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Parental involvement in language and literacy acquisition: A bilingual journaling approach

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Abstract

This pilot study examined the feasibility of a home-school partnership for improving emergent literacy skills in Spanish-speaking pre-school children of migrant farmworkers. Parents were requested to send labeled drawings of family activities to their children's classroom for supplementing bilingual language and literacy instruction. Participants were 19 children (between 2;6 and 5;2) assigned randomly to experimental (n = 11) or control (n = 8) classrooms. Pretest-posttest measures in Spanish and English were obtained using the Early Literacy Skills Assessment (ELSA). Results indicated significant increases in pre- to posttest English and Spanish scores for the experimental group, but not for the control group in alphabetic and print knowledge. Parental participation rates (as measured by weekly drawing submissions) exceeded 90%. These results suggest that integrating parent-generated content into classroom language intervention activities may be feasible both in terms of parental involvement as well as children's emergent literacy skills development.

Keywords

Drawing, ELL, emergent literacy, language, migrant, preschool, Spanish

I Introduction

The improvement of literacy outcomes among language minority students is a priority for educators, clinicians, and lawmakers. Research indicates that Spanish-speaking English language learners (ELLs) are twice as likely as their monolingual English-speaking peers to demonstrate sub-average literacy skills (Snow et al., 1998). The National Center for Educational Statistics has

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Lena G Caesar, Loyola University in Maryland, 4501 Charles Street, Baltimore, MD 21210, USA. Email: lgcaesar@loyola.edu reported persistent gaps between reading scores of Hispanic elementary students in the USA and their non-Hispanic peers (Lee et al., 2007). Hispanic students are often predisposed for low literacy achievement even before they enter the educational system (Restrepo and Towle-Harmon, 2008). Additionally, research has shown that, if left untreated, these disparities continue over time and across grades (Verhoeven and van Leeuwe, 2008). Early intervention therefore may be critical for improving the literacy learning potential of ELLs.

Current research suggests that the problems many children experience learning to read during the elementary years may be related to deficiencies in their emergent literacy skills development, skills that are typically acquired during the preschool years. Three key emergent literacy skills that researchers have found to predict children's reading ability during the elementary school years are: (1) oral language proficiency, (2) phonological processing, and (3) print knowledge (August and Shanahan, 2006). A growing body of research suggests that Spanish-speaking children who are at high risk of developing reading difficulties may benefit from early intervention programs that provide systematic instruction in these three emergent skill areas (Eppe, 2006; Farver et al., 2007).

The children of migrant farm workers are especially vulnerable to academic failure given the reality of inconsistent school attendance produced by their families' frequent moves. These children may take as many as three years to complete a single grade, and it is estimated that more than half lag behind their age-matched peers by at least one grade level. However, the high dropout rate seen in this population may be due not only to poor school attendance but also to other sociocultural factors including the need to assist parents with work in the fields, few peer relationships in the school setting, and extremely low levels of academic literacy in English (National Center for Farmworker Health, 2009).

For the children of migrant farm workers and other impoverished immigrant groups, the development of oral language proficiency in English may be especially crucial. Findings from the National Literacy Panel on Language Minority Children and Youth (August and Shanahan, 2006) indicated that English oral proficiency (more so than print knowledge and phonological awareness) is an important prerequisite for bilingual children's literacy development.

The availability of effective home literacy experiences has been found to play an important role in children's later language and literacy development (Hart and Risley, 1995). Children from home environments that consistently offer literacy-rich practices and engagement with parents in 'optional talk' (i.e. in which parents interact with their children talking about experiences beyond daily living necessities) often outperform their peers on measures of language and literacy (Hart and Risley, 1995; Wells, 1986). Home environments that are low in literacy-related behaviors may compromise children's emergent literacy skills acquisition and overall language development (Bennett et al., 2002), especially as measured in academic settings. Traditional studies, however, may overlook familial strengths in areas other than shared book-reading. Unfortunately, many researchers tend to overlook the multiple 'funds of knowledge' that families can provide (regardless of socioeconomic status) for supplementing and enhancing classroom instruction (Moll et al., 1992). For example, because the Hispanic family is a close-knit, multigenerational unit, oral language is highly valued and viewed as the preferred mode of communication. The presence of the extended family (that may include not only grandparents but also uncles, aunts, and cousins) results in a high degree of social interaction that provides children with a highly supportive and interactive home environment (Brice, 2002).

Multiple studies have shown that literacy-rich environments are less likely to be found in the homes of children who are ELLs and whose parents are undereducated and have low family incomes (Gonzalez and Uhing, 2008; Snow et al., 1998). Children from such homes tend also to demonstrate poorer literacy outcomes, lower overall academic achievement, and higher grade repetition (August and Hakuta, 1997). Furthermore, parents from homes with limited literacy resources

have been found to demonstrate both quantitative and qualitative differences in their book-sharing styles and practices (Caspe, 2009) and in the opportunities they provide for their children to engage with both printed and spoken language (Lynch, 2008).

The need for early intervention of emergent literacy abilities is especially urgent among bilingual children from low socioeconomic backgrounds. Children of migrant farm workers are especially vulnerable to the combination of risk factors that may predict delayed literacy development, being Spanish-speaking in an English instructional environment and members of families with parents among the lowest paid and minimally educated (Hovey et al., 2003).

Several studies have provided evidence that support the efficacy of training parents to engage in emergent literacy experiences with their preschool children (O'Neil-Pirozzi, 2009; Sénéchal and LeFevre, 2002; van Kleeck, 1994). Techniques most frequently studied and employed include shared or joint book-reading, playtime activities, meal-time expansions, and bath-time routines (Delaney and Kaiser, 2001; Hammer and Weiss, 1999; Sorsby and Martlew, 1991). One technique that has received much attention in the literature is shared storybook-reading / dialogic reading (Justice and Kaderavek, 2002; Rabidoux and MacDonald, 2000). As a naturalistic approach, parents can be taught to facilitate early literacy growth through shared reading and discussion using open-ended questions, and expansions on child language. The usefulness of training and promoting parental shared book-reading activity is seriously challenged, however, by the inability of many low-literate parents of ELLs to engage in reading activities in either the first or second language (Hammer et al., 2003).

Another critical issue in literacy development among ELLs is the role and impact that first language (L1) may have on the literacy skills of the second language (L2). Whereas the literature is replete with information regarding the process of learning to read in a first language, less information exists regarding reading development for children exposed to two or more languages (Gyovai et al., 2009). Cummins (2000) has consistently argued that the language development of the two languages are interconnected and intertwined, and that linguistic proficiencies of L1 will usually transfer to L2. Results of studies done by other researchers (Durgunoglu et al., 1993) also indicate that L1 does play a role in the development of literacy skills in L2, and that specific isolated skills (such as phonological awareness) may actually be predictive of L2 mastery.

This body of literature has implications for planning school-home activities for ELLs. Involving parents may be one means of building children's oral and emergent literacy proficiencies in L1, especially if they use familiar, culturally appropriate experiences (Hammer, et al., 2003). In addition, encouraging parents to engage in pre-literacy activities with their children in L1 may serve to enhance literary activities in L2.

The primary objective of this pilot study was to examine whether a school-home collaborative language and emergent literacy activity called, Supporting the Acquisition of Language and Literacy through School-Home Activities (SALSA) would result in improved emergent literacy abilities. The intervention was designed to investigate whether utilizing home-generated content in L1 as the basis for a classroom language intervention activity in L2 (1) was feasible in terms of parent involvement and participation, and (2) would result in improving the emergent literacy skills (in L1 and L2) of bilingual children of migrant farmers. This intervention is inspired by Kress and Van Leeuwen's (1996) theory of visual 'grammar', which provides an analytical framework for discussing the ideational, interpersonal and textual meanings in children's drawings. This theory is based on the premise that drawing is one of many modes of communicating meaning, and that visual forms are capable of depicting unique representations of reality and patterns of experience that may be difficult to express through verbal or alphabetic modes. They posit that in the same way that verbal and written modes are constrained by a grammar (that is, rules for extracting meaning), visual modes are also subject to specific rules of interpretation that may be culturally

and socially bound. Other researchers (Hopperstad, 2010; Dyson, 1989) extended Kress and Van Leeuwen's work by demonstrating that children's drawings function effectively as a bridge to print and writing, given that much of children's early attempts at literacy involve drawing SALSA is specifically based on a journaling activity described by Nelson (2010) that involved both parents and their children in sharing familial experiences through visual modes.

Research questions addressed in this study were as follows:

- 1. How does utilizing home-generated drawings and labels within the context of classroom language enrichment improve the emergent literacy skills (in L1 and L2) of bilingual preschool children of migrant farm workers, as compared with those who receive typical classroom language stimulation?
- 2. What is the feasibility of low-income, low-literacy parents participating in a school-home journaling activity for enhancing their children's emergent literacy skills?

II Methods

I Study design

This pilot study used an experimental research design in which children were randomly assigned either to an experimental (SALSA Roja) or control (SALSA Verde) classroom. Random assignment was made by program staff upon the children's enrolment in the seasonal Head Start program. The typical protocol at this Head Start setting is that students are randomly assigned to one of two preschool classrooms upon admission into the program. The study was conducted over seven weeks, with the first and last week devoted to pre- and posttesting. The intervening five-week period was used to deliver the experimental language stimulation activities twice weekly.

2 Setting of the study

The study was conducted at a Migrant Head Start Center in southwest Michigan. In Michigan, Migrant Head Start programs typically operate in the growing season from May to October and provide services for the children of migrant farmworkers. Migrant farmworkers are among the lowest paid workers in the USA with medial annual incomes of less than \$9,000 as compared to the 2012 US poverty level of \$23,050 for a family of four (National Center for Farmworker Health, 2012). Comprehensive full-day services are provided five days per week for migrant farmworkers' children who are between two weeks and five years of age. To be eligible for services, parents must provide proof that (1) agriculture is the primary source of family income and that (2) within the last 24 months the family has relocated for the specific purpose of engaging in agricultural work. Typical migrant Head Start programs intentionally promote and structure a bilingual (English, Spanish) classroom atmosphere and culture. In addition to making sure that each classroom is staffed by teachers who are fluent in Spanish as well as English, all classroom objects, furniture and reading materials are labeled in both languages.

3 Participants

Parents of 23 children gave permission for their children to take part in the study. Three families did not complete the study as a result of moving to a new farm location. Of these, 19 children completed pre- and posttests in English and Spanish. The sample therefore consisted of 19

Variable	Experimental $(n =)$	Control $(n = 8)$
Mean age	48.6 months	46.4 months
Age range	34 to 62 months	35 to 57 months
Number of males / females	6 (55%) / 5 (45%)	6 (75%) / 2 (25%)
Number with developmental concerns or IEP	5 (45%)	5 (63%)
Fathers with high school education or GED	6 (55%)	2 (25%)
Mothers with high school education or GED	5 (45%)	1 (13%)
Number of home-language environments:		, , ,
Spanish	6 (55%)	4 (50%)
English/Spanish	2 (18%)	2 (25%)
Spanish/Mixteco	3 (27%)	2 (25%)

Table I. Demographic characteristics	of experimental and control	group participants.
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Notes. IEP = Individualized Education Program; GED = General Educational Development.

Spanish-speaking English Language Learners (ELLs) between the ages of 2;10 and 5;2 who were enrolled in a Migrant Head Start Center preschool program in southwest Michigan. Demographics for the two groups are shown in Table 1. None of the children came from homes in which English was the primary language spoken. Approximately 25% of the families in both groups reported that, in addition to Spanish, an indigenous language, Mixteco, was spoken. All child participants were born in the USA. However, parents of the child participants were of Mexican ancestry and had migrated to Michigan from either Florida (90%) or Arizona (10%) in concert with seasonal employment opportunities. The majority of the parents (85%) reported having less than a high school education. Family data regarding education experiences and language/literacy exposure of the children and their families were collected from school records, which also provided information about children who were being observed for developmental concerns or who had Individualized Family Service Plans (IFSPs). One child in the experimental classroom had a cochlear implant and another had an IFSP based on a diagnosis of a pervasive developmental disorder (PDD). Three children in the control classroom were being observed for possible speech and language delays based on minimal expressive language output. It should be noted that all of the children in both classrooms (regardless of diagnosed or suspected disabilities) were invited to participate in the study.

4 Measures

a Measures of emergent literacy skills. The pretest–posttest measure used to quantify changes in the children's emergent literacy concepts and oral language narrative skills in both Spanish and English was the Early Literacy Skills Assessment (ELSA) (Cheadle, 2007). The ELSA uses a storybook interaction task to assess early literacy skills in four areas identified by the National Early Literacy Panel (2004) as key early literacy prerequisites. The four emergent literacy skills assessed by the ELSA are:

- comprehension: the ability to predict, retell and connect to real life;
- phonological awareness: the ability to recognize the sound structure of speech;
- alphabetic principle: knowledge of the systematic relationship between letters and sounds; and
- concepts about print: knowledge of how print is organized and used for reading and writing.

The ELSA was selected because it utilizes a meaningful, real-life approach (similar to familiar classroom learning activities) to assess both oral language and emergent literacy skills in English and Spanish and has been reported to meet basic reliability and validity standards (Cheadle, 2007).

b Test administration. In this study, the test was administered by trained upper-level undergraduate and graduate students in speech-language pathology under the supervision of the authors, one of whom is fluent in Spanish. Although all six student clinicians were fluent in Spanish, half were assigned to administer the test consistently in English (under the supervision of the second author) and half in Spanish (under the supervision of the first author). Order of administration was counterbalanced so that equal numbers of children in both groups were tested with the Spanish version first; the other half with the English version first. Examiners were blind to the children's assignment to experimental and control groups during pretesting, but they could not be blinded to group assignment for the posttest, which was a weakness of the study but necessary for meeting the project's educational purposes. Supervisors double-scored items during administration to assure reliability.

c Measures of parent participation. Both the control and experimental classrooms were provided with large containers for depositing SALSA bags as students entered the class room on Monday or Tuesday mornings. A large attendance chart with each child's name listed was also posted adjacent to the SALSA containers in both rooms. Each week, children who returned their SALSA bags received both a personal sticker and a sticker next to their names. The chart functioned as a tally system for the number of bags returned each week. In addition, student clinicians verified that each bag in the experimental room contained a journal with a parental drawing and photocopied and dated all parental input.

c Qualitative measures of effectiveness. Two weeks after the conclusion of the study, parents were invited to return to the Head Start Center for a parent focus group session about the SALSA activities. The meeting, which was conducted in Spanish, was attended by both authors and several of the Head Start teachers and staff members. Parents of children in both the control and experimental groups were given an opportunity to provide feedback and respond to open-ended questions regarding their experience with the SALSA Project. Parental comments were video-recorded, and field notes were made by the second author.

5 Procedures

a Parent preparation procedures. One week prior to the start of the study, parents of children in both the experimental and control classrooms were invited to a meeting at the Head Start center. Parents were told that two different methods of home–school activities were being evaluated and compared, but they were not informed as to which was the experimental and which the control condition was.

During the meeting parents were informed about the nature of the project and also how to produce the drawings for the school-home journals while interacting with their children at home. Parents of both groups were shown the special bags: green for control ('SALSA Verde') and red for experimental ('SALSA ROJA'), in which the study materials would come home each Friday. Specifically, they were told that all of the children would receive bags, some with books for reading and others with material for writing. Parents were told that if their children received red SALSA bags containing an interactive journal (spiral notebook), writing and coloring implements, and simple incentives, their role would be to produce simple drawings to represent the families' activities while discussing the events with their children. Parents of children who received green SALSA bags containing cardboard books that focused on colors, shapes, and numbers (no narratives) were asked to respond in the same way that they typically did when books were sent home by the Head Start staff (e.g. looking through the books with the children and talking about the concepts). Given that parents were most likely part of a close-knit community, researchers controlled for overlap and confusion by making sure that no writing or drawing materials were included in the bags of children in the control group. Parents of both groups were also informed that bags would be sent home on Fridays and should be returned to the school on Mondays. The decision to request parent participation only on weekends was made based on respect for the typical farm worker schedule of dawn to dusk employment on weekdays.

b Classroom instructional procedures. The Head Start Center followed the same basic schedule in both classrooms on Tuesdays and Thursdays for the five weeks of intervention. During 'choice time' (8:45 to 9:45), student clinicians interacted with individual children. Circle time was held from 9:45 to 10:15. During recess time (10:15 to 11:15), student clinicians took turns interacting with the children on the playground, completing any individual sessions, and photocopying data from the SALSA journals and clinician-produced drawings. Individual assessments with the ELSA occurred during weeks one and seven.

6 Experimental group procedures

In classroom sessions, children in the experimental group received oral language stimulation and exposure to emergent literacy concepts based on content provided by their parents in the school-home journals. Goals were to increase the children's language and literacy by: (1) encouraging narrative recounts of experiences based on SALSA drawings and comments from the school-home journal; (2) building expressive and receptive vocabulary (for concepts represented in the journals) in English and Spanish; and (3) focusing on emergent literacy skills (such as, paper and pencil tasks involving print knowledge).

During Tuesday choice time, clinicians employed a researcher-generated protocol for preparing the children to share their stories about the pictures during circle time the following Thursday (for protocol and schedule, see Appendix 1). During the 5–7 minute sessions held within the classroom, student clinicians helped children select bags with their names and then interacted with the children at a table within the classroom. They looked at and expressed interest in the parent-drawn picture in the journal, while scaffolding the children's recounting of the events depicted. English was the primary language used (consistent with Head Start goals to help the children learn English), but clinicians were told to use Spanish as needed to establish rapport and to clarify concepts. They were asked not to teach letter names but to heighten awareness of print through name recognition having children dictate words for the clinicians to write. They also were asked to use metalanguage to talk about Spanish and English words and to provide opportunities for the children to say the words in Spanish if they knew them and to imitate words and phrases in both languages. An example might be 'Let's draw you on the swings. What's this? Yes, it's your *head*' [while labeling *head* in the drawing]; 'How do you say it in Spanish? – *Cabeza*, Si' [while adding that label to the drawing].

On Thursdays, classroom teachers led circle time and asked children to show their journals around the circle and respond to teacher questions about the events depicted. Student clinicians used English to scaffold the children's verbal attempts, which were translated by the classroom teachers into Spanish. On Thursdays, during choice time, clinicians applied Piagetian principles of 're-presentation' of verbal and nonverbal concepts (Piaget, 1926/1959) in a new context by

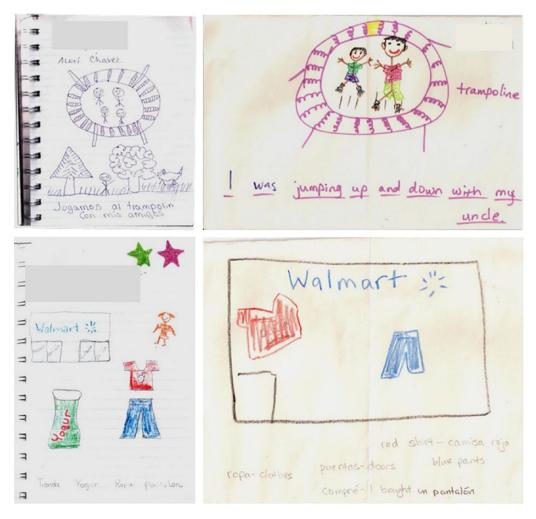


Figure 1. Examples of pages from parent-child Supporting the Acquisition of Language and Literacy through School-Home Activities (SALSA) journals (on the left) and related drawings produced by clinicians working with children (on the right) during individual time classroom sessions.

working individually with each child to redraw the main components from the original journal entry on a larger piece of plain paper while talking with the child about the events, adding details, and encouraging new vocabulary. Figure 1 shows examples of parent–child journal entries sent from home beside the pictures redrawn with the children's words added during classroom intervention sessions.

7 Control group procedures

On both Tuesdays and Thursdays, student clinicians in the control condition assisted the classroom teachers during choice time and circle time by participating in teacher-led classroom activities (craft, singing, finger-plays, etc). Given that both of the pre-school classrooms followed identical schedules, student clinicians in the control and experimental classrooms spent similar amounts of

time in their respective settings. Student clinicians in the control room were informed about the importance of providing a different kind of attention to the control group (as part of the rigorous experimental design) that did not involve drawing or print materials coming from home in SALSA bags. Interactions in the control room differed from those in the experimental room in several ways, including:

- the use of non-narrative cardboard books that focused on numbers, colors, and shapes that also went back and forth between home and school;
- the absence of story recounting during circle time;
- the use of child-centered talk about the children's 'here-and-now' activities (as opposed to narrative retelling of past experiences);
- circle time activities that focused on teacher-led rhymes, songs and discussions of the shape and color concepts in the books from the SALSA bags; and
- individual interactions with various children during choice time;

For the control group protocol and daily schedule, see Appendix 2.

8 Data analysis

Pre-post comparisons scores were obtained for Spanish and English ELSA results for the experimental and control groups. Due to the inability of subscale test scores to meet the assumptions of normality, nonparametric Wilcoxon Signed Ranks Tests were used to analyse the pretest-posttest test data for the four subscale Spanish and English ELSA results. In addition, a mixed design repeated measures ANOVA was conducted for the two groups (experimental and control) by two languages (English and Spanish) and two tests (pretest and posttest) using the total scores. In this case, a parametric test was appropriate because the total test scores met assumptions of normality, and Levene's test showed equality of variance. Qualitative descriptive methods were also used to summarize results of the parent focus group session.

III Results

The first research question asked whether utilizing home-generated drawings and labels within the context of classroom language enrichment would improve the emergent literacy skills (in L1 and L2) of bilingual preschool children compared with typical classroom language stimulation and a home program that involved book-sharing. The outcome variable was the difference in pre- and posttest scores on the ELSA administered in both English and Spanish, including its four subscales and the total score in each language.

The results of the Wilcoxon Signed Ranks Tests for the experimental and control groups are summarized for the English administration of the ELSA in Table 2, with results presented graphically in Figure 2, and for the Spanish administration in Table 3, with results presented graphically in Figure 3. The only statistically significant differences from pre- to posttest (p < .05) were found for the experimental group children, who showed significant increases in alphabetic principle and print concepts, as well as in the total ELSA scores in both English and Spanish. Using Cohen's (1988) guidelines for interpreting an effect size r of .3 as a medium effect and of .5 as a large effect, these results all showed medium to large effects. Although not statistically significant, the changes in comprehension scores for the English ELSA showed a medium effect for both groups, and the changes in the phonological awareness scores showed a medium effect for the control group in both English and Spanish.

English ELSA scores	Post-pretest difference		Wilcoxon Z	Þ	Effect size r
	Mean negative rank	Mean positive rank			
Comprehension:					
Exp(n =)	3.75	4.75	-I.476	.140	.31
Control $(n = 8)$	2.00	0.00	-1.604	.109	.40
Phonemic awareness:					
Exp(n =)	5.67	4.67	656	.512	.14
Control $(n = 8)$	2.00	3.25	-1.490	.136	.37
Alphabetic principle:					
E_{xp} (n = 11)	0.00	4.00	-2.414	.016*	.51
Control $(n = 8)$	3.00	3.00	-1.342	.180	.33
Print concepts:					
Exp(n =)	1.75	5.93	-2.255	.024*	.48
Control $(n = 8)$	3.25	4.00	530	.596	.19
Total ELSA score:					
Exp(n =)	6.00	5.44	-2.200	.028*	.47
Control $(n = 8)$	4.75	3.00	847	.397	.21

 Table 2. English ELSA score pre-post changes and effect sizes for experimental and control groups based on Wilcoxon Signed Ranks Tests.

Note. * p < .05.

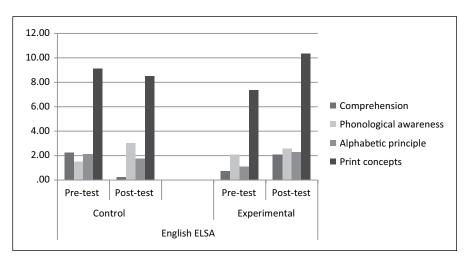


Figure 2. Mean pre- and post-test scores for the two groups on the four Early Literacy Skills Assessment (ELSA) subscales administered in English: comprehension, phonological awareness, alphabetic principle, and print concepts.

The mixed design ANOVA made it possible to compare the children's English and Spanish capabilities as well as to compare the two groups. The results of this analysis, which are illustrated in Figure 4, showed a significant main effect for language of test administration in favor of Spanish,zxz F(1, 17) = 16.672, p = .001, showing that Spanish was the better language for

Spanish ELSA scores	Post-pretest difference		Wilcoxon Z	Þ	Effect size r
	Mean negative rank	Mean positive rank			
Comprehension:					
Exp(n =)	4.83	5.08	960	.337	.20
Control $(n = 8)$	3.50	2.25	816	.414	.20
Phonemic awareness:					
Exp(n =)	7.38	3.10	832	.405	.18
Control $(n = 8)$	3.50	3.50	-1.472	.141	.37
Alphabetic principle:					
Exp(n =)	2.00	4.00	-1.973	.049*	.42
Control $(n = 8)$	2.50	5.33	647	.518	.16
Print concepts:					
Exp(n =)	0.00	5.50	-2.842	.004**	.61
Control $(n = 8)$	1.50	4.00	-1.214	.225	.30
Total ELSA score:					
Exp(n =)	3.00	5.78	-2.499	.012*	.53
Control $(n = 8)$	3.38	5.63	638	.523	.16

Table 3. Pre-post change and effect sizes for the Spanish ELSA scores for experimental and control
groups based on Wilcoxon Signed Ranks Tests.

Notes. *p < .05; **p < .01.

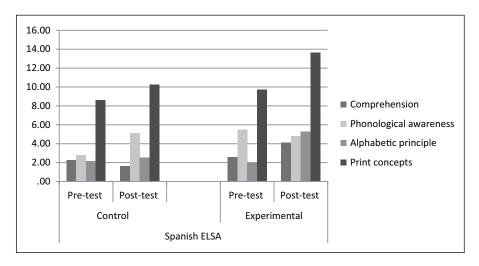


Figure 3. Mean pre- and post-test scores for the two groups on the four Early Literacy Skills Assessment (ELSA) subscales administered in Spanish: comprehension, phonological awareness, alphabetic principle, and print concepts.

the children, regardless of group assignment and time of testing. A significant main effect also was found for the repeated measures over time, showing significant increases in scores, again regardless of group or language of testing, F(1, 17) = 9.962, p = .006. This did not answer the question, however, about whether any effect could be detected for the experimental group that

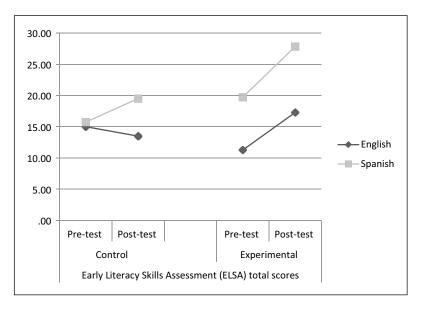


Figure 4. Changes in mean total pretest-posttest English and Spanish scores for experimental and control groups.

was not detected also for the control group. A positive answer to that question emerged from the statistically significant interaction between the two groups and the repeated measures, in favor of the experimental group, F(1, 17) = 5.231, p = .035, suggesting that it was treatment differences and not simple maturation or general learning that accounted for the interaction effect. The language by group interaction also was examined, but it was not significant, F(1, 17) = 3.773, p = .069.

The second research question asked whether it is feasible for parents employed as migrant farm workers to participate in a school-home journaling activity for enhancing their children's oral language and emergent literacy skills. The data used to answer this question came from the compliance rates with requests to return journals weekly with pictures and commentary and comments at the post-study focus group meeting. Specifically, the parents in the experimental group returned the journals in 64 of 66 opportunities for a compliance rate of 94%. The compliance rate for parents in the control group was 80%, with parents returning the SALSA Verde bags in 53 of 66 opportunities. Although there were observable differences in the return rate of bags between the control and experimental classrooms, results of a chi-square test indicated a nearly significant relationship between group and the frequency of bags returned $(chi^2(1, n = 19) = 1.00, p = .06)$ a statistic no doubt affected by the small sample size of this pilot study.

Information obtained from the post-intervention parent focus group session also confirmed parents' willingness and motivation for participating in the SALSA project. About 40 parents (mothers and fathers, many with children) attended the meeting. At the meeting families were reminded that this was part of a research study, and they were presented with a brief slide show depicting their children engaging in SALSA activities. Parents of children in the control room (SALSA Verde) were asked to describe what they liked or disliked about having the book bags sent home with their children. The same procedures were repeated to gather information from parents of the experimental (SALSA Roja) group. An analysis of parents' comments (likes versus dislikes) made during the meeting indicated that parents of children in the experimental room (SALSA Roja) were more positive toward the SALSA Roja intervention than parents in the control room (SALSA Verde). Examples of comments made by SALSA Roja parents included statements such as:

This was something that I and my child enjoyed. She always wanted me to draw more than one picture.

Another parent noted:

I found SALSA to be very interesting. It gave me a chance to do schoolwork with my child.

Parents also commented on the academic benefits children received from participating in the project:

I feel that SALSA helped my child to learn faster. By the last week of SALSA he could recognize his name [in print].

On the other hand, parents of the SALSA Verde group used words such as 'boring', 'it got stale' and 'not interesting after the second week' to describe their reactions to the book bags they received. One parent also noted, that because there were no specific instructions, the bags were often never opened. Another parent stated that she faithfully sent back the SALSA Verde bag, just so that her child could receive his sticker.

IV Discussion

The results of this study supported the feasibility of a collaborative school-home intervention method for improving the emergent literacy of Spanish-speaking children of migrant farmers attending a migrant Head Start program. Analysis of pretest-posttest scores for the emergent literacy skills (comprehension, phonemic awareness, alphabetic principle, print concepts) showed increases in knowledge of alphabetic principles and print concepts for children who received the SALSA Roja (experimental) intervention compared to those in the SALSA Verde (control) condition. Results also indicated that in both languages (English and Spanish) children in the experimental group outperformed their control group peers in their overall performance on the ELSA test as indicated by their pre- to posttest total scores. Significant differences between the two groups were not found in the areas of comprehension and phonemic awareness for the experimental group. The fact that neither group demonstrated significant improvement in comprehension scores from pre-to posttest may be attributable to many of the children's relatively low exposure to home literacy in their first language, which may have resulted in guessing and random pointing during pretesting activities.

It was interesting to note that greater pre- to posttest score increases were evident in the area of phonological awareness for the control group than for the experimental group. This difference may be related to the greater amount of time the control group spent in rhyming/singing activities during circle time on Tuesdays and Thursdays. The experimental group, on the other hand, demonstrated greater gains in alphabetic and print concepts, an understandable difference given that the focus of the SALSA intervention was more graphic than phonemic. This difference in the types of gains demonstrated by the two groups strongly suggests that a child's emergent literacy skills may be best supported by a combination of auditory and visual language activities.

There were also interesting group differences in the phonemic scores based on language. Spanish phonemic scores were higher for the experimental group than for the control group at pretest, yet decreased for the experimental group and increased for the control group at posttest. In addition, the control group's posttest English scores decrease, while their Spanish scores increase. These group differences in language performance may be attributable to several factors, including, (1) the relatively strong emphasis placed on English during the SALSA intervention, as compared to the dominant Spanish environment of the control room; and (2) the phenomenon of first language loss due to subtractive bilingualism commonly observed in sequential language learners.

Regarding feasibility from the perspective of migrant farm worker parents, the study found that the parents were consistent in providing drawings and written comments about the family's weekend activities in a weekly bilingual journal that could support language development, emergent literacy activities, and classroom communication in their children's Head Start classroom. Parents' favorable comments about the approach in the post-intervention focus group (e.g. 'This was really good for my child' or 'Both me and my child liked doing this') highlighted the fact that they may have enjoyed the time spent with their children on the drawing tasks The quality of the drawings, including parents' close attention to detail, also reflected their interest in the project and commitment to the tasks.

I Study limitations and strengths

The pilot study had a number of limitations, including small sample size, inability to blind posttest examiners, and a small percentage of parents with children in both groups accompanied by possible spill-over effects. In addition, there were children with perceived and/or diagnosed disabilities in both classrooms. While these concerns were mostly on the part of school personnel (and not the parents), it is still possible that interactions at home and in the classroom may have been affected by this knowledge. Nevertheless, the objective results of children's pre–post testing scores along with the evidence of consistent parent involvement (almost 100% participation in weekly journaling) support the feasibility of the SALSA experimental school–home journaling approach with families in which the children are ELLs and the parents are migrant farm workers, along with the possibility of improved emergent literacy skills following intervention with parent-generated content.

2 Implications for future research and practice

There are three design factors that may have contributed to this preliminary success, and which could be incorporated into further research and practice. These are: (1) level and type of parental involvement, (2) potential for parent empowerment, and (3) cultural relevance.

With regard to the level and type of parental involvement, parents in the experimental group were asked to perform a role that was practical and achievable, especially given the fact that the majority of the parents had less than a high school education. Drawing and writing about familiar concepts and activities, using words they chose may have been less daunting than sharing books and reading (some parents in the focus groups expressed this as 'boring'), whether the books were written in English or Spanish. These results also highlight the need for literacy materials in the home language that are geared to parents' levels of literacy.

The school-home journaling activity required almost no reading abilities (in any language) and very little writing ability. Parents, in fact, varied in the amount of writing added to pictures, although all of them included at least one-word printed labels (words like *Walmart, pants*, etc.). Encouraging written input in L1 also served to validate the home language for both parents and children. The once weekly requirement (for parents who work from dawn to dusk on long summer days) also made their contribution achievable. It is also possible that the children's interest

in, and enjoyment of, the task may have additionally worked to increase parent involvement, resulting in a transactional model of home–school involvement that may have been mediated by the child.

Second, the approach was designed to have potential for parental empowerment. Although much of the literature on the involvement of Hispanic parents in their children's academic development presents a 'deficit perspective', findings of this study support the work of Barrueco (2012) that portrays parents as 'eager' to be involved with their children's learning despite the perception of powerlessness and incompetence that are held by many school personnel. The content of the intervention was almost entirely dependent on parents' dependability in returning the bilingual journal at the beginning of each week. The SALSA activities thus served to empower parents with the responsibility for a simple aspect of their children's education. During the training and orientation sessions, researchers made it clear to parents in both groups that their input was crucial to the success of the SALSA intervention. Also, by providing praise and small incentives to children who returned their bags on Mondays, parents were vicariously motivated to do their part to ensure a fulfilling school experience for their children.

Third, the SALSA project was designed to have cultural relevance for the families by providing the opportunity to bridge cultural divides between clinicians and children, and clinicians and parents. Parents were asked to provide content information about family activities they chose to share. This provided a window into the typical activities, festivities, and interests of the family. Language content that originated from the home had the additional advantage of being culturally relevant, appropriate, and functional, thus reducing the need for additional activities to address carry-over and generalization. The availability of this content allowed clinicians to enter into the world of both parent and child, and allowed the parents to easily and effectively introduce their culture to the clinician.

V Conclusions

In conclusion, this pilot study provided preliminary evidence that the SALSA intervention method can offer an approach for addressing the issue of parental involvement in literacy enrichment among low-income, low literacy populations, while assisting children to develop concepts of emergent literacy. Although methods such as shared book-reading have met with significant success among White, middle-class parents, very few studies have documented the validity of this approach among parents of ELLs. Reasons for this may be that parents may not have oral proficiency in the language of the books available to them and, thus, may feel self-conscious about mispronouncing or misspeaking English to their children. This issue may be complicated further for a minority of Spanish-speakers (e.g. migrant farmworkers) who may not be fluent readers in either L1 or L2, due to limited educational opportunities. Also, the SALSA method demonstrated that encouraging parents to interact with their children in the home language may have positive carry-over effects for literacy development in the second language, highlighting the importance for early childhood educators to advise parents that using the home language can be beneficial to their children.

The SALSA approach could address such concerns by providing a context in which parents can engage in language and literacy rich interactions with their children that do not require high levels of literacy, yet encourage discourse and interactions about shared experiences, while modeling parental literacy skills directly. By tying written communication directly to oral communication at home and school, the SALSA approach also addresses areas of emergent literacy (e.g. alphabetic principle and print concepts) not typically addressed by approaches that focus solely on receptive and expressive oral language skills.

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Declaration of conflicting interest

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Appendix I

SALSA Roja (experimental group) protocol

Guiding principles

- 1. Clinicians will support bilingual communication, but use primarily English when speaking to the children, especially for individualized 1:1 scaffolding. It is okay to use Spanish as needed to establish rapport or clarify meaning. Spanish will be the primary language during the structured circle time activity, but translators will translate all scaffolding comments for clinicians who will say them first in English.
- 2. In general:
 - a. Spanish will be the primary language of the group story telling
 - b. English will be the primary language of individual session 1:1 story telling.
- 3. The goal is to scaffold more elaborate language, including all of the following:
 - a. Narrative accounts and recounts of experiences, starting with SALSA stories from home, elaborating narrative events and the 'landscape of consciousness' (i.e. feelings about what happens), including any problems or challenges that made the event unusual, funny, or interesting;
 - b. Vocabulary (for spatial concepts, nominals, modifiers, action and state verbs, etc.);
 - c. Emergent literacy concepts (paper and pencil tasks, drawing, knowledge that print represents spoken words). Do not expect children to learn letter names, but encourage awareness particularly of the letters that make up their own names when you write them on the story page, and matching their names on the back of their SALSA bags.
- 4. Children will place their journals (SALSA bags) in a specially-marked container when they enter the classroom. Children who did not bring their journals will also be encouraged to draw a picture (with materials from the generic box and scaffolding by a clinician) so they will have something to show during circle time.
- 5. SALSA Individual Story Telling Time, with clinician scaffolding will take place with each child during 'choice time'. On Tuesday, stories will be scaffolded for the first presentation in group by discussing the content from parent journals and helping the children think about what they might say about their stories during circle time 'show and tell'. During Thursday choice time, clinicians will redraw the main components from the original story and add details and encourage new vocabulary. Each 5 minute (or so) individual session will end with a request, 'What do you want me to write about your picture' [encouraging dictation pace, showing recognition of the representation of the child's spoken words with print]. The goal is to get children to produce self-generated multiword utterances in English to go with their pictures. Some children may produce only single words at first; others may respond to co-construction of sentences. We will differentiate modeled words from spontaneously produced words by underlining children's spontaneously produced words.
- 6. SALSA Group Story Telling Time will occur during 'circle time'; each student should have a turn each day if possible:
 - a. At circle time, teachers will take all the journals to the circle time area.
 - b. A generic box with miscellaneous writing and coloring materials will also be taken to the circle time area.

- c. Teacher will have children volunteer to 'show and tell' the stories in their journals.
- d. Children will be scaffolded to come to the front of the group and share their pictures, one at a time, to talk about the picture. Clinicians will model this for the first few children each session (using a translator as necessary). Then will provide question-based scaffolding for children who need help in sharing their pictures :
 - i. WHO? (participated in the story/activity/experience);
 - ii. WHERE? (in what place/location did the event occur);
 - iii. What Happened? (describe an action that occurred).
- e. After 'story telling,' children will be scaffolded to call on at least one other child in the group to make comments or ask questions (questions and comments will be modeled by the clinicians early in the process).
- 7. General language scaffolding will occur during 'recess time' out on the playground for both groups so the children will get their breaks.
- 8. On Tuesday, copies will be made of parent journals, including a blank page to document if no parent/family input was received on a particular day.
- 9. On Thursday, copies will be made of clinician-scaffolded stories with children's dictated words and other words (not underlined) that clinicians have provided as models.

Tuesday	Thursday
7:30–8:00 Arrival	7:30–8:00 Arrival
8:00–8:30 Breakfast	8:00–8:30 Breakfast
8:30–8:45 Brush teeth	8:30–8:45 Brush teeth
 8:45–9:45 Choice time: Clinicians hold 5-minute individual SALSA Story Telling sessions with each child looking at and discussing the picture in the journal, helping the child prepare to talk about the picture during circle time. 9:45–10:15 Circle time: SALSA Story Telling All study children present stories using SALSA journal from home. Clinician scaffolding is translated for children as needed. Either language is appropriate. 	 8:45–9:45 Choice time: Clinicians hold 5-minute individual SALSA Story Telling sessions with each child redrawing the picture and adding a dictated word, phrase, or sentence in the child's own words [co-constructed if necessary]. 9:45–10:15 Circle time: SALSA Story Telling All study children present stories using new SALSA pictures. Either language is appropriate.
 Other children in the group are scaffolded (with translation) to make comments and ask questions following the child's presentation of the picture (modeled by clinicians) 	 Other children in the group are scaffolded (with translation) to make comments and ask questions following the child's presentation o the picture (modeled by clinicians)
• Stay in circle time until all children get a turn (time permitting)	• Stay in circle time until all children get a turn (time permitting)
10:15–11:15 Recess time (on playground with children; complete individual sessions; copy data from SALSA journals)	10:15–11:15 Recess time (on playground with children; complete individual sessions; copy data from SALSA pictures)
11:15–11:30 Wash hands	11:15–11:30 Wash hands
11:30–12:30 Lunch	11:30–12:30 Lunch

SALSA Roja (experimental group) class schedule

Appendix 2

SALSA Verde (control group) protocol

Guiding principles

- 1. In an intervention research study, it is important that the control group members also receive special attention from the researchers. Otherwise, it is impossible to know whether it is the experimental treatment or just extra attention (called a placebo or Hawthorne effect) that is responsible for any change measured.
- 2. On the other hand, the control group needs to receive a different kind of attention from that received by the experimental group. Here are the main differences:
 - a. The SALSA Verde group will *not* get any drawing or print materials in their SALSA bags that go home on Friday. The bags will hold books for the parents to share with their children and send back on Monday.
 - b. The SALSA Verde group will *not* get any scaffolded story telling during circle time, except what the teachers normally would provide. The clinicians will not lead the group activities, but will observe and take notes on the instructional activities, children's responses, and behavior (attention, signs of comprehension, etc.) of individual children.
 - c. The SALSA Verde group will *not* get any planned individual sessions. During choice time, clinicians will interact with the children in English as the children play but will not use any drawing or printing during the interactions. They will go outside with the children during recess time and interact with them, using child-centered principles, commenting on what the children are doing, but using 'here-and-now' language rather than engaging in narrative discourse about 'there-and-then' stories from home.

Tuesday	Thursday
7:30-8:00 Arrival	7:30–8:00 Arrival
8:00–8:30 Breakfast	8:00–8:30 Breakfast
8:30–8:45 Brush teeth	8:30–8:45 Brush teeth
8:45–9:45 Choice time: Clinicians mingle with children as they choose among learning areas (motor play, art, house-keeping, and 'circle time', etc). 9:45–10:15 Circle time: Classroom teachers lead out. Clinicians sit with children and participate in songs, fingerplays, shared book- reading, etc. 10:15–11:15 Recess: On playground with children.	 8:45–9:45 Choice time: Clinicians mingle with children as they choose among learning areas (motor play, art, house-keeping, and 'circle time', etc). 9:45–10:15 Circle time: Classroom teachers lead out. Clinicians sit with children and participate in songs, finger plays, shared book-reading, etc. 10:15–11:15 Recess: On playground with children.
11:15–11:30 Wash hands	11:15–11:30 Wash hands
11:30–12:00 Lunch	11:30–12:00 Lunch

SALSA Verde (control group) class schedule

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