Final Performance Report

SUPPORTING ACQUISITION OF LANGUAGE AND LITERACY THROUGH SCHOOL-HOME ACTIVITIES (SALSA)

Funded by a 2008-2009 Projects on Multicultural Activities Grant
American Speech-Language-Hearing Association

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- Natalya Franco, undergraduate student
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- Paula Vergunst, undergraduate student

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SALSA PROJECT DESCRIPTION

PROJECT TITLE:
Supporting Acquisition of Language and Literacy through School-Home Activities (SALSA): A Bilingual Approach

BRIEF DESCRIPTION:
The purpose of this pilot study was to examine the effectiveness of a home-school partnership for stimulating language and literacy skills in Spanish-speaking children of migrant farmers. Subjects of the study were 12 preschool children between the ages of 3 and 5, enrolled in a Migrant Head Start Center in southwest Michigan. An equivalent number of age-matched peers were randomly assigned to a control group. The study utilized an experimental, pretest-treatment-posttest design, and focused on expanding children’s ability to produce oral narratives in English and Spanish based on simple drawings provided by parents in a take-home journal. This parent-provided journal content served as the basis not only for literacy enrichment in the classroom, but also for oral language enrichment therapy provided by speech-language pathology & audiology students. Findings indicated that children in the experimental group outperformed their control peers on early literacy measures related to print concepts and alphabetic principles. Also, both groups demonstrated higher language and literacy gains in Spanish than in English.

NEED FOR THE PROJECT:
The improvement of literacy outcomes among language minority students has become a significant area of concern among both educators and lawmakers. Some evidence shows that Spanish-speaking English Language Learners (ELLs) are twice as likely as their monolingual English-speaking peers to demonstrate literacy skills below average (Snow, Burns & Griffin,
Findings from the National Literacy Panel on Language Minority Children and Youth (August & Shanahan, 2006) also show that English oral proficiency is an important prerequisite for bilingual children’s literacy development. One aspect of oral proficiency that especially warrants attention is that of narrative abilities. Results of two recent studies (Miller et al., 2006; Uccelli & Paez, 2007) have indicated that improved oral narrative skills in either language (Spanish or English) can contribute to improved reading comprehension in English.

The need for early assessment and intervention of oral narrative abilities is especially urgent among bilingual children from low socioeconomic backgrounds. For this population, English narrative abilities have been consistently identified as a specific area of weakness (Pearson, 2002; Uccelli & Paez, 2007). Children of migrant farmers are especially vulnerable to the combination of risk factors that may be predictive of delayed literacy development—given that migrant populations in the United States are most frequently monolingual Spanish-speaking, among the lowest paid, and minimally educated (Hovey, Magaña, & Booker, 2005).
METHOD OF OPERATION:

Participants in the study were 22 Spanish-speaking English Language Learners (ELLs) between the ages of 3; 0 and 5; 11, enrolled in two pre-school classrooms at a Migrant Head Start Center in southwest Michigan. Parents of the child participants were first invited to a training session that provided modeling and practice in how to interact with their children at home to produce stick-figure drawings and brief written comments (in Spanish or English) to describe the depicted activity in the words of their child. These descriptions of parent-child interactions during the home setting were sent weekly to school using an interactive journal (spiral notebook) to provide a springboard for bilingual, story-telling activities in the classroom.

This study utilized an experimental research design. Two groups of children participated in the study. Children were randomly assigned either to an experimental (SALSA roja) or control group (SALSA verde) upon their admission to the seasonal Head Start program. Each child in the experimental group was provided with a SALSA kit composed of a “journaling” notebook, writing and coloring implements, and simple incentives. Children took SALSA kits home on weekends (Fridays) to obtain parental input in their journals. This input consisted of a simple drawing and key words requiring minimal literacy skills on the part of parents. Parents were requested to have their children return their journals to the classroom on Mondays. Children received oral language stimulation based on journal content.

The intervention took place within the Migrant Head Start classroom setting during “circle time” and “free play” and utilized conversational content provided by the parent in the journaling kit distributed to each child. Clinical trainees (graduate and undergraduate speech-language pathology majors) utilized a protocol for increasing conversational skills in both English and Spanish based on parent-child experiences documented in children’s journals. One
week prior to intervention, the children were pre-tested as a means of obtaining baseline data on Spanish and English expressive language and emergent literacy skills. Pretests consisted of (a) the validated *Early Literacy Skills Assessment (ELSA)* (Cheadle, 2007) in English and Spanish, and (b) a narrative language sample in English and Spanish. These tests were used again as post-tests to measure outcomes of the intervention. The ELSA uses a storybook assessment task to measure early literacy skills (comprehension, phonological awareness, alphabetic principle, and concepts about print). Language samples were analyzed using *Bilingual Systematic Analysis of Language Transcripts (Bilingual S/E SALT)* (Miller & Iglesias, 2006). In addition to test results, data were collected from families regarding education experiences and language/literacy exposure of the children and their families.

The research involved the collaboration of two university programs: Andrews University and Western Michigan University. Undergraduate students from Andrews University were supervised by Dr. Lena Caesar, while graduate students from Western Michigan University were supervised by Dr. Nickola Nelson. The project provided students with the opportunity to participate in research and clinical activities. Preparations for the study took place during the 2009 Spring semester (January to May) and data were gathered during the months of June-July 2009. The study began in June, 2009 and lasted for 8 weeks. The treatment phase lasted for six weeks. Sessions were held twice weekly, for approximately 30 minutes each.
RESULTS AND OUTCOMES:

Data from the project are still being analyzed. However, preliminary results of the standardized test, *Early Literacy Skills Assessment (ELSA)*, revealed that children in the experimental group who received the SALSA intervention, made significant gains in more areas than did their age-matched peers in the control group. Although the SALSA intervention was done in both English and Spanish, gains in Spanish emergent literacy were more significant than in English. The figures below show the comparative performance of both the experimental and control groups in English and Spanish.

Figure 1. Pre-Post Change in English Scores
Figure 2. Pre-Post Change in Spanish Scores

Pre-Post Change in Spanish ELSA Scores

Mean Raw Scores

p = .01

p = .05

- Compreh
- PhAware
- AlphaPrinc
- PrintConc

Spanish Experimental Group (Roja)

Spanish Control Group (Verde)

Pre: 🔴
Post: 🔴
PROGRAM EVALUATION:

The major goal of this pilot research project was to examine the efficacy of a parent-school collaborative language and emergent literacy intervention, Supporting the Acquisition of Language and Literacy through School-Home Activities (SALSA), for Spanish-speaking Head Start children. The intervention was designed to promote parents’ abilities to support language and emergent literacy development in their preschool children through a parent-child journaling activity. It is based on a preschool school-home journaling activity that Nelson (2010) describes in her recent textbook and has application for broad groups of typical and special needs learners as well as ELLs. In this section, project objectives, activities and accomplishments will be
presented.

The project’s specific objectives were as follows: (a) pilot a literacy and language intervention method in the domain of language and literacy development using a parent-supported journaling approach; (b) determine the efficacy of the intervention on children’s emergent language and literacy abilities; (c) provide parents with the skills and opportunities for encouraging language-focused parent-child interactions; (d) enhance the knowledge and competence of Head Start teachers regarding bilingual and language-literacy issues in the context of oral-written school-home connections; and (e) add to the cultural-linguistic competence of speech-language pathology majors by providing training in bilingual assessment and intervention.

Objective 1:

To pilot a literacy and language intervention method in the domain of language and literacy development using a parent-supported journaling approach.

Activities and Accomplishments for Objective 1

This project piloted a bilingual journaling approach that utilized parent drawings of activities done with the child for stimulating language and literacy in the classroom. Each child was provided a SALSA ‘kit’ consisting of: A journaling notebook, pencils, weekly instructions, and crayons.

The sequence of activities was as follows:

- **Friday**
  - Children take SALSA kits home

- **Monday**
  - Children Return SALSA kits to classroom
Teachers remind children (who forgot) to bring journals on Tuesday

**Tuesday**

- The rest of the children return SALSA kits to classroom
- Children share their stories during Circle time with teacher
- Children receive SALSA-based language stimulation with SLPs

**Thursday**

- Children continue to share their stories during Circle time with teacher during free-time
- Children continue to receive SALSA-based language stimulation with SLPs during free-time

**Friday**

- Children take SALSA kits home

The level of parental participation in the SALSA project was very high. Of the 12 parents who began the projects, 11 remained in the study for its entire duration. Parents were also consistent in supplying new drawings on a weekly basis. During the final post study wrap-up session, several parents indicated that they wanted the study to continue and that they had derived significant benefit from their interactions with their children.

**Objective 2:**

*To determine the efficacy of the intervention on children’s narrative abilities.*

**Activities and Accomplishments for Objective 2**

In order to determine the efficacy of the intervention method, the project utilized an experimental design involving a control (SALSA verde) and an experimental group (SALSA roja). Both groups were pretested and post-tested, but only the SALSA roja group received the
bilingual journaling intervention. The SALSA verde group was only exposed to regular classroom stimulation.

Preliminary results suggest that the SALSA intervention may be an effective intervention method for bilingual children from low-literacy homes. Standardized test scores from the ELSA indicated that the experimental group outperformed their peers on several measures of emergent literacy skills. It should also be noted that the control group also made significant gains in the area of phonological awareness that were not seen in the experimental group. The SALSA intervention appeared to be associated with greater gains in Spanish than in English, and also more in the area of alphabetic principle and print awareness that in phonological development. Information from the pre-and-post language samples are in the process of being analyzed. The figures below present scores that demonstrate the efficacy of the SALSA intervention.

Figure 4- Results of Spanish Standardized Tests

<table>
<thead>
<tr>
<th>ELSA Spanish Results</th>
<th>Experimental Group (SALSA Roja)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Before SALSA</strong></td>
<td><strong>After SALSA</strong></td>
</tr>
<tr>
<td>(Mean Raw Scores – Spanish version)</td>
<td>(Mean Raw Scores – Spanish version)</td>
</tr>
<tr>
<td>1. Comprehension: 2.54</td>
<td>1. Comprehension: 4.09</td>
</tr>
<tr>
<td>2. Phonological Awareness: 5.45</td>
<td>2. Phonological Awareness: 4.81</td>
</tr>
<tr>
<td>3. Alphabetic Principle: 2.18</td>
<td>3. Alphabetic Principle: 5.36*</td>
</tr>
<tr>
<td>5. Total Spanish Score: 19.91</td>
<td>5. Total Spanish Score: 27.82**</td>
</tr>
</tbody>
</table>

Wilcoxon signed rank test signif p < .05*; p < .01**
### ELSA English Results

**Experimental Group (SALSA Roja)**

<table>
<thead>
<tr>
<th>Before SALSA (Mean Raw Scores – English version)</th>
<th>After SALSA (Mean Raw Scores – English version)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Comprehension: 2.54</td>
<td>1. Comprehension: 4.09</td>
</tr>
<tr>
<td>2. Phonological Awareness: 5.45</td>
<td>2. Phonological Awareness: 4.81</td>
</tr>
<tr>
<td>5. Total English Score: 15.92</td>
<td>5. Total English Score: 18.42</td>
</tr>
</tbody>
</table>

Wilcoxon signed rank test
signif p < .01**

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**Objective 3:**

To provide parents with the skills and opportunities for encouraging language-focused parent-child interactions.

### Activities and Accomplishments for Objective 3

Two training meetings were held for parents prior to the start of the project. At the training sessions, parents received bilingual instruction (written and verbal) regarding the aims of the SALSA project and the protocols that would be followed. A short pre-recorded video demonstration of a parent-child interaction was also made available to parents. A model drawing was included in each journal sent home with the children. Parents were provided with incentives for participating.

The quality of the drawings that were returned, the consistency with which parents participated and parent’s actual statements regarding the benefits they and their children derived from the activity
demonstrate that SALA provided parents both the skills and opportunities for enhancing their children’s language competence. Examples of parents’ journal input can be seen in the figures below.

Figure 6. Example of Parent Journal Entry-1

![Figure 6. Example of Parent Journal Entry-1](image)

Figure 7. Example of Parent Journal Entry-2

![Figure 7. Example of Parent Journal Entry-2](image)
Objective 4:

To enhance the knowledge and competence of Head Start teachers regarding bilingual and language-literacy issues in the context of oral-written school-home connections.

Activities and Accomplishments for Objective 4

Teachers of both the experimental and control classrooms were invited to attend the training sessions (described in objective 3) along with the parents. Teachers also had the opportunity of not only observing but participating in the SALSA activities. Classroom teachers were the ones who collected the SALSA kits on Mondays and kept track of the children’s participation. Group intervention was done at circle time and student clinicians involved all the classroom teachers present.

Teachers were thus provided with an opportunity to gain knowledge regarding the oral-written school-home connections and also to benefit from models provided by clinicians of emergent literacy stimulation techniques.

Objective 5:

To add to the cultural-linguistic competence of speech-language pathology majors and provide training in bilingual assessment and intervention.

Activities and Accomplishments for Objective 5

The SPPA322 Child Language Disorders course in the Spring of 2009 was modified to present a multicultural focus to the study of language and literacy disorders in children. Further,
2 weeks of the semester was specifically devoted to discussing issues regarding the Hispanic child and the challenges faced by migrant populations. As a final project, students worked in teams to prepare examples of culturally relevant SALSA kits, protocols for SALSA intervention, and training materials for parents and teachers. Kits and interventions were displayed and demonstrated at a SALSA symposium that took place near the end of the semester. Ninety percent of students who participated received a rating of ‘B’ or better on their SALSA projects.

**Plan for Replication**

Dissemination of the results of this study has already been initiated. A one-hour mini-seminar was presented at the 2009 ASHA National Convention in New Orleans, LA. Presenters were Drs Lena Caesar and Nickola Nelson along with student clinicians Natalya Franco (Andrews University) and Paula Vergunst (Western Michigan University). A proposal for another seminar presentation at the Michigan Speech-Language-Hearing Association’s (MSHA) Annual Convention in March of this year has been accepted. Arrangements for presentations in other scholarly venues (such as professional development workshops, seminars for Head Start teachers and educators) are in progress. In addition, at least one journal article will be submitted on the bilingual journaling and related SALSA activities. A second article will be submitted on outcomes of the clinical training and cultural sensitivity activities in terms of students’ competencies. Articles and presentations will incorporate enough detail for others to be able to replicate the activities.

Given that the results of this pilot project appear promising, plans are afoot for applying for both a research grant and an inter-University training grant between Andrews University and Western Michigan University.
Budgetary Changes

No major deviation from the original plan was made in the execution of the project. The data gathering portion of the project was completed for close to its originally projected costs of $10,007.04. Because of low enrollment at the beginning of the Migrant Head Start season, fewer children and families were involved in the study than had originally been anticipated. However, the numbers were sufficient to obtain meaningful results and parents were able to receive more hours of training and coaching. Although the data collection part of the project is complete, data are still been analyzed. One student worker is still engaged in coding and analyzing language samples. It is anticipated that coding and analysis will be completed by the end of the semester. Statistical consultation is still in progress. There is at present sufficient funds for paying a student worker to the end of the semester for completing the coding and analysis of the narrative language samples. A final report from the Andrews Budget Office is forthcoming.
References


Hovey, J.D., Magaña, C., & Booker, V. (2005). *The relationship of migrant farmwork stress to depression and hopelessness: Preliminary findings in the standardization of the migrant farmworker stress inventory*. The Program for the Study of Immigration and Mental Health. The University of Toledo, OH. Department of Psychology.


