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Brigham Young University - Provo

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Effects of a Cross-Age Peer Tutoring Program on Reading Performance of  
Hispanic Title I Second and Third Grade Students

Ana Isabel Rodriguez

A thesis submitted to the faculty of  
Brigham Young University  
in partial fulfillment of the requirements for the degree of  
Master of Science

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## ABSTRACT

### Effects of a Cross-Age Peer Tutoring Program on Reading Performance of Hispanic Title I Second and Third Grade Students

Ana Isabel Rodriguez

Department of Counseling Psychology and Special Education, BYU  
Master of Science

Hispanic students are falling behind their peers in reading fluency and are struggling to close the gap. This study examined the reading fluency influence on 73 Hispanic second and third grade students while receiving reading fluency support from middle school Hispanic tutors. These students were compared to Hispanic second and third grade students not receiving tutoring reading support. All students were assessed before the tutors gave reading support, mid-year and after the reading support finished using a school district fluency measurement. Findings found that students made rapid growth in reading fluency from the beginning of the tutoring support to mid-year. From mid-year to the end of the tutoring support, students continued to make growth but at a slower rate. The study used a Likert scale questionnaire given to the teachers and administrators to evaluate perspectives of the effectiveness of the tutors. The findings indicate that tutors are beneficial in supporting the increase in reading fluency achievement as well as being role-models for young Hispanic students. Results of the study suggest that small group instruction guided by a tutor is beneficial to second and third grade students.

Keywords: peer tutors, Hispanic, Latino, reading fluency, tutoring, fluency support

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## DESCRIPTION OF THESIS STRUCTURE

This thesis, *Effects of a Cross-Age Peer Tutoring Program on Reading Performance of Hispanic Title I Second and Third Grade Students*, is written in a hybrid format. The hybrid format brings together traditional thesis requirements with journal publication formats.

This thesis reflects requirements for submission to the university such as the preliminary pages. The thesis report is presented as a journal article, and conforms to length and style requirements for submitting research reports to education journals.

The literature review is included in Appendix A. Appendix B includes the checklist that was used to verify treatment fidelity during the treatment. The teacher survey consent is included in Appendix C and Appendix D includes the survey the teachers completed.

The format to this thesis contains two reference lists. The first reference list contains references included in the journal-ready article. The second list includes all citations used in the Appendix entitled “Review of the Literature.”

## Introduction

Hispanics are the fastest-growing population in the United States according to the U.S. Census Bureau. It is predicted that the Hispanic population will continue to grow and may double within the next few years. In the United States about one fourth of Hispanic families are living below the poverty level (Calhoun, Al Otaiba, Greenberg, King, & Avalos, 2006). The Hispanic population faces challenges that have adverse effects in respect to the education system. Issues, such as poverty, minimal maternal education, poor health care, and limited economic resources have been shown to contribute to reading difficulties (Snow, Barnes, Chandler, Goodman, & Hemphill, 1991 as cited in Calhoun, Al Otaiba, Cihak, King, & Avalos, 2007).

Research has shown that Hispanic second language students are not as successful as their English-speaking peers in school (Ivey, 2011). According to Ivey, Hispanic second language students are learning two languages, which may impact their reading fluency. Language and culture for some children become barriers for the level of support available to them at home (Ivey, 2011). Therefore, early interventions for Hispanic students are an investment because through the provision of additional support, students' learning opportunities increase (Garcia & Jensen, 2009). Research from Garcia and Jensen (2009) indicates that there is a connection between the Spanish and English language that develops certain cognitive abilities. The researchers believe that Hispanic students who speak English and Spanish need their educational programs to be explicit with both language and cultural integration.

With the growing number of Hispanic students, teachers encounter a diverse population with a wide level of academic skills, including reading. Reading achievements in children are very different among socioeconomic classes and ethnic groups (Adams, 1990: Snow, Burns, & Griffin, 1998 as cited in Calhoun et al., 2007). Teachers find it difficult to meet the needs of

their diverse population because of the lack of strategies known to support reading fluency in Hispanic children. Teachers must be able to meet the needs of all students in order to have successful achievement outcomes for the different levels of learners in their classrooms.

When teachers expect high-level outcomes for all students, then that is the level at which students will perform. Evidence shows that students, including those of low-income and minority, are able to accomplish high level goals when they are taught with high level teachings (Stuart & Hahnel, 2011). Ravitch (1996) discusses in her article that Catholic schools have the same high expectations for all students and all students are required to take the same high-level courses. Catholic schools are implementing the idea of high academic expectations for all children with the results of higher performing Hispanic children (Ravitch, 1996).

The U.S. Department of Education (2003) stated that the majority of Latino students are receiving special education because of reading difficulties. This problem leads to misrepresentation of Latino students in special education classrooms receiving special education services. Researchers have been unable to determine which specific factors lead to misrepresentation in minorities; however, demographic factors (minority status, low income) have shown to be a significant factor in misrepresentation (Serwatka, Peering, & Grant, 1995).

There is a need for personnel in the education system to re-evaluate how to meet the needs of a diverse population, including Latino students who demonstrate reading difficulties. According to research conducted by Calhoon et al. (2006), an effective method to help diverse learners in reading fluency is through peer tutoring. The research by Calhoon and associates (2006) was conducted among three Title I elementary schools with the majority of the students being of Hispanic ethnicity. The study showed more growth in phoneme segmentation fluency and nonsense word fluency with the support of peer assisted reading fluency practice. Cross-age

tutoring offers an opportunity to utilize resources already in the schools to assist in the teaching process (Nisbett, 1999). Teachers may use the trained tutors to take individual students and focus on reading fluency skills and practice. Peer tutoring can be used as an intervention allowing the students to be served with individualized instruction (Dufrene, Reisener, Olmi, Zoder-Martell, McNutt, & Horn, 2010). Furthermore, peer tutors are able to assist students in a small group setting allowing the student to feel comfortable and successful while reading.

Simmons, Fuchs, and Fuchs (1995) found that peer-mediated programs, such as the program, peer-assisted learning strategies (PALS), have been shown to double or triple students' reading fluency levels. The PALS program is an example of the success that cross-age tutoring may have on students. As PALS has shown to be effective, it may also have successful results for Hispanic Title 1 students. Peer tutoring may also be used as a way to accommodate and modify instruction to ensure success for Title 1 Hispanic students. Kupzyk, Daly, Ihlo, and Young (2012) suggest that adjusting instruction such as making an alignment between the student's current level and instruction level is a means to help improve achievement. Peer tutoring can be used to help with this type of modification. Kupzyk et al. (2012) also note that having positive feedback, pacing, and frequent checking for accuracy will enhance students' learning rates. Feedback, pacing, and frequent checking can all be addressed using a peer tutor. The peer tutor is able to provide the individual student with the intense interventions suggested by Kupzyk.

Like PALS, Latinos in Action (LIA) is a tutoring program designed to train high school students to act as tutors for elementary school students. The LIA members are high achieving Hispanic students currently in a middle school (sixth-eighth grade). The LIA participants are required to maintain a GPA of 3.0 or higher and speak both Spanish and English. The

participants are trained by a certified teacher to help struggling elementary age readers with reading skills. The students receive four weeks of training by their mentor teacher prior to providing services at the elementary school. They receive training in teaching fluency skills as well as in working effectively with young children.

In 2012, over 1,000 students were members of the LIA program. The LIA members provide services for an estimated sixty elementary schools in Utah. The LIA program is provided at no cost to all students in elementary settings. The LIA were the peer-tutoring group that was used as the cross-age peer tutors in this study.

### **Statement of the Problem**

In 2009, Theresa Martinez, University of Utah Vice President for Academic Outreach, noted that schools were not structurally set up to handle the increasing Latino population (Schencker, 2009). In Utah 67.8% of Hispanic students pass the state core criterion-referenced test (CRT) in language arts; compared to 87.8% of Caucasian students (Utah State Office of Education, 2012). These percentages show that Hispanic students in Utah's classrooms are struggling to keep up with their peers in general education settings.

The Utah State Office of Education (2012) reported that in 2012, only 36.5% of students who were classified as limited English proficient passed the language arts CRT; whereas, 86.3% of students with native English skills passed. Clearly, reading fluency rates for Hispanic students were falling short when compared to their peers. Elementary Hispanic students require additional support with their reading fluency skills and were lacking extra support in the classroom. Teachers are working to find ways to close the gap in reading fluency rates. This results in teachers being unable to meet the needs of a struggling diverse population, which affects the students not just during their public education but also throughout their lifetime.

Tutors may be one solution to this problem.

### **Statement of Purpose**

In view of the research suggesting that children of diverse ethnicity can benefit from peer tutoring instruction in reading, the purpose of this study was to examine the effects of a cross-age peer-tutoring program on the reading fluency performance of Hispanic Title I elementary-age students.

### **Research Questions**

Based on the statements of the problem and purposes noted above, this study addressed the following research questions:

1. What is the effect of Latinos in Action cross-aged peer tutoring on the reading fluency skills of second and third grade Hispanic students?
2. What are the perceptions of elementary general education teachers regarding the Latinos in Action program?

### **Method**

The treatment group at the elementary school received reading fluency support from the LIA tutors. The school district personnel administered three benchmarks to assess reading fluency growth of second and third grade students. The control group did not receive reading fluency support from the LIA tutors but continued with their regular reading program. Their regular program consists of reading instruction from paraprofessionals already working in their classrooms.

School district reading fluency benchmark scores from fall, winter, and spring were collected and compared. Fall benchmarks were administered before Latinos in Action began their services. Winter benchmarks were administered in January (mid-year) and the final benchmark (spring) was administered a week after the LIA concluded their services. All three benchmarks were then compared to evaluate reading fluency impact. The treatment group was

compared to a same-grade control group from another classroom. The control group did not receive services from the LIA tutors.

### **Participants**

The participants consisted of children in second grade (37 students) and third grade (36 students). The children involved in the study were of Hispanic origin. The participants included children in general education as well as children in special education, with the majority (95%) being from the general education population.

The tutors ( $n = 30$ ) were students in eighth and ninth grade between the ages of 13 and 15 and were members of the Latinos in Action program. Tutors of the LIA program were of Hispanic origin and had to be bilingual to qualify for the LIA program.

The four general education teachers were of Caucasian origin and have been teaching between 4 to 20 years in elementary general education settings. The general education teachers were not fluent in Spanish. The general education teachers lived outside of the city in which the elementary school is located.

The administrators of the school were of Caucasian origin and had been administrators for one to three years in the elementary setting. The primary investigator is of Hispanic origin and had been a special education teacher for five years in middle school and elementary settings.

### **Settings**

The study was conducted in second and third grade classrooms and hallways at a Title I elementary school in the western United States with an enrollment of 747 students. The school had 121 second grade students and 118 third grade students enrolled. The population of the school was as follows: Hispanic 55.8%, Caucasian 23.3%, African American 1.3%, American Indian 17.8%, Asian 0.3%, Pacific Islander 0.4%, students with disabilities 11.8%, and English Language Learners 52.1%. The low-income socioeconomic status of the school was 92.5%.

Among these students, 92% received free or reduced lunch. During the months of October to March the school encounters a high mobility rate from a nearby homeless shelter. The school follows a traditional school schedule, which begins school at 8:05 am and ends at 2:45 pm.

While working with the targeted students, the LIA tutors worked one-on-one with students in a separate area of the classroom or in the hallway in front of their classroom. The LIA arrived at the elementary school with their on-site coordinator at the time agreed upon by the coordinator and the principal of the elementary school. The LIA participants were assigned to second and third grade classrooms. The classroom teacher assigned the LIA participant to one student. All students, whether participating in the study or not, received support from the LIA group.

The reading fluency assessment was administered in the school library because it provided a quiet environment. A trained district assessor assessed each student individually. Scores were immediately collected and entered into the school district AIMSweb<sup>®</sup> system which is used to monitor students' progress in reading fluency.

### **Measures**

AIMSweb<sup>®</sup> Reading Curriculum-Based Measurement (R-CBM) is a brief individually administered, standardized test of oral reading leveled according to academic grade. AIMSweb<sup>®</sup> is an Internet based assessment and progress monitoring program. It can be customized to each state's benchmark goals.

The participants were given the one-minute timed AIMSweb<sup>®</sup> fluency probe to assess how many correct words per minute they read. The students' correct words read per minute were evaluated as the dependent variable. In September, the children were given a school district benchmark using AIMSweb<sup>®</sup> to attain pre-LIA tutor support reading fluency level. School district personnel administered the assessment before services from the tutors began. The



children were assessed in the school's library where it was quiet and free from distractions. The children received a mid-year AIMSweb® assessment (January), which was followed by a post-tutoring AIMSweb® assessment (May) to determine their levels of reading fluency after the services of the Latinos in Action tutors. All three assessments were administered by a trained school employee and given in the library.

### **Procedures**

The LIA tutors received training for one month, every other day, in cross age tutoring, ESL specific strategies, and peer mentoring, with regard to working with elementary-age children to support reading fluency in the middle school setting before they began to work with children. The training consisted of teaching the tutors background information about ELL students and struggling readers. Participants learned tutoring strategies such as sight word practice, chunking, and reading both leveled and chapter books. The program mentor modeled reading with a tutee using both good and bad examples to help guide the student. Tutors then practiced with each other until they mastered the strategies. While the tutors worked with the children, there was a supervisor from the Latinos in Action program on site to help provide tutoring support as needed.

The treatment group received reading fluency tutoring support for forty-five minutes, twice a week. The LIA tutors were assigned up to two students with whom to work. Each tutor and their assigned student were given a designated location in the hallway with student desks and chairs ready for them to work on reading fluency. The LIA tutors were trained at the school to use a specific reading intervention during each 45-minute fluency building session. During the sessions, the LIA tutor listened to a student read aloud grade level material provided by the general education teacher. The tutor corrected any word errors and had the student re-read difficult phrases. When a student came across a difficult word, the tutor would prompt the

student to say the word by using pronunciation of sounds in the word. If the student was still not able to say the word the tutor would say the word to the student and would have the student repeat the word. Positive praise was immediately used throughout the session. The primary investigator would randomly observe the tutors while they worked with the students assuring routines were in place.

Elementary general education teachers were given the option to allow the LIA tutors to work with their students. After the teachers signed the survey consent (See Appendix C), they were asked to complete a five-question survey at the end of the services from the tutors.

Hispanic students in one second and one third grade classroom whose teachers accepted support from the Latinos in Action participated in reading fluency support. Hispanic students of one second and one third grade classroom whose teachers chose not to receive support from the LIA tutors were selected as the comparison group. All students in the classrooms that chose to have LIA tutors were given time with the tutors without regard to race or reading fluency skills. Teachers who chose not to receive support from the Latinos in Action continued with their regular classroom instruction.

Regular attendance was required of all members of the LIA program, therefore assuring that students received support with the same student at every session. If a member of the Latinos in Action was absent, then a member of the LIA group, deemed as an extra, filled in for the absent member. This assured that students did not miss out on the tutoring services of the LIA program.

### **Data Collection**

The participating school district uses AIMSweb® to create achievement standards (district level benchmarks). One sub-measurement within the AIMSweb® is the oral reading fluency-timed assessment, which assesses students' words per minute read correctly. All students

enrolled in grades kindergarten to fifth are assessed for their grade level. All students in the district are expected to participate in the administration of the benchmark. ELL students, students with an Individualized Education Program (IEP), and students with a Section 504 plan and all general education students participated in the assessment. Students who are not meeting the district benchmark standards are considered to be at risk or not performing at expected grade level.

Reading fluency monitoring was required of all students in the school district whether they received Latinos in Action support or not; therefore all students were administered the AIMSweb<sup>®</sup> reading fluency assessment regardless of their participation in the study. The school district had set grade level benchmarks as the levels for grade proficiency. The school district benchmarks for second and third grade students are found in Table 1.

Table 1  
*District Benchmarks in Correct Words per Minute*

	2 <sup>nd</sup> Grade District Benchmarks	3 <sup>rd</sup> Grade District Benchmarks
Fall	55+ correct words per minute (cwpm)	105+ correct words per minute (cwpm)
Winter	80+ cwpm	120+ cwpm
Spring	92+ cwpm	136+ cwpm

The reading fluency scores were compared between the treatment and control groups. Hispanic student scores were used in the study for both groups.

### **Treatment Fidelity**

To assure tutors were providing support as trained, the primary investigator conducted random observations for one-third of the intervention sessions (See Appendix B). The principal investigator conducted the treatment fidelity at least every two weeks. The observer assessed the following items: The LIA and student(s) sat down together away from whole group instruction, the LIA engaged student(s) 95-100% of the time according to teacher instructions, and the session was conducted over a 15-minute time frame. Student engagement was measured by observing during the session if the student was actively engaged while reading with the LIA. A student actively engaged was measured as reading out-loud with the LIA and responding to LIA prompts 95-100% of the time during the session. The sessions were conducted 1:1 during the allowed tutoring time.

### **Social Validity**

After the close of the study, teachers completed a hard copy questionnaire assessing the acceptability of the peer tutoring intervention. The primary investigator explained how to answer the 5-point scale before giving the teachers the survey. A 5-point Likert scale was used to evaluate participants' satisfaction with goals, procedures, and outcomes of the study (Wolf, 1978). The Likert scale consisted of strongly agree = 1; agree = 2; neutral = 3; disagree = 4; strongly disagree = 5 (See Appendix D). The teachers answered the questionnaire in private, without the primary investigator present.

After the LIA completed their classroom support the teachers that chose not to have the LIA work with their students were asked informally why they chose not to have the group participate in their classrooms. The school principal and assistant principal were also asked informally if they believe the LIA support was beneficial to their students and school. They were asked why they chose to allow the LIA's work at their school.

## Research Design

This research study was qualitative and quantitative in design. Quantitative data were collected over a nine-month period with data sets collected in September, January, and May. Data were used to compare the treatment group and the control group fluency scores. Qualitative data were collected from teachers at the end of the school year. This section will include the description of the data collection procedures and study design.

Approval was obtained through the institutional review boards of the university and the school district to use human subjects.

## Data Analysis

After the spring reading fluency benchmark, the scores of all three benchmarks were collected by district personnel. The scores were then given to the principal investigator with no student names attached to compare and evaluate. Scores were separated by teacher and grade. Each student was given a number to separate and to help maintain organization of scores. After the scores were separated, students who were not of Hispanic origin were also removed from the list.

Students' names were removed but each assessment was given a random number to help with organizing the scores. This particular elementary school has a high mobility rate. Due to this high mobility rate, students who did not complete all three benchmarks were also removed from the list. Figure 1.1 shows the number of participants in each group.

All three scores from each group were entered into SPSS. A repeated-measures ANOVA was used to evaluate the results. The scores were evaluated in two ways. The first evaluation compared the treatment group to the control group by grade level. The scores were quantified and compared. Each score was correlated to the others in order to match the same person for each individual benchmark. The second evaluation was the average of all the participants in the

study and was not separated by grade. Scores were only separated and compared by treatment group or control group.

Grade	Number of Participants	LIA Support
2	18	Class did not receive LIA support.
2	19	Class did receive LIA support.
3	18	Class did not receive LIA support.
3	14	Class did receive LIA support.

*Figure 1.1.* Student participants.

The teachers and principals were asked two informal questions about their thoughts of the Latinos in Action program and the impact it had on their students. The teacher responses were read by the primary investigator and grouped by themes. The principal's comments were grouped by theme and compared with the teacher responses.

### Results

The study results will be presented reviewing first the second grade reading fluency growth comparing both treatment and control group, then the third grade reading fluency growth and finally the completed surveys from teachers and administrators.

In order to test whether or not there was differential change over time in terms of reading fluency scores according to group membership (treatment v. control) two mixed design (split plot) ANOVA were conducted. A split plot ANOVA generates an estimate of the interaction between group membership and the repeated measure of performance. It also generates an estimate of the main effect for group membership and the main effect for time. The interaction

term is most important as it isolates differential change over time according to group membership. The main effects for time and group membership may also be relevant.

The first analysis was conducted only on the children in second grade. As seen in Figure 2.1, there was not a significant linear time by group interaction ( $F_{[1,35]} = 0.370$ , NS). There was, however, a significant quadratic interaction between time and group ( $F_{[1,35]} = 11.683$ ,  $p = .002$ ). As seen in Figure 2.5, the quadratic interaction indicates that the group's responses over time had a different curvature to them. The main effect for time was also significant ( $F_{[1,35]} = 353.606$ ,  $p < .001$ ). This indicates that although the groups had different curvature over time, all subjects, regardless of group membership, improved in their reading fluency skills. The main effect for group membership was not significant ( $F_{[1,35]} = 3.069$ , NS).

As an additional check, a  $t$ -test (Figure 2.3) for equality of means was conducted that focused only on the final benchmark reading fluency scores. There were no significant differences between the groups ( $t_{[35]} = -1.339$ , NS).

**Tests of Within-Subjects Contrasts**

Measure: MEASURE\_1

Source	Time	Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Linear	46335.212	1	46335.212	353.606	.000
	Quadratic	499.460	1	499.460	11.977	.001
Time * Group	Linear	48.509	1	48.509	.370	.547
	Quadratic	487.207	1	487.207	11.683	.002
Error(Time)	Linear	4586.275	35	131.036		
	Quadratic	1459.595	35	41.703		

Figure 2.1. Comparing time and control and experimental groups for second grade.

### Tests of Between-Subjects Effects

Measure: MEASURE\_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	289913.294	1	289913.294	196.845	.000
Group	4520.573	1	4520.573	3.069	.089
Error	51547.949	35	1472.799		

Figure 2.2. Effects for groups in second grade.

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
RCBMSpringScore	Equal variances assumed	.932	.341	-1.339	35
	Equal variances not assumed			-1.327	30.450

Figure 2.3. Comparison between groups for the spring benchmark for second grade.

### Independent Samples Test

		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
RCBMSpringScore	Equal variances assumed	.189	-11.424	8.531
	Equal variances not assumed	.194	-11.424	8.611

Figure 2.4. T-test comparison between groups for the spring benchmark for second grade.



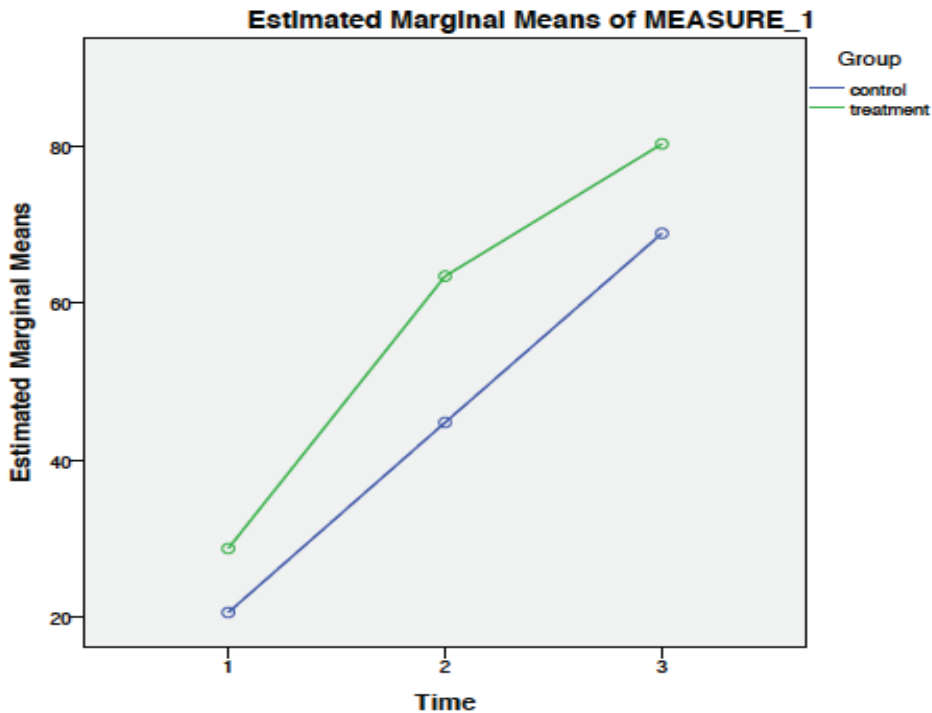


Figure 2.5. Plot of second grade control and treatment groups' change in reading fluency over time.

A second split plot ANOVA was conducted that focused only on the third grade students. In this case, the time by group interactions (linear and quadratic) were not significant ( $F_{[1,30]} = .002$ , NS;  $F_{[1,30]} = .108$ , NS). The main effect for time was significant ( $F_{[1,30]} = 89.481$   $p < .001$ ). The main effect for the group was not significant ( $F_{[1,30]} = .208$ , NS). As an additional check, a  $t$ -test for equality of means was conducted that focused only on the final benchmark reading fluency scores. There were no significant differences between the groups ( $t_{[30]} = .364$ , NS).

## Tests of Within-Subjects Contrasts

Measure: MEASURE\_1

Source	Time	Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Linear	21515.525	1	21515.525	89.481	.000
	Quadratic	647.223	1	647.223	7.602	.010
Time * Group	Linear	.525	1	.525	.002	.963
	Quadratic	9.223	1	9.223	.108	.744
Error(Time)	Linear	7213.413	30	240.447		
	Quadratic	2554.090	30	85.136		

Figure 3.1. Comparing time and control and experimental groups for third grade.

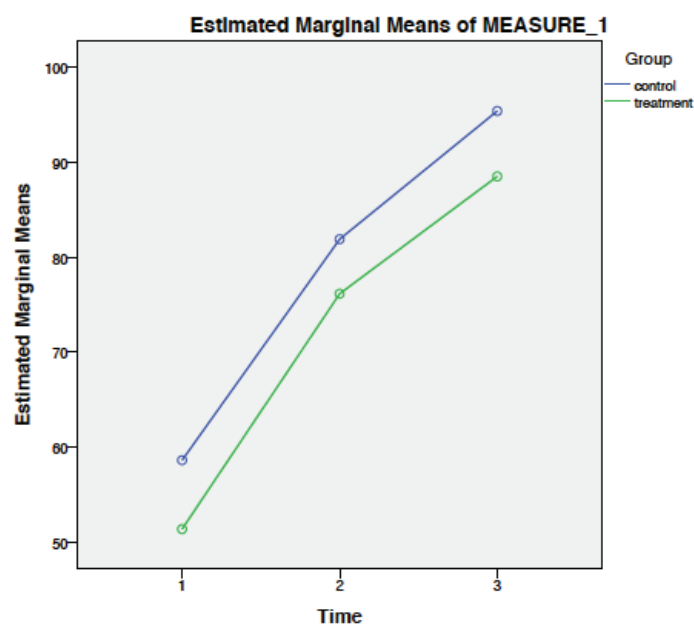


Figure 3.2. Plot of second grade control and treatment groups' change in reading fluency over time.

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
RCBMWinterScore	Equal variances assumed	1.273	.268	.364	30
	Equal variances not assumed			.373	29.841

Figure 3.3. Comparison between groups for the spring benchmark for third grade.

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	Std. Error Difference
RCBMWinterScore	Equal variances assumed	.718	5.746	15.774
	Equal variances not assumed	.712	5.746	15.403

Figure 3.4. T-test comparison between groups for the spring benchmark for third grade.

Treatment group teachers agreed to answer the Likert scale survey in regards to the LIA and their services (See Appendix D). The second grade teacher felt the LIA had a positive influence on her student's confidence in reading and school experience (see figure 4.1). She agreed that the LIA had a positive impact on the students' reading fluency rates. The third grade teacher had a negative experience with her LIA participants. She chose to pull her class from the study a week before the winter benchmarks were administered. Her survey stated she felt the LIA participants that were assigned to her were not fully invested in her students or the program (See Figure 4.1).

	Students look forward to working with tutor	Student is actively engaged during tutoring support	Students' reading fluency scores have improved	Students' confidence in reading has improved	Tutoring has helped students' overall school experience
2nd grade teacher	1	1	2	2	1
3rd grade teacher	5	4	5	5	5

Note: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly Disagree

Figure 4.1 Teacher survey results.

The principal and assistant principal of the school answered the informal questions asked by the principal investigator. The school principal survey questions and answers follow.

1. Do you feel that the Latinos in Action are beneficial to your student's and school?

Why or why not?

“I believe that the LIA are very beneficial for our students. They are examples of students who are on track to go to college; which is a good role model for our students. The LIA are also involved with providing service which our students see them doing around the community as well as at our school. I believe the LIA program provides hope and a perspective for Latinos that they can succeed in school and the community. It's a great program for all involved.”

2. Why do you participate with the Latinos in Action?

“We participate in LIA because it provides our students with some extra tutoring help while at the same time providing a way for the LIA students (who many have been students at our school) an opportunity to serve and grow. As mentioned above, LIA also are role models for our students on being good students and good citizens in the community.”

Questions and responses from the assistant principal follow.

1. Do you feel that the Latinos in Action are beneficial to your student's and school?

Why or why not?

“I do feel that LIA is a very beneficial opportunity for [our] elementary and any school that is in need of additional supports.”

2. Why do you participate with the Latinos in Action?

“I participate with Latinos in Action to provide more one-on-one interaction with students. It increases our student literacy skills when they have increased opportunities to read aloud to the LIA. It is a nice support for teachers and office staff to have extra hands to help out

with organizing and managing items around the school. It is fantastic that LIA helps out with translation services during parent teacher conferences. I really enjoy the ability of the LIA to provide culturally relevant teaching opportunities and assemblies.”

Both teachers who chose not to use the LIA were asked the following question: “Why did you choose not to participate with the LIA program?” A response from the third grade teacher was “I didn't have Latinos in Action in my classroom due to timing. When they came it was during our student based intervention time. I have had Latinos in Action in my classroom in the past and have loved having them in there and I know the students enjoyed having them but this past year it was due to bad timing.” The response from second grade teacher was “I think it was more of a timing issue and then it was too late.”

In summary, three out of four teachers and administrators had similar responses. Teachers and administrators felt that the LIA program was beneficial to the students in reading fluency skills and as role models. Administrators in particular felt that the students are given influences to be successful in other aspects of their academic success as well as reading skills.

### **Discussion**

The study investigated the impact of Hispanic middle school students as peer tutors to elementary Hispanic second- and third- grade students reading fluency rate. The study also looked at how the teachers and principals felt the LIA tutors impacted the students reading fluency rates. Teachers who did not use the LIA’s but were used in the study were asked why they chose not to have the program service their students.

Data analysis shows that the Latinos in Action had a positive influence on elementary-age Hispanic students’ reading rates based on teacher and administrator survey results. The study suggests that students initially increased reading fluency rates at a faster rate when compared to their peers not receiving support, however after mid-year the students’ reading rates leveled off.

Review of the split plot ANOVA for both second and third grade students show the treatment group had a faster growth than the controlled group. At mid-year the treatment group continued to make positive progress but at a slower rate. At the end of the year the analysis shows that there was no significant difference in the fluency reading rates. The primary investigator speculated about the quick growth and then slow growth after the mid-year mark. Considering possible changes in the treatment group, however, none were found. There was no change in curriculum or tutors and there were no extended school breaks after the mid-year mark that could have impacted lack of continued quick growth in the treatment group.

DeThorne, Petrill, Schatschneider, and Cutting (2010) examined the association between conversational language and reading development. The study found similar results as previous studies, with a “common denominator between spoken language and reading development” (DeThorne, et al., p. 210). Miller, Heilmann, and Nockerts (2006) found an association in English language learners between oral language proficiency and reading proficiency in a sample of 1531 bilingual children. This research could help explain the possible reason for quick trajectory growth in fluency and then slow growth after mid-year. The students in the study are bilingual children; it may be possible the children reached their ability to read sooner based on their oral language limitations. The oral language development of the bilingual children may have impeded them from continued quick progress. In other words, the children reached their potential at a quicker rate with the LIA support.

### **Limitations**

The research was limited to three reading benchmarks for one school year and did not address long-term reading fluency effects. The primary investigator recognizes that the reading scores were also impacted by other school-wide factors including a district wide reading program implemented by the general education teacher and Tier II reading support provided to all

students in second and third grade students. This research was also limited in its scope because the researcher did not address the impact the LIA tutors had on the students' self-esteem, the impact it had on their future educational decisions or on their reading comprehension. The early withdrawal of the third grade treatment group was a limitation in regards to the spring reading benchmarks.

### **Implications for Practice**

Results of the study support findings of Dufrene, Reisener, Olmi, Zoder-Martell, and Horn (2010) indicating students benefit from support in small group instruction by a tutor. The results show that the students receiving support from a peer tutoring program are able to increase their reading fluency skills at a quicker speed during early interventions when compared to peers in the same grade level. This study shows students might benefit from continued reading fluency support from peer tutors such as Latinos in Action. According to the teacher survey results it is implied that students showed interest in spending time with their peer tutors. Teachers might also benefit from the continued reading support from peer tutors to help support their students reading fluency. Peer tutors can help teachers create small group support and allow the teacher to be more flexible and attentive of individual student needs.

The students receiving reading support from peers could also benefit from seeing someone of their same origin as a leader. The students could possibly see their peer tutor as an influence in their future education and work decisions. It is possible that having a peer tutor to help translate any unrecognized or new words to the student in their native language may be beneficial in helping the student with retention and understanding of new or unknown words.

### **Recommendations for Future Research**

Yasutake, Bryan, and Horn's (1996) study indicates that students showed a significant positive effect in effort, ability, and task difficulty when using peer tutors. Therefore, any future

research would benefit from studying the impact the LIA's have on students' self-esteem in reading and goal decision-making. Future research could also investigate the impact on kindergarten improvement on language acquisition, letter recognition, or word formation. Studies of upper grade (fourth– sixth grade) LIA impact on self-esteem and reading fluency rate might be beneficial to schools and students. Long-term reading fluency impact may be beneficial to schools and peer tutoring programs. The study did not evaluate the student's level of reading comprehension. Future research could benefit from evaluating comprehension increase and comparison of fluency rate to comprehension rate.



## References

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- Calhoun, M. B., Al Otaiba, S., Cihak, D., King, A., & Avalos, A. (2007). Effects of a peer-mediated program on reading skill acquisition for two-way bilingual first-grade classrooms. *Learning Disability Quarterly, 30*, 169-184.
- Calhoun, M.B., Al Otaiba, S., Greenberg, D., King, A., & Avalos, A. (2006). Improving reading skills in predominantly Hispanic Title 1 first-grade classrooms: The promise of peer-assisted learning strategies. *Learning Disabilities Research & Practice, 21*, 261-272.
- DeThorne, L. S., Petrill, S. A., Schatshneider, C., & Cutting, L. (2010). Conversational language use as a predictor of early reading development: Language history as a moderating variable. *Journal of Speech, Language, and Hearing Research, 53*, 209-223.
- Dufrene, B. A., Reisener, C.D., Olmi, D. J., Zoder-Martell, K., McNutt, M. R., & Horn, D. R. (2010). Peer tutoring for reading fluency as a feasible and effective alternative in response to intervention systems. *Journal of Behavioral Education, 19*(3), 239-256.
- Garcia, E., & Jensen, B. (2009). Early educational opportunities for children of Hispanic origins. *Social Policy Report, 23*(2), 1-20.
- Ivey, P. S. (2011). Overcoming language and cultural barriers in school: Helping Hispanic students acquire success in elementary school. *School of Education and Counseling Psychology, 1*-44. Retrieved from ERIC database  
<http://files.eric.ed.gov/fulltext/ED519664.pdf>
- Kupzyk, S., Daly, E. J., III, Ihlo, T., & Young, N. (2012). Modifying instruction within tiers in multi-tiered intervention programs. *Psychology in the Schools, 49*(3), 219-230.

- Miller, J. F., Heilmann, J., & Nockerts, A. (2006). Oral language and reading bilingual children. *Learning Disabilities for Research and Practice*, 21, 30-43.
- Nisbett, C. J. (1999). The effects of cross-age peer tutoring on mathematical achievement and self-esteem of elementary school children. *ProQuest Dissertations and Theses*; ProQuest (UMI No. 9932940).
- Ravitch, D. (1996). Why do Catholic schools succeed? *Forbes*, 158(8), 81.
- Schencker, L. (2009). Schools, state offer safety nets for Latino kids. *The Salt Lake Tribune*. Retrieved from [http://www.sltrib.com/education/ci\\_12899681](http://www.sltrib.com/education/ci_12899681)
- Serwatka, T. S., Peering, S., & Grant, P. (1995). Disproportionate representation of African Americans in emotionally handicapped classes. *Journal of African American Studies*, 25, 492-506.
- Simmons, D., Fuchs, L., & Fuchs, D. (1995). Effects of explicit teaching and peer tutoring on the reading achievement on learning disabled and low-performing students in regular classrooms. *Elementary School Journal*, 95, 387-408.
- Stuart, L., & Hahnel, C. (2011). *A report card on district achievement: How low-income, African-American, and Latino students fare in California school districts. K-12 policy*. Oakland, CA: Education Trust-West.
- U.S. Department of Education. (2003). *Key indicators of Hispanic student achievement: National goals and benchmarks for the next decade*. Retrieved from <http://www.ed.gov.erl.lib.byu.edu/pubs/hispanicindicators/index.html>
- Utah State Office of Education. (2012). *Cohort graduation and dropout rate report*. Retrieved from [www.schools.utah.gov/.../Graduation-Dropout-Rates/GraduationReportU](http://www.schools.utah.gov/.../Graduation-Dropout-Rates/GraduationReportU)

- Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis, 11*, 203-214.
- Yak, L. K. (2002). Population projections. Washington, DC: U.S. Census Bureau.
- Yasutake, D., Bryan, T., & Horn, E. (1996). The effects of combining peer tutoring and attribution training on students' perceived self-competence. *Remedial and Special Education, 19*(2), 83-91.

## **APPENDIX A: Review of Literature**

In Utah, teachers are beginning to encounter a large diverse population of not just ethnicities, but also of reading ability levels. These diverse populations are challenging teachers in their teaching strategies. Teachers find it difficult to find strategies to meet the needs of struggling students and are finding the reading fluency gap among ethnicities to grow further apart. The rising gap in reading abilities amongst races has been a concern for decades. It is becoming more difficult to close the educational achievement gap. The Utah State Office of Education (USOE) graduation rates from 2012 show that Hispanic students are 20% lower than that of their Caucasian peers. The USOE uses a statewide student identifier in order to track each student accurately.

### **Growth of the Hispanic Population in the United States**

Hispanics are the fastest-growing segment of the United States population. According to U.S. Census Bureau data (Guzman, 2001), the Hispanic population increased by more than 58 % from 1990 to 2000, increasing from 22 million in 1990 to 35 million in 2000. The total population of the United States increased 13 % during the same time period. In 2010, U.S. Census Bureau estimated the number of Hispanics to be about 50.5 million, or about 16 % of the U.S. population, up 43 % from the 2000 Census. The increase of over 15 million Hispanics from 2000 to 2010 accounted for more than half of the total population increase in the United States during that time (Humes, Jones, & Ramirez, 2011), which was 27.3 million in total (Census Bureau, 2010). The Census Bureau made note that the non-Hispanic population had a much slower increase over the past decade of about 5%. “More than one in four Americans belongs to one of the two largest minorities, Blacks and Latinos” (Gardin, 2012, p. 3793).

In the United States the Hispanic population faces challenges that non-Hispanics do not encounter. In America about one-quarter of Hispanic people live below poverty (Yak, 2002). This issue can be associated with other issues, such as low maternal education, poor health care, and limited economic opportunities. All of these issues have been shown to contribute to reading difficulties (Snow, Barnes, Chandler, Goodman, & Hemphill, 1991). This may be due to second language acquisition, environment, poverty, or limited resources. The National Reading Panel (2000) says there are specific skills needed to become adequate readers: phonemic awareness, phonics, vocabulary, comprehension, and fluency (Kamps & Abbott, 2007). These are skills the Hispanic student population struggle to acquire at an early age.

Schools are often not structurally organized to accommodate Hispanic students facing these issues. As a result of the increase in the Hispanic population and the academic struggles Hispanic students face, including high drop-out rates, “researchers have begun to examine the characteristics that lead to academic success and failure” among the Hispanic student population (Alfaro, Taylor, & Bamaca, 2006, p. 279).

### **Achievement Gap Comparing Hispanic Students to Non-Hispanic Students in U.S. Schools**

Recent studies show that the educational outcome of Hispanic students in the U.S., on average, falls well behind those of non-Hispanic students (Kao & Thompson, 2003). According to the National Assessment of Educational Progress (NAEP), reading scores have increased for both white and Hispanic students groups, but the achievement gap between Hispanic and white students did not change for fourth- or eighth-graders when comparing 1992 to 2009. “The 26-point gap for fourth-graders in 2007 was not significantly different from the 25-point gap in 2009” (Hemphill, Vanneman, & Rahman, 2011, p. iv).

Shepard (2001) states there are as many Hispanic students as there are white students that cannot read at a basic level. However, Hispanics are more often retained and are three times more likely to drop out of school than white students (August & Hakuta, 1998).

A study conducted by Wang (2008) shows that the achievement gap begins as early as Kindergarten. In her study, Hispanic children had the largest gap in math skills and overall literacy knowledge when compared to white children. “The gaps range from half a standard deviation unit on measures of overall mathematics knowledge and skills, overall literacy knowledge and skills, and phonological awareness knowledge and skills, to almost one full standard deviation on the measure of reflective vocabulary knowledge and skills” (Wang, 2008, p. 25).

### **Hispanic Student Graduation Outcomes**

Due to individual, family, or school related factors, many Hispanic students struggle through school (Alvarado, 2009). When compared to their peers, Hispanic students traditionally do not perform as well on national assessments (Kamps, et al., 2006). “According to the 2005 National Assessment of Education Progress (NAEP) (U.S. Department of Education, 2005), only 13 percent of fourth-grade Hispanic students and 15 percent of eighth-grade students meet proficiency reading standards” (Kamps, et al., 2006, p.154).

When compared to non-Hispanic white and black students, Hispanic students are less prepared for Kindergarten. Hispanic students begin Kindergarten with less readiness than their non-Hispanic peers (Duncan & Magnuson, 2005; Fryer & Levitt, 2004). In 2011 the Utah State Office of Education reported (USOE) that 57% of their enrolled Hispanic/Latino students received a diploma by September 30, 2011. This report shows that 45% of English Language Learners graduated, 65% of economically disadvantaged students graduated, and 80% of white students in Utah graduated. The Utah graduation report shows the large gap between races and

graduation, a great concern when evaluating the fast growing percentage of Hispanic students in education.

Utah statistics show that about 50% of Hispanic students will graduate from high school (Salinas, 2002). According to the Utah State Office of Education report on graduation rates for 2011, 45% of Hispanic students, 59% of English Language Learners and 33% of economically disadvantaged students dropped out of school. In addition, Hispanic students are more likely to attend a two year college and less likely to graduate a four year college when compared to Caucasian students (Fry, 2004).

### **College Outcomes**

Over the decades, the gaps have declined slightly but not enough to make a significant impact on Hispanic student outcomes. Hispanic students are “receiving fewer than seven percent of the college degrees, with males receiving only about 60 percent as many as females” (Gandura, 2009, para.7). “Research shows that Hispanic second language students are not as successful as their English-speaking peers in school” (Ivey, 2011, p. 4). Due to risk factors such as language ability or academic expectations, many Hispanic students are found on a Tier 2 or Tier 3 level on the Response To Intervention (RTI) model.

The U.S. Department of Education (2003) stated that the majority of Latino students who are receiving special education do so because of reading difficulties. Improperly placing a student in special education has a negative effect on their academics. This may also be negatively impacting Hispanic students placed in special education because of reading difficulties that have been caused by a second language barrier. The current demands for higher reading skills in the workplace place the students with low levels of reading fluency levels at a great disadvantage (Torgesen, 2000). Because Hispanic students are at greater risk of becoming adults with low

levels of literacy, they are also at greater risk of becoming disadvantaged in the workplace. Unchecked literacy problems in childhood create lifelong challenges in adulthood.

### **Employment Outcomes for Hispanic Students**

As pointed out by Torgesen, the achievement gap for Hispanic students leads to concerns with potential employment outcomes. In the U.S most Hispanics remain in low-skilled positions. As few as two percent of Hispanic students earn more than \$75,000 per year (White House Initiative on Educational Excellence for Hispanic Americans, 2002). Studies have shown that there is a direct relation to education. The Hispanic population continues to fall behind the rest of the nation when it comes to moving into white-collar positions (White House Initiative on Educational Excellence for Hispanic Americans, 2002). The two largest minority groups, African American and Hispanic, struggle with family income. “The median family income per capita for these two groups is below 60%of levels for non-Hispanic whites, and their poverty rate is at least twice as high” (Gardin, 2012, p. 3793).

In 2000, 21%of Hispanic students were school dropouts; in comparison, eight percent of white youth and 12% of black youth dropped out of school (Fry, 2003). Hispanic youth face obstacles in the American educational system that threaten to diminish their long-term prospects and impact the social mobility of the Hispanic population as a whole (Crosnoe, 2005). When Hispanic students fail in school, it has a rippling effect on their future. As pointed out by Woolley (2009) when a Hispanic student does not ultimately succeed in school, the challenges began many years earlier. When an adult struggles with literacy, it has a negative impact on the literacy of their children, which creates a disturbing cycle.

### **Reading and the Classroom**

Garcia and Jensen (2009) suggest that interventions during the early educational years of Hispanic students can help to improve learning opportunities and outcomes. According to



Mercado (2001), Hispanic students are expected to have both social and academic proficiency. Many Hispanic students are bilingual to some extent, and this impacts the Hispanic student population from the outset of their education. Their reading skills are often limited in the English vocabulary (Ben-Zeev, 1977; Cobo-Lewis, Pearson, Eilers, & Umbell, 2002).

Richard Gomez, Utah State Office of Education Coordinator for Educational Equity (Schencker, 2009), stated ultimately more institutional changes had to happen in schools in order to assure Hispanic student success. Knowledge and economic success are dependent on the ability to read which has a lifelong impact on children's success (Adams, 1990). However, the reading achievement of children from a very early age is strikingly different among socioeconomic classes and ethnic groups (Adams, 1990). It is well known that reading fluency affects a student not only in the academic setting but also in their environment. Reading fluency impacts their potential economic success. It is crucial that strategies are created for children at a young age that will immediately provide positive reading results for the Hispanic student population. Calhoun and colleagues (2007) made a very powerful statement when they said that prevention was a more powerful goal than remediation; therefore, emphasizing the importance of putting in place early interventions for today's diverse population.

In their classrooms, teachers encounter a diverse pupil population with a variety of ability levels (Nisbett, 1999). This makes it difficult to meet the needs of all students. In order to have successful reading achievement levels for all students, teachers need support to find adequate strategies that meet the needs of all their students. Demographic trends in the United States present major challenges for public education (Fusarelli & Boyd, 2004). These are challenges that teachers are struggling to overcome.

Many teachers find themselves with a diverse classroom and little training in managing a diverse student body or lack of materials to meet diverse needs. Research conducted by Marx and Larson (2011) showed teachers working in a junior high enjoyed working with Latino students, but felt they could not relate well with them and did not know them well. The teachers also reported having stereotypes and misconceptions about the Latino students and did not feel prepared to teach them. Marx and Larson's (2011) research demonstrates how unprepared teachers often are to help the struggling Hispanic population. Teachers require a classroom set-up that would allow Hispanic students to receive the best strategies to help them succeed.

Preparing paraprofessionals and any person who interacts with the students is one step toward achieving better preparation for the large Hispanic population that teachers are now experiencing. Clewell and Villegas (1999) argue that teaching with an emphasis on respect towards individuals and their cultural differences provides a bridge to effectively teaching in multicultural classrooms. Howe (1995) suggested that schools should create staff development trainings to help teachers, and any person working with Hispanic students, acquire strategies shown to be successful with Hispanic students. A successful strategy would also include understanding cultural dynamics that come from their homes. Training teachers, paraprofessionals, and any who will be working with Hispanic students will not only create an environment that will help Hispanic students succeed but will also help create an atmosphere of acceptance.

When there is a lack of understanding in cultural differences there is often a breakdown of communication between students and teacher. This lack of understanding and communication may lead to serious academic consequences (Salinas, 2002). It is important that teachers have the necessary skills to interact with students in culturally appropriate way (Salinas, 2002). Being

aware of a student's cultural background may help the teacher understand how a student learns as well as how to better support a student's personality. According to Clewell and Villegas (1999), students learn best where there is a bridge between their school and home experiences. Students' prior knowledge and experiences, including individual and cultural, contribute to and inform the overall learning process.

Research demonstrates that all students, including those of color and of low-income situations, can achieve at high levels when taught at high levels (Stuart & Hahnel, 2011). All students are capable of reaching the expected levels a teacher establishes. Teachers must have high levels of expectations in order to motivate students to be self-directed. The No Child Left Behind Act (NCLB) includes all students in the classrooms and states, “All children will have a fair, equal, and significant opportunity to receive a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments” (Section 1001, p. 15). This statement from NCLB includes the struggling Hispanic population, therefore making it important to create strategies to help reading fluency for the struggling Hispanic student.

While teachers have the ability to influence students to set proper academic goals and to establish personal expectations, teachers need a variety of information about the student in order to best assist in setting these goals and expectations. Such information naturally includes academic assessment and observation within the classroom, but understanding a student’s environment outside the classroom can also be critical.

Salinas (2002) noted that Hispanic teachers can be valuable role models for Hispanic students and can help reduce stereotypes. When a teacher shares a common cultural identity with his or her student, the teacher will often have a greater understanding of the student’s home

environment and the unique challenges and opportunities facing the student. While Hispanic students cannot always be paired with Hispanic teachers for a variety of reasons, peer-tutoring programs offer a unique opportunity to provide cultural connections and valuable role models for Hispanic students in an academic setting.

Latinos in Action (LIA) is a cooperative learning tutoring program consisting of high school age Hispanic students who tutor elementary age Hispanic students. The LIA tutors assist elementary students academically to help prevent English Language Learners from disproportionate identification or special education. But they also serve as role models and mentors to these students. A study conducted by Bankston and Zhou (2002) found schools that actively promote clubs or activities supported by positive cultural characteristics and ethnic language are beneficial to literacy achievement and do not interfere in mainstream education. The study found that ethnic language skills contributed to the goals of mainstream education. Given the findings of that study, it may be suggested that role models who speak the same language as the students may benefit the elementary-age student learner in creating a bridge between their native language and culture and their expected academic language and culture.

### **Peer Tutoring**

According to Meyer and Felton (1999), a directed practice in repeated reading is a primary method used to improve reading fluency. Literature supports the positive effect of repeated readings as a means to improve fluency (Chard, Vaughn, & Tyler, 2002). The National Reading Panel suggests that instruction in guided oral reading is an important part of reading which helps increase fluency and comprehension skills (2000). It also states that guided repeated oral reading helps improve fluency and has an overall positive improvement rate in reading fluency (2000).

According to the National Research Council (Snow, Burns, & Griffin, 1998), oral reading is accepted as a means to increase fluency as well as comprehension. As Reutzel (2006) pointed out, "effective fluency instruction for elementary students requires explicit, systematic explanation and instruction about the elements of reading fluency, rich and varied modeling and demonstrations of fluent reading, guided oral reading practice with appropriately challenging and varied texts on a regular basis, guided repeated or multiple rereading of the same text, assessment and self-monitoring of oral reading fluency progress, information on how to 'fix up' faltering reading fluency, and genuine audiences and opportunities for oral reading performance" (Wang, Algozzine, Ma, & Porfeli, 2011, p. 450).

Peer tutoring is one way to assist the Hispanic student population as they begin their reading fluency skills. Katherine Keller discusses that research has found that peer tutors provide the following: (a) modeling fluent reading for the student, (b) providing support or feedback with difficult words, (c) providing opportunities for students to read a text more than once to gain comfort and control over the reading, (d) charting student progress, and (e) identifying a benchmark or target the student needs to achieve with each reading (Chard, et. al., 2002). Peer tutoring can be used as a means to assist in repeated oral reading to help students increase reading fluency. It also provides support for the strategies suggested by Reutzel (2006) as effective ways to increase fluency in elementary students. Peer tutors are able to provide systematic explanations and instructions as they demonstrate fluent reading. They are also the audience that a student needs during oral reading practice. When trained properly, peer tutors are an effective means of assisting the students while they strive to progress in their reading skills.

Peer tutoring involves small group assistance and frequent interaction and provides the opportunity for immediate feedback. A student may receive a variety of strategies to help support

reading fluency, but they are not very effective without constant feedback by another person such as a peer, volunteer, or teacher (Reutzel, 2006). A peer tutor can be the volunteer that gives the immediate feedback a student requires in order to promptly recognize reading errors. An example of the effectiveness of peer tutoring programs is that of Peer Assisted Learning Strategies (PALS). PALS is a well-researched peer-mediated program that has helped significantly improve reading fluency rates, offer more opportunities to respond, and allow for easier participation in reading activities (Greenwood, Carta, & Hall, 1988). Research by Mathes, Torgesen, and Allor (2001) found that low-achieving students benefited significantly from PALS intervention in the area of reading achievement ( $ES = .59$ ), and average-achieving ( $ES = .34$ ) and low-achieving ( $ES = .41$ ) students generally scored higher than students in the contrast condition. They also scored at or near achieving students on phonological awareness. Research such as Calhoun's and colleagues (2006) shows that peer tutoring such as PALS have shown to be an effective reading support strategy for ethnically and diverse students.

A tutor has the ability to assist the student by using strategies such as pace, tone, and reading level instruction. Students may also benefit from an emotional perspective in the sense that they are working either alone with the tutor or with another student who reads at the same level. This helps students feel more comfortable rather than feeling concerned about being compared to their higher-ability peers. Cross-age tutoring also offers an opportunity to utilize resources already in the schools to assist in the teaching process (Nisbett, 1999).

Peer tutoring can be used as an intervention allowing a student to be served with individualized instruction (Dufrene, Reisener, Olmi, Zoder-Martell, McNutt, & Horn, 2010). Peer tutoring may help prevent reading difficulties. According to research done by Claudia Nisbett (1999), two main benefits for cross-age peer tutoring are academic achievement and an

increase in the student's self-esteem. Other benefits demonstrated by Nisbett's study shows that students are able to take charge of their education, have a communication link, and tutors are able to provide more sensitivity to the needs of the tutee (Nisbett, 1999). She argues that these types of programs help students learn how to work well with others. Lastly, she states that there are no preconceived prejudices from the tutor to the struggling students.

Looking specifically at Hispanic students, the study conducted by Marx and Larson (2011) addressed concerns regarding the reading skills of Hispanic junior high students. The researchers helped a junior high school create a literacy curriculum that helped improve teacher-to-student ratio and allowed students to have individualized attention. The new curriculum was designed to meet the individual needs of struggling readers by offering small group interventions. Formal and informal assessments showed improvement in reading skills as well as behavior and attendance. Building on these concepts, peer tutoring offers a way to provide small group settings and individualized attention where the resources to do so might otherwise be unavailable.

A study by Stuart and Hahnel (2011) showed that using PALS with predominantly Hispanic students living in high poverty was beneficial. The students being tutored enjoyed having older students work with them: they also felt reading with PALS was a way fun way to learn to read. In addition, the study showed that the students worked hard when they were grouped with PALS and they felt PALS helped them improve their reading skills.

Haager and Windmueller (2001) studied student and teacher outcomes with ELL learners in a high-risk school. They concluded that continuous teacher support combined with student monitoring, while using evidence-based reading practices, is critical for improving student reading skills (Kamps, et al., 2006). According to Torgesen (2000), the progress struggling

students make is due to the time the intervention lasts combined with the type of intensity and smaller group sizes.

Like PALS, the LIA group can play a part in this intervention. The LIA group may help the teacher achieve the number of hours the intervention needs in order to be successful, and the LIA group may also be a source of long-term support for the teacher. The LIA group generally would participate in reading support for an entire school year and help tutor a student or small group for that time frame.

### **Definition of Terms**

For the purpose of this study, peer tutoring is defined as an instructional system in which students teach other students. Peer tutoring is designed to be a quiet and friendly environment for learning, personalized for the individual student. AIMSweb<sup>®</sup> allows teams to assess students' current educational needs through use of a Benchmark process.



### References

- Abi-nader, J. (1990). "A house for my mother": Motivating Hispanic high school students. *Anthropology & Education Quarterly*, 21(1), 41-58.
- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- Alfaro, E. C., Umana-Taylor, A. J., & Bamaca, M. Y. (2006). The influence of academic support on Latino adolescents' academic motivation. *Family Relations*, 55, 279-291.
- Algozzine, B., Marr, M. B., Kavel, R. L., & Dugan, K. K. (2009). Using peer coaches to build oral reading fluency. *Journal of Education for Students Placed at Risk*, 14(3), 256-270.
- Alvarado, C. G. (2009). Empowering community-school engagement in promoting Latino high school graduation at the elementary school level. (Doctoral Dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 304852416).
- Anderson, L. B. (2007). A special kind of tutor. *Teaching Pre K-8*, 37(5), 56-57.
- August, D., & Hakuta, K. (1998). *Education language-minority children*. Washington, DC: National Academy Press.
- Bankston, C. L., & Zhou, M. (2002). Being well vs. doing well: Self-esteem and school performance among immigrant and nonimmigrant racial and ethnic groups. *International Migration Review*, 36(2), 389-415.
- Barron-McKeagney, T., Woody, J., & D'Souza, H. (2001). Mentoring at-risk Latino children and their parents: Impact on social skills and problem behaviors. *Child and Adolescent Social Work Journal*, 18, 119-136.

- Ben-Zeev, T. (1977). The influence of bilingualism on cognitive strategy and cognitive development. *Child Development*, 48, 1009–1018.
- Calhoun, M. B., Al Otaiba, S., Cihak, D., King, A., & Avalos, A. (2007). Effects of a peer-mediated program on reading skill acquisition for two-way bilingual first-grade classrooms. *Learning Disability Quarterly*, 30, 169-184.
- Calhoun, M. B., Al Otaiba, S., Greenberg, D., King, A., & Avalos, A. (2006). Improving reading skills in predominantly Hispanic Title 1 first-grade classrooms: The promise of peer-assisted learning strategies. *Learning Disabilities Research & Practice*, 21, 261-272.
- Chard, D. J., Vaughn, S., & Tyler, B. J. (2002). A synthesis of research on effective interventions for building reading fluency with elementary students with learning disabilities. *Journal of Learning Disabilities*, 35(5), 386.
- Clewell, B. C., & Villegas, A. M. (2001). Creating a nontraditional pipeline for urban teachers: The pathways to teaching careers model. *Journal of Negro Education*, 68(3), 306-317.
- Cobo-Lewis, A. B., Pearson, P. Z., Eilers, R. E., & Umbell, V. C. (2002). Effects of bilingualism and bilingual education on oral and written Spanish skills: A multifactor study of standardized test outcomes. In D. K. Oller & R. E. Eilers (Eds.), *Language and literacy in bilingual children* (pp. 98–117). Clevedon, UK: Multilingual Matters.
- Crosnoe, R. (2005). The diverse experiences of Hispanic students in the American educational system. *Sociological Forum*, 20(4), 561-588.

- DeThorne, L. S., Petrill, S. A., Schatsneider, C., & Cutting, L. (2010). Conversational language use as a predictor of early reading development: Language history as a moderating variable. *Journal of Speech, Language, and Hearing Research, 53*, 209-223.
- Dufrene, B. A., Reisener, C. D., Olmi, D. J., Zoder-Martell, K., McNutt, M. R., & Horn, D. R. (2010). Peer tutoring for reading fluency as a feasible and effective alternative in response to intervention systems. *Journal of Behavioral Education, 19*(3), 239-256.
- Duncan, G. J., & Magnuson, K. A. (2005). Can family socioeconomic resources account for racial and ethnic test score gaps? *The Future of Children, 15*(1), 35-54.
- Fry, R. (2004). *Hispanic youth finishing college: The role of selective pathways*. Washington, DC: Pew Hispanic Center.
- Fryer, R. G., & Levitt, S. D. (2004). Understanding the Black-White test score gap in the first two years of school. *Review of Economics and Statistics, 86*(2), 447-464.
- Fusarelli, B., & Boyd, W. L. (2004). Introduction: One nation indivisible? An overview of the yearbook. *Educational Policy 18*(1), 5-11. doi: 10.1177/0895904803260356
- Garcia, E., & Jensen, B. (2009). Early educational opportunities for children of Hispanic origins. *Social Policy Report, 23*(2), 1-20.
- Gardin, C. (2012). Poverty among minorities in the United States: Explaining the racial poverty gap for Blacks and Latinos. *Applied Economics, 44*(29), 3793-3804.

- Gandura, P. (2005). On Hispanic education-progress and stagnation: 25 years of Hispanic achievement. *DiverseEducation.com* [Web blog post]. Retrieved from <http://diverseeducation.com/article/12637/>
- Gradín, C. (2012). Poverty among minorities in the United States: Explaining the racial poverty gap for blacks and Latinos. *Applied Economics*, 44(29), 3793-3804. doi: 10.1080/00036846.2011.581219
- Greenwood, C. R., Carta, J. J., & Hall, R. V. (1988). The use of peer tutoring strategies in classroom management and educational instruction. *School Psychology Review*, 17(2), 258-275.
- Guzman, B. (2001). *The Hispanic Population, 2000*, United States. *Bureau of the Census*. 8(2), 1-8.
- Haager, D., & Windmuelier, M. (2001). Early literacy intervention for English language learners at-risk for learning disabilities: Student and teacher outcomes in an urban school. *Learning Disability Quarterly*, 24, 235-250.
- Hemphill, F., Vanneman, A., & Rahman, T. (2011). *Achievement gaps. How Hispanic and White students in public schools perform in mathematics and reading on the national assessment of educational progress. Statistical analysis report*. Washington, DC: Institute of Education Sciences National Center for Education Statistics.
- Howe, C. K. (1995), Improving the achievement of Hispanic students. *Educational Leadership*, 51, 42-44.

- Humes, K. R., Jones, N. A., & Ramirez, R. R. (2011). *Overview of race and Hispanic origin: 2010* (C2010BR-02). Retrieved from U.S. Census Bureau website: <http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf>
- Ivey, P. S. (2011). Overcoming language and cultural barriers in school: Helping Hispanic students acquire success in elementary school. *School of Education and Counseling Psychology, Dominican University of California*, p. 1-44.
- Kamps, D., Abbott, M., Greenwood, C., Arreaga-Mayer, C., Wills, H., Longstaff, J., & Walton, C. (2008). Use of evidence-based, small-group reading instruction for English language learners in elementary grades: Secondary-tier intervention. *Learning Disability Quarterly, 30*, 153-168.
- Kao, G., & Thompson, J. (2003). *Racial and ethnic stratification in educational achievement and attainment*. Philadelphia, PA: Department of Sociology and Population Studies Center, University of Pennsylvania.  
doi:10.1146/annurev.soc.29.010202.100019
- Kupzyk, S., Daly, E. J., III, Ihlo, T., & Young, N. (2012). Modifying instruction within tiers in multi-tiered intervention programs. *Psychology in the Schools, 49*(3), 219-230.
- Marx, S., & Larson, L. L. (2011). Taking off the color-blind glasses: Recognizing and supporting Latina/o students in a predominantly White school. *Educational Administration Quarterly, 48*(2), 259-303.
- Mathes, P., Torgesen, J., & Alior, J. (2001). The effects of peer-assisted literacy strategies for first-grade readers with and without additional computer-assisted

- instruction in phonological awareness. *American Educational Research Journal*, 38, 371-410.
- Mercado, C. I. (2001). The learner: "Race," "ethnicity," and linguistic difference. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed.). Washington, DC: American Educational Research Association.
- Meyer, M., & Felton, R. (1999). Repeated reading to enhance fluency: old approaches and new direction. *Annals of Dyslexia*, 49(1), 283-306.
- Miller, J. F., Heilmann, J., & Nockerts, A. (2006). Oral language and reading bilingual children. *Learning Disabilities for Research and Practice*, 21, 30-43.
- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.
- Nisbett, C. J. (1999). *The effect of cross-age peer tutoring on mathematical achievement and self-esteem of elementary school children*. (Ed.D., Delta State University). *Proquest Dissertations and Theses*. (304565828).
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425 (2002).
- Raavitch, D. (1996). Why do Catholic school succeed? *Forbes*, 158(8), 81.
- Reardon, S. F., & Galindo, C. (2009). The Hispanic-White achievement gap in math and reading in the elementary grades. *American Educational Research Journal*, 46, 853-891.
- Reutzel, D. R. (2006). "Hey teacher, when you say 'fluency,' what do you mean?" In T.

- Rasinski, C. Blachowicz, & K. Lems (Eds.), *Fluency instruction: Research-based best practices* (pp. 63–85). New York, NY: Guilford Press.
- Salinas, J. P. (2002). *The effectiveness of minority teachers on minority student success*. Retrieved from <http://search.proquest.com/docview/62362603?accountid=4488>
- Shepard, L.A. (2001). The role of assessment in a learning culture. *Educational Researcher*, 29, 4-14.
- Schencker, L. (2009). *Schools, state offer safety nets for Latino kids*. The Salt Lake Tribune. Retrieved from [http://www.sltrib.com/education/ci\\_12899681](http://www.sltrib.com/education/ci_12899681)
- Stuart, L., & Hahnel, C. (2011). *A report card on district achievement: How low-income, African-American, and Latino students fare in California school districts. K-12 policy*. Oakland, CA: Education Trust-West.
- Snow, C. E., Burns, M. S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Snow, C. E., Barnes, W. S., Chandler, J. Goodman, I. F., & Hemphill, L. (1991). *Unfulfilled expectations: Home and school influences on literacy*. Cambridge, MA: Harvard University Press.
- Torgesen, J.K. (2000). Individual differences in response to early interventions in reading: The lingering problem of. *Learning Disabilities Research & Practice*, 15(1), 55-64.
- U.S. Census Bureau. (2010). *Race, Hispanic or Latino, Age, and Housing Occupancy: 2010*. 2010 Census Redistricting Data (Public Law 94-171) Summary File, Tables P1, P2, P3, P4, H1. Retrieved from U.S. Census Bureau website:

- [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_PL\\_QTPL&prodType=table](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_PL_QTPL&prodType=table)
- U.S. Department of Education. (2003). *Key indicators of Hispanic student achievement: National goals and benchmarks for the next decade*. Retrieved from <http://www.ed.gov.erl.lib.byu.edu/pubs/hispanicindicators/index.html>
- Utah State Office of Education. (2011). *Cohort graduation and dropout rate report*. Retrieved from <http://www.schools.utah.gov/data/Educational-Data/Graduation-Dropout-Rates.aspx>
- Utah State Office of Education. (2012). *Cohort graduation and dropout rate report*. Retrieved from <http://www.schools.utah.gov/data/Educational-Data/Graduation-Dropout-Rates.aspx>
- Wang, A. H. (2008). A pre-kindergarten achievement gap? Scope and implications. *US-China Education Review*, 5(9), 23-31.
- Wang, C. (2011). Rethinking the relationship between reading and behavior in early elementary school. *The Journal of Educational Research*, 104(2), 100-109.
- Wang, C., Algozzine, B., Ma, W., & Porfeli, E. (2011). Oral reading rates of second-grade students. *Journal of Educational Psychology*, 103, 442-454.
- White House Initiative on Educational Excellence for Hispanic Americans, Washington, DC. (2002). 35 (ED470558).
- Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis*, 11, 203-214.



- Woolley, M. E. (2009). Supporting school completion among Latino youth: The role of adult relationships. *The Prevention Researcher: Successful Adolescent Development, One Issue at a Time*, 16(3), 9-12.
- Yak, L. K. (2002). *Population projections*. Washington, DC: U.S. Census Bureau.
- Yasutake, D., Bryan, T., & Horn, E. (1996). The effects of combining peer tutoring and attribution training on students' perceived self-competence. *Remedial and Special Education*, 19(2), 83-91.

## APPENDIX B

### Treatment Fidelity Checklist

Yes	No	Checklist	Observer Signature
<input type="checkbox"/>	<input type="checkbox"/>	LIA and child(ren) sit down together away from whole group instruction	
<input type="checkbox"/>	<input type="checkbox"/>	LIA will engage child(ren) 95-100% of the time according to teacher instructions	
<input type="checkbox"/>	<input type="checkbox"/>	Session is conducted over a fifteen-minute time frame	

## APPENDIX C

# Survey Consent

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## Introduction

I, Ana Rodriguez, am conducting a research study as a graduate student at Brigham Young University to determine the effects of a cross-age peer-tutoring program on the reading performance of Hispanic Title I second and third grade students. This study is being conducted under the direction of Professor Betty Ashbaker, Department Chair. You were invited to participate because you are the teacher of students receiving services from the Latinos in Action.

## Procedures

If you agree to participate in this research study, the following will occur:

- \*You will be asked to complete a short five-question survey about the Latinos in Action.
- \*Although I have access to your student's scores I would like you to know I will be compiling their data and their names and teacher names will not be used.
- \*The survey will be given to you after the completed services of the Latinos in Action.

## Risks/Discomforts

There are minimal risks for participation in this study. You may answer only those questions that you want to answer.

## Benefits

There will be no direct benefits to you. It is hoped, however, that through your participation researchers may learn about the impact the Latinos in Action have on the reading fluency skills of 2<sup>nd</sup> and 3<sup>rd</sup> grade students in a Title 1 school.

## Confidentiality

The thesis chair and the graduate student at BYU will have access to the reading fluency data and survey collected. Quantified data and results will be reported to school principal, and other Canyons District personnel as required by Canyons Review Committee. No specific identifiers

will be shared by the graduate student or the Graduate Chair. Data will be kept in a locked file and locked room in the Special Education Department at Brigham Young University. Program Investigator and thesis chair will have access to the information collected. Materials will be kept for one year and will be securely stored in a locked filing cabinet. After the data is used it will be shredded.

#### Compensation

No compensation will be given.

#### Participation

Participation in this research study is voluntary. You have the right to withdraw at any time or refuse to participate entirely without jeopardy to your class status, grade, or standing with your school.

#### Questions about the Research

If you have questions regarding this study, you may contact Ana Rodriguez at 801-638-9774 or Professor Betty Ashbaker at 801-422-8361; fax 801-422-0198 for further information.

#### Questions about Your Rights as Research Participants

If you have questions regarding your rights as a research participant contact IRB Administrator at (801) 422-1461; A-285 ASB, Brigham Young University, Provo, UT 84602; [irb@byu.edu](mailto:irb@byu.edu).

#### Statement of Consent

I have read, understood, and received a copy of the above consent and desire of my own free will to participate in this survey.

Name (Printed): \_\_\_\_\_ Signature \_\_\_\_\_ Date: \_\_\_\_\_

## APPENDIX D

### Teacher Survey

After participating in the Latinos in Action program:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Students look forward to working with the tutor.	1	2	3	4	5
Student is actively engaged during tutoring support.	1	2	3	4	5
Students' reading fluency scores have improved.	1	2	3	4	5
Students' confidence in reading has improved.	1	2	3	4	5
Tutoring has helped students' overall school experience.	1	2	3	4	5