Survey, 2009 Cohort (FACES-2009; U.S. DHHS, 2009-2013; N= 825 DLL children), which was a longitudinal study of program performance, and specifically the population served; staff qualifications; HS classroom practices and quality measures; and child and family outcomes (U.S. DHHS, 2011).

Quantitative analyses of HSIS and FACES-2009 were conducted to understand what characteristics of Spanish-speaking DLL families predict enrollment in L1 HS environments (RQ 1), whether there are main effects of instruction in L1 on children's development (RQ 2), and whether HS is differentially beneficial for children based on such use (RQ 3). Specifically, logistic regression and residualized growth models were used for analyses.

To answer the fourth research question, qualitative HS classroom observations were conducted in a large county in the Southwest U.S. primarily serving Spanish-speaking DLL children (85% of all local HS participants). These observations were conducted in four purposely-sampled local HS classrooms over a

period of two months to refine the results from the quantitative data and provided a more detailed understanding of L1 classroom use (RQ 4).

Progress Update

Data analysis is complete for this project and is currently in the writing and reporting stage. Results from RQ 1 showed that children with Spanish as their exclusive first language were significantly more likely to be enrolled in an ECE arrangement that used L1 for instruction over an arrangement that did not use L1. Furthermore, the higher the proportion of other DLL children previously enrolled in an L1 instruction ECE setting, the more likely the parent of the study child enrolled them as well.

Results from RQ 2 showed that in both datasets there was a main effect of instructing Spanish-speaking DLL children in L1 for their English receptive vocabulary skills at the end of the HS year. A two-sample test of independent means showed that this finding replicated in both HSIS and FACES-2009.

Results from RQ showed that in the HSIS there was a positive interaction between L1 classroom use and random assignment to the HS treatment on English receptive vocabulary. Spanish-speaking DLL children in HS classrooms that instructed in L1 had higher English receptive vocabulary skills than Spanish-speaking DLL children in HS classrooms that did not instruct in L1 as well as Spanish-speaking DLL children in the control condition.

Preliminary results from RQ 4 suggest that there may be something fundamentally different about the way Spanish instruction impacts DLLs' receptive vocabulary skills compared with other domains, including early literacy in HS. Classroom observations indicated that both when introducing children to new vocabulary as well as using key established vocabulary in the classroom, teachers always said the words in one language and then deliberately translated into the other. Thus, such explicit translation provided Spanish-speaking DLL children with more classroom opportunities to make connections to the vocabulary and to increase their overall oral language skills.

Specific issues that I can address in December 2015 at the CCPRC Annual Meeting include

characteristics that predict enrollment in L1 HS, the effects of instruction in L1 on Spanish-speaking DLL children's English language school readiness skills, and how L1 is currently being used in local HS centers.

Implications for policy/practice

This research has important policy/practice implications for ECE programs as the study helps to elucidate what promotes better academic outcomes for the growing population of Spanish-speaking DLL children and whether L1 use in HS settings plays a role. Based on these results, HS and other ECE centers may be better equipped to make important decisions regarding teacher and staff hiring, classroom supports, and curriculum decisions

Implications for research

This study also has implications for research, particularly with how L1 classroom use as a construct is operationalized, as it is one of the first projects to look at the dynamics of L1 classroom use in depth in local HS classrooms. Currently, national data sets only have a few dichotomized language variables. The results of this work will hopefully spark discussion about how to better conceptualize home language use for future studies and how to better capture the complex dynamics in the match between the classroom language environment and children's language abilities.

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