

TEXAS ASSOCIATION FOR BILINGUAL EDUCATION Affiliate of the National Association for Bilingual Education

The TABE Journal

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TEXAS ASSOCIATION FOR BILINGUAL EDUCATION

110 Broadway Suite 480
San Antonio, TX 78205
210-979-6390
800-TABE-93
210-979-6485 fax
tabe@sbcglobal.net

## Introduction

The presentation of manuscripts in the TABE Journal would not be possible without the dedicated professionalism of key personnel involved with the journal. Special thanks are due to all of the members of the Editorial Review Board for their assistance in reviewing submitted manuscripts in a timely manner. Thanks are also due to the previous editorial assistants Judee Macias-Harris and Sarah Martinez, and also to the current editorial assistant, Lorena G. Veleta, who have all been committed to the review and publication process for the journal.

The TABE Journal is committed to the exchange of educational data, studies, ideas, practices, and information with policymaking bodies in this public forum. The current issue begins with "Differences between Resilient and Non-Resilient English Language Learners on Classroom Behaviors, Perceptions of Learning Environment in Reading, and Attitudes toward School" by Padron, Waxman and Brown who examine the role of resilience among English Language Learners. "Hispanic English Learners Self-Esteem Related to Instructional Program Type, Language of Instruction and Gender" by Irby, Tong, Nichter, Lara-Alecio, Hassey, Guerrero and Helms who examine the intersection of self-esteem and self-confidence with regards to gender and different program models for English Language Learners. "¿Se Habla Español? Parental Report v. Picture Vocabulary Scores in Classifying the Language Dominance of Bilingual Mexican-American 3- to 7-year-olds" by Amy Weimer shares valuable research on vocabulary and assessment for English Language Learners. "Raising Children to be Balanced Bilingual in a Predominantly English Speaking Society: Chinese Immigrant Parent Viewpoints" by Ekiaka Nzai provides a unique parent perspective for Chinese background English Language Learners in South Texas. "Hispanic Students and Hispanic Teachers: A Comparison of Student Demographics and Teacher Employment Rate in Northeast Texas Public Schools" by Holt, Hinojosa and Borgemenke provide a study with insightful implications for understanding the changing demographic makeup of Texas Hispanic students and the teachers who serve those populations. This issue of the journal concludes with a new section entitled "Research Briefs" that consist of short seminal pieces of research on Bilingual Education issues and concerns: "A Note on English Language Development in One-way versus Two-way Bilingual Programs" by Dow, Tinajero and Krashen. This issue of the TABE Journal also marks the beginning of using graduate doctoral reviewers on the editorial review board for the journal. The editors consider the role of doctoral students on the review board to be critical for mentoring future bilingual educators and researchers who may in-turn one day similarly serve the goals and objectives of both TABE and the TABE Journal.

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# Differences between Resilient and Non-Resilient English Language Learners on Classroom Behaviors, Perceptions of Learning Environment in Reading, and Attitudes toward School 

Yolanda N. Padrón<br>Texas A\&M University

Hersh C. Waxman
Texas A\&M University
Ann P. Brown
Houston Community College


#### Abstract

Resilience research focuses on why some students do well in schools while other from the same schools and similar disadvantaged circumstances are not as successful in school. The present study examines differences between resilient and non-resilient fourth- and fifth-grade English Language Learners (ELLs) on their (a) classroom behaviors, (b) perceptions of the classroom learning environment in reading, and (c) attitudes toward school, classroom instruction, instructional materials, language use, their reading teacher, and educational aspirations. This study is different from prior research in that multiple data sources are used to examine the resilience phenomenon. The results of this study indicate that there are several significant differences between resilient and non-resilient ELLs. Resilient students, for example, spent more time interacting with teachers for instructional purposes than non-resilient students. Also, resilient ELLs perceive a more positive instructional learning environment and are more satisfied with their reading classrooms.


Reducing the achievement gap between English Language Learners (ELLs) and their white counterparts is one of the greatest educational challenges (Paik \& Walberg, 2007; Waxman, Padrón, \& García, 2007). The achievement gap is usually discussed in terms of dramatic differences in graduation rates and the academic achievement between white and minority students such as Hispanics (Fry, 2007; Waxman, Padrón, \& Garcia, 2007). Research in this area typically looks at school districts and/or schools that do better than others in reducing the gaps between groups of students. There are fewer research studies, however, that focus on achievement gaps within schools and classrooms (Waxman et al., 2008). These "within" school educational disparities often are greater than the differences between schools or school differences (Waxman, Padrón, \& Garcia, 2007). Research in this area often is called "resilience research." This paradigm focuses on why some students do well in school and why they are successful, while similar students from the same schools and classrooms and from similar disadvantaged circumstances are not successful in school (Condly, 2006; Gordon \& Mexia, 2006; Waxman, Padrón, \& Gray, 2004).

Resilience research has predominantly focused on students' development and examining students who developed academic and social competencies despite exposure to at-risk environments. The resilience framework emphasizes predictors of academic success rather than on academic failure, and it generally examines protective factors that reduce negative possibilities or increase positive possibilities (Sacker \& Schoon, 2007). Although there is a growing body of research trying to address the issues of why some students from at-risk home and school environments have been successful in school, many of these studies have not examined important classroom processes that have been found to influence significantly students' cognitive and affective outcomes (Rivera \& Waxman, 2007).

Educational resilience is not a fixed attribute of students, such as ability, since it has not been found to be characteristic of resilient students (Bernard, 1993; Gordon \& Song, 1994; Masten, Best, \& Garmezy, 1990), but rather as alterable processes or mechanisms that can be developed and fostered. For example, protective factors that increase positive possibilities or reduce negative circumstances are required for students to become successful (Sacker \& Schoon, 2007). There have been a number of alterable processes or protective factors that have been found to be associated with resilient children (Henderson \& Milstein, 2003). Bernard (1993), for example, states that there are personal characteristics that resilient children have: (a) social competence, (b) problem-solving skills, (c) autonomy, and (d) sense of purpose. McMillan and Reed (1994) also described factors that appear to be related to resilience: (a) individual attributes, (b) positive use of time, (c) family, and (d) school.

It is important to address resilience with ELLs, since many ELLs come from economic and socially disadvantaged circumstances and they have fewer resilience-promoting conditions than other white students in similar conditions (Borman \& Overman, 2004; Waxman, Padrón, \& Garcia, 2007). The present study differs from prior research in that it uses multiple data sources to examine the phenomenon of resilience. This mixed-methods study uses quantitative observational and survey data as well as more qualitative interview data to provide rich insights to our understanding of the resilience phenomena as well as our interpretations of what distinguishes resilient and non-resilient students (Waxman \& Chang, 2006).

## Systematic Classroom Observation

Systematic classroom observation is a quantitative method of measuring classroom behaviors from direct observations that specify both the events and behaviors that are to be observed and how they are to be recorded (Waxman, 2003). Classroom observation methods can answer important questions about whether some students are being treated differently in the classroom and whether this may explain why some students learn more than others (Waxman, Tharp, \& Hilberg, 2004). In addition, the use of classroom observations has been found to lead to improved understanding and better models for improving teaching (Waxman, 1995; Waxman, 2003; Waxman \& Huang, 1999).

## Classroom Learning Environments

Classroom learning environment research emphasizes the student-mediating or student cognition paradigm which maintains that how students perceive and react to their learning tasks and classroom instruction may be more important in terms of influencing student outcomes than the
observed quality of teaching behaviors (Knight \& Waxman, 1991; Winne \& Marx, 1982; Wittrock, 1986). That is, students' perceptions of learning environments influence the effects of learning outcomes both directly and indirectly (Fraser, 1991; Aldridge \& Fraser, 2008). This paradigm assumes that: (a) the classroom environment experienced by the student may be quite different from the observed or intended instruction (Waxman \&Chang, 2006; Wittrock, 1986), and (b) teaching and learning can be improved by examining the ways that classroom instruction and the learning environment are viewed or interpreted by the students themselves since students ultimately respond to what they perceive is important (Chavez, 1984).

Results from previous studies and reviews of research have found that generally variables such as cohesiveness, task orientation, rule clarity, student satisfaction, and teacher support are positively related to students' gain in academic achievement (Fraser, 1991). Furthermore, students' perceptions of their learning environment are a stronger factor of learning outcomes than their prior achievements (Aldridge \& Fraser, 2008). These findings suggest that for school interventions to be effective students' perceptions need to be changed (Gijbels et al., 2006; Wubbels, 2005). An additional benefit of students' perceptions of learning environment is that feedback from students' perceptions has been found to be helpful to teachers in improving the classroom learning environment (Aldridge \& Fraser, 2008).

In addition to the classroom observation and learning environment data, students were interviewed individually about their perceptions of the school. The use of interview data complements both the observational and survey data and provides another source of data to examine differences between resilient and non-resilient students.

## Purpose of the Study

The purpose of the present study is to investigate the classroom learning environments of resilient and non-resilient ELL students in reading school classrooms. This focus is important for several reasons. First, the concept of resilience is a relatively recent development and therefore there are not a large number of studies in the area. Second, the investigation of reading classroom learning environments is quite small and needs to be expanded. Although there have been a handful of studies that examined resilient and non-resilient students in middle school mathematics, there have been very few that focused on reading, especially at the elementary school level. Finally, although there have been a few studies that examined the learning environment and observational differences between resilient and non-resilient ELLs, none have examined this phenomenon through the use of observational, survey, and interview data.

The present study addresses the following research question: Are there significant differences between resilient and non-resilient ELL students in their (a) classroom behaviors, (b) perceptions of the classroom learning environment in reading, and (c) attitudes toward school, classroom instruction, instructional materials, language use, their reading teacher, and aspirations?

## Methods

## Participants

The participants were fourth- and fifth-grade ELLs and their teachers from three elementary schools located in a major metropolitan area in the south central region of the United States.

Students in the three schools are predominately Latino ( $>75 \%$ ) and are from low-income families, with most of them receiving free or reduced-cost lunches. The academic achievement of students in the three schools is lower than others in the same school district and lower than the state average.

Near the middle of the school year, teachers were asked to identify their population of ELL students at risk (e.g., students from families of low socioeconomic status or living with a single parent, relative, or guardian). From this pool of at-risk ELLs, teachers were then asked to select up to three "resilient" students (i.e., high achieving on both standardized achievement tests and daily school work, very motivated, and excellent attendance) and three "non-resilient" students (i.e., low achieving on both standardized achievement tests and daily school work, not motivated, and poor attendance) in their class. It should be pointed out that teachers did not have difficulty in identifying resilient and non-resilient ELLs.
The following sections provide a discussion of participants' procedures and results for each instrument follows. Sample sizes vary by type of data collected.

## Observational Data

Participants. There were a total of 21 classrooms from which students were drawn. Trained observers observed the 48 resilient and 42 non-resilient ELLs identified by teachers during regular reading classes.
Procedures. Teachers provided a seating chart that identified the students who needed to be observed. The observer, however, did not know whether a particular student had been identified as resilient or non-resilient. Each student was observed for 1030 -second intervals during each class period.
Instrument. The observation instrument used in this study is the Classroom Observation Schedule (COS) (Waxman, \& Padrón, 2004). This instrument is designed to systematically obtain information on students' classroom behaviors. It documents observed student behaviors in the context of ongoing classroom instructional-learning processes. The COS was modified to include a Language Used section for the present study, since Spanish was the primary language for many of the students. Individual students are observed with reference to (a) their interactions with the teacher or other students, (b) the selection of activity, (c) the type of activity they are working on, (d) the setting in which the observed behavior occurs, (e) their engagement, and (f) the language used. This observation schedule has been found to be valid and reliable in previous studies. In the present study, the inter-observers' agreements (Cohen's kappa) were found to be excellent, with an inter-observers' reliability coefficient of . 96

## Learning Environment Data

Participants. A total of 104 students were surveyed in 26 reading classrooms from the three schools. Nearly $54 \%$ of them were boys and $45 \%$ were girls. All the students were Latino ELLs, of whom 58 were identified as resilient and 46 were identified as non-resilient students. Procedures. Near the end of the school year, fourth- and fifth-grade ELLs in the three schools completed the learning environment survey. Trained researchers read survey items to all students in either Spanish or English. Items were read to students so that reading comprehension would not be a factor in responding to the survey. It was explained to students that the survey was not a test and their responses would not be seen by any school personnel.

Instrument. The My Class Inventory (Fraser \& Fisher, 1986; Fraser \& O'Brien, 1985) was used to collect data on students' perceptions of their classroom learning environment. The inventory is a 30 -item questionnaire. Students respond either "Yes" or "No" to statements about their reading class. The questionnaire contains six scales that assess students' perceptions in the following areas: (a) Satisfaction, (b) Friction, (c) Competition, (d) Difficulty, (e) Cohesion, (f) Self-Esteem in Reading. A brief description of the scales and a sample item from each follows:

- Satisfaction -- the extent of students' enjoyment of class work (e.g., I enjoy the schoolwork in my reading class.)
- Friction -- the amount of tension and quarreling among students (e.g., Some students in my reading class pick on me.)
- Competition -- the emphasis on students competing with each other (e.g., I try to be first to finish the classwork in reading.)
- Difficulty -- the extent to which students find difficulty with the work of the class (e.g., In my reading class, the work is hard for me to do.)
- Cohesion -- the extent to which students know, help, and are friendly toward each other (e.g., In my class, I often work with other students.)
- Self-Esteem in Reading-the extent to which students thinks that they are good at reading (e.g., I am a very good reader.)

The instrument has been found to be reliable and valid in many different school settings and it is especially applicable for elementary school students (Fraser \& Fisher, 1986; Waxman et al., 1994). The internal consistency reliability coefficients of the six scales in the present study: Satisfaction, Friction, Competition, Difficulty, Cohesion, and Self-Esteem in Reading, are .80, $.66, .63, .66, .76$, and .64 , respectively. In other words, the survey questionnaire has adequate internal consistency reliability.

## Student Interview Data

Participants. A total of 21 resilient and 18 non-resilient ELLs were randomly selected to be interviewed. The students selected were from 15 fourth- and fifth-grade classrooms.
Procedure. A 20-minute structured interview was conducted with both resilient and non-resilient students. The students were interviewed in a quiet area away from their classrooms and given the option of doing the interview in either English or Spanish. The interview was audiotaped by the researcher with the permission of the student and the students' parents. Interviews were later transcribed and coded.
Instrument. The structured interview was designed to supply in-depth information about the educational experiences of resilient and non-resilient students. This interview was adapted from an interview schedule developed by Richardson, Casanova, Placier, and Guifoyle (1989). All interview questions were translated into Spanish by one researcher and then translated back to English by a different researcher. These back-to-back translations were conducted to assure the accuracy of the translations.

The student interview asked students questions related to their perceptions about School in General, Instructional Materials/Tools, Instructional Practices, Reading Teacher, Discipline, and Aspirations. In the section about School in General, students were asked about their perceptions of their school and the classes in which they were enrolled. For example, they were asked about their grades, homework, and likes and dislikes about school.
The next section of the interview asked students about the Instructional Materials and/or Tools that were used in school, and their perceptions of them. This section included questions such as the following: "Do you use textbooks in school? "Do you use worksheets in school? Follow-up questions asked students for examples on how they used the materials. Related to Instructional Materials/tools, there were several questions about the use of computers in school, as well as in the students' homes.

Students were also asked about the Instructional Practices that they perceived their teachers using during reading class. An example, of these questions included: "Do you ever get to decide what to do in school?" "Do you ever work with groups of students in your (reading) class?" Students then were also asked specific questions about their Reading Teacher, such as, "What do you like best about your teacher?" "What do you think your teacher thinks about you?" There were also questions about Discipline in school. ELLs were asked this question: "Do you ever get in trouble at school?" When appropriate, follow-up questions were also asked: "What kind of trouble do you get into?" and "Do you know why you get into trouble?"
The last section of the interview focused on the Aspirations of the ELLs. These questions included: "Are you looking forward to going to middle school?" "Do you think that you will finish high school?" "Do you think that you will finish college?"

## Results

## Observation Results

Table 1 presents the means and standard deviations of the student observations by resilient and non-resilient groups. Each mean value represent the average percentage of time that students were observed to be engaged in the activity. The results from the COS revealed that both resilient ( $73 \%$ ) and non-resilient ( $67 \%$ ) students spent over $65 \%$ of their time doing independent work (i.e., no interaction with the teacher). Resilient ( $15 \%$ ) students, however, spent more time interacting with teachers for instructional purposes than did the non-resilient students (11\%). Non-resilient students spent more time interacting with other students (9\%) and teachers (5\%) in order to socialize, as compared to the resilient students ( $2 \%$ and $1 \%$, respectively). Non-resilient students also spent more time interacting with the teacher for managerial purposes ( $\mathrm{NR}=3 \%, \mathrm{R}=$ $1 \%$ ).

The classroom observations revealed that over $94 \%$ of the time, classroom activities were assigned by teachers. The most frequently observed activity types for resilient students included Working on Written Assignments ( $31 \%$; NR=17\%) and Watching or Listening ( $30 \%$; NR=20\%). For non-resilient students the activities included: Not Attending to Task ( $29 \%, \mathrm{R}=10 \%$ ), Watching and Listening (20\%), and Working on Written Work (17\%). All of these findings are statistically significant. Students were never observed working with technology, such as computers, calculators, or viewing video or slides.

The predominant classroom setting for all students is Whole-Class Setting, which was observed over $77 \%$ of the time. There was little group or pair work being conducted in these classrooms. In terms of Student Engagement, Time-on-Task varied greatly between resilient (87\%) and nonresilient ELLs (60\%). Nearly 89\% of the time, students were observed using English while Spanish was used about $7 \%$ of time.

A $t$-test for independent samples was used to compare resilient and non-resilient ELLs' classroom behaviors. Table 1 presents the $t$-test results on the six clusters of variables. The results reveal that non-resilient students were observed more frequently interacting with teachers for managerial purposes than resilient students $(t=-2.25, p<.05)$. Similarly, non-resilient students were observed more frequently interacting with teacher ( $t=-2.34, p<.05$ ) and other students for social or personal purposes ( $t=-2.32, p<.05$ ). Resilient students were observed working on written assignments more frequently than non-resilient students ( $t=2.61, p<.05$ ), whereas non-resilient students were observed not attending to task significantly more often than resilient students $(t=-3.37, \underline{p}<.001)$. As for Student Engagement, resilient students were found to be on task significantly more than non-resilient students $(t=4.75, p<.0001)$, whereas nonresilient students were found to be distracted $\left(t=4.27, p_{-}<.0001\right)$ and disruptive $(t=-2.83, p<$ $.01)$ significantly more often than resilient students. There was no significant difference in language (i.e., Spanish or English) used by resilient and non-resilient students. The standard deviations were very large, suggesting there was a great variance among students' classroom behaviors in the variables being observed.

## Learning Environment Results

Descriptive statistics are used to report the means and standard deviations of students' perceptions of their classroom learning environment scales. The mean ratings range from 1 to 3 ; a mean rating close to the value of 3 for a scale indicates that students perceived that the particular variable was very prevalent (i.e., agreed with all the items on the scale) while a mean value of 1 indicates that most students disagreed with the items on the scale. In general, the results indicate that students in these three schools had positive perceptions of their classroom learning environment. The variable with the highest mean for resilient students was Satisfaction ( $M=2.72, S D=0.44$ ), followed by Cohesion ( $M=2.57, S D=0.46$ ), and Self-Esteem ( $M=2.30$, $S D=0.60$ ). The variables with the lowest mean value for resilient students was Difficulty ( $M=$ $1.34, S D=0.43)$, followed by Friction $(M=1.82, S D=0.63)$. For non-resilient students the variable with the highest mean was Cohesion $(M=2.62, S D=0.42)$, Satisfaction ( $M=2.54, S D$ $=0.52$ ), and Competition ( $M=2.27, S D=0.61$ ); while the lowest mean value variables were Self-Esteem in Reading ( $M=1.75, S D=0.73$, and Difficulty $(M=1.82, S D=0.55$ ).
Table 1 presents the findings from the independent t-tests that were used to examine if there were significant differences between resilient and non-resilient students on the five scales of the My Class Inventory. The results revealed that there was a significant difference between resilient and non-resilient students on two of the scales: Difficulty ( $t=4.869, p<.0001$ ) and Self-Esteem in Reading ( $t=4.289, p<.0001$ ). Results indicated that non-resilient students scored significantly higher on Difficulty than resilient students. On the other hand, resilient students scored significantly higher than non-resilient students on the Self-Esteem in Reading scale. Not surprisingly, these findings indicate that non-resilient students find school work more difficult; while resilient students perceived themselves as having the ability to do schoolwork. There were
no significant differences among the two student groups on the scales of Friction, Competition, and Cohesion.

## Student Interview Results

School in general. Both resilient and non-resilient ELLs responded that they liked school. When they were asked why they liked going to their school, however, there were differences in the responses given by the resilient students and the non-resilient students. The resilient students ( $64 \%$ ) answered in academic terms, such as, "You learn" "Good teachers" "Nice principal" and "Choice of books to read" while the non-resilient students ( $100 \%$ ) answered in non-academic terms, for example, "Many Choices in the Cafeteria" "Parties" and "Friends are here." Math was the subject that resilient (37\%) and non-resilient (29\%) ELLs said that they liked the most. Math was also cited by both resilient ( $63 \%$ ) and non-resilient ( $38 \%$ ) students as the subject that they felt they were best at. When the students were asked their hardest subject, the resilient and non-resilient students had similar responses. The resilient ELLs indicated that Reading (28\%) and Social Studies (28\%) were difficult subjects; while half of the non-resilient ELLs reported that Reading was the most difficult subject.
When asked if they finished their homework, the resilient students ( $90 \%$ ) said "Yes" as compared with $71 \%$ from the non-resilient students. When asked "Why?" they finished their homework, the resilient students ( $24 \%$ ) most often cited answer was "If I don't, I get in trouble," while the non-resilient students (30\%) mainly responded that they did their homework because the teacher told them to do it.
Instructional Materials/Tools. The resilient and non-resilient students alike responded that they used textbooks and worksheets in class and they liked using them. When asked how often worksheets were used in the classroom, the response "Mostly every day" was the response given by the resilient students (31\%) and the non-resilient students (43\%). Both resilient and nonresilient ELLs said computers were used in school. Both resilient ( R ) students and non-resilient (NR) students indicated that computers were primarily used for the same types of activities: Games ( $\mathrm{R}=21 \%$; $\mathrm{NR}=33 \%$ ), Math ( $\mathrm{R}=21 \%$; $\mathrm{NR}=28 \%$ ), and Reading ( $\mathrm{R}=21 \%$; $\mathrm{NR}=22 \%$ ). Forty-two percent of the resilient students indicated that they knew the names of computers programs, while $73 \%$ non-resilient students could name the programs that they used. When asked whether they felt like they learned more by using computers, both resilient $44 \%$ and nonresilient $65 \%$ ELLs responded that computers helped them learn more.
Instructional Practices. When asked if they ever get to decide what to do in school, a small percentage of resilient ( $22 \%$ ) students responded positively; over three times as many of the nonresilient students responded positively $(73 \%)$. Both resilient and non-resilient students said they did group work in the classroom ( $\mathrm{R}=82 \%, \mathrm{NR}=100 \%$ ), and all the students stated that they liked group work $(\mathrm{R}=100 \%, \mathrm{NR}=100 \%)$. Students indicated that they liked to do group work because "they learned more when they did group work" ( $\mathrm{R}=93 \%, \mathrm{NR}=92 \%$ ). Furthering probing indicated that the resilient students (43\%) and non-resilient students (73\%) enjoyed group work because they "were able to learn more because they were able to help each other."
When asked if there was anything they learned about in school that they felt was very important or meaningful, both the resilient students (76\%) and the non-resilient students (93\%) responded "Yes." In a follow-up question, the resilient students and non-resilient students indicated that Math ( $\mathrm{R}=27 \%, \mathrm{NR}=18 \%$ ) and Reading ( $\mathrm{R}=13 \%, \mathrm{NR}=18 \%$ ) were very important. In addition, non-resilient students also felt that Science (18\%) was an important thing that they learned in
school. ELLs, both resilient (65\%) and non-resilient (88\%), also responded positively when asked if there was anything they learned about in school that was very exciting or interesting. Reading Teacher. When ELLS were asked to describe their reading teacher, the most frequent response by resilient students ( $41 \%$ ) and non-resilient students ( $33 \%$ ) was that their teachers was "Nice." Students were also asked what the teacher thought about them as a student; $32 \%$ of resilient students responded: "The teacher thinks that I'm a good student" (i.e., a positive academic term) while half of the non-resilient students indicated: "I don't know." When a follow-up question was asked, "How do you know that the teacher feels this way about you?", Resilient students ( $29 \%$ ) answered that "the teacher tells me," while the non-resilient students ( $100 \%$ ) responses were "Report card grades, the teacher helps me," "the teacher gives us math work," and when "the teacher says very good."
Discipline. When asked if they got in trouble at school, there were very different responses given by the resilient students $v s$. the non-resilient students. Almost all of the non-resilient ELLs indicated that they "got in trouble at school" as opposed to $58 \%$ of the resilient students. When asked a follow-up question about the kind of trouble that they got into at school. Resilient students ( $64 \%$ ) responded "Talking" while the non-resilient students (35\%) responded "Fighting." When students were asked if they knew why they got in trouble at school, the resilient students responded "Yes" ( $50 \%$ ); however, $100 \%$ of the non-resilient students responded "Yes."
Aspirations. Both the resilient (89\%) and non-resilient ELLs (92\%) said that they were looking forward to going into middle school; however, their reasons were different. Most of the responses from the resilient students were positive academic reasons (i.e., Learn new things ( $25 \%$ ), Bigger school ( $17 \%$ ), and Different and more classes with more teachers ( $25 \%$ ), while most of the responses the non-resilient students ( $77 \%$ ) gave were positive, but non-academic (i.e., Try something different, Like real world, More activities, Skating parties/field trips, Cousin said it's fun, and Snack bar/lockers/big bathrooms.
When the students were asked if they thought they would finish high school, the majority ( $85 \%$ ) of the resilient and non-resilient (78\%) ELLs felt that they would do so. In addition, they were asked if they thought they would finish college, $85 \%$ of the resilient students and $67 \%$ of the non-resilient students felt that they would go to college.

## Discussion

In the present study, we focused on elementary school ELLs who come mostly from low-income families and found that the classroom behaviors and learning environments considerably differed between resilient and non-resilient ELLs. Despite coming from the same school environments, similar home backgrounds, and having similar demographic characteristics, some ELLs have been academically successful in their reading classes, whereas others have performed very poorly.

The observational findings are extremely crucial given that the amount and quality of teacher and student academic interactions are two of the most important variables that related to student outcomes (Hattie, 2009). Results of the present study indicate that there are several classroom behavioral differences between resilient and non-resilient elementary school students. One of the differences related to the amount and types of interactions that were found in the classroom processes. Non-resilient ELLs spent significantly more time interacting with their teachers for
managerial and social purposes than the resilient students. These two student groups also differed in terms of the classroom activities in which they were involved. Resilient students, for example, were observed more often working on written assignments, whereas non-resilient students were more frequently observed socializing with other students and not attending to task. The percentage of time that resilient students were on task was much higher than that of nonresilient students. Resilient students were less often distracted or disruptive than non-resilient students. Although there were no statistically significant differences found in the use of Spanish and English for resilient and non-resilient students, the use of English in all classrooms for these fourth- and fifth- grade ELLs was over $80 \%$ of the time.

The results from this study indicate that resilient elementary school ELLs perceive a more positive instructional learning environment and are more satisfied with their reading classroom. These findings are consistent with previous studies that have found that satisfaction differentiates resilient and non-resilient students (Alva, 1991; Reyes \& Jason, 1993, Waxman, Huang, \& Padrón, 1997). In addition, resilient students indicate less difficulty with classwork than nonresilient students. The magnitude of these differences is both statistically and educationally significant. These differences provide a great challenge for classroom teachers who need to provide optimal learning environments for all their students.

In summary, the findings from the student observations support the learning environment data. We found significant differences between resilient and non-resilient students on their classroom behaviors and perceptions of their learning environment (a little puzzling, because they were in the same learning environment, were they not?). These findings have important educational implications because researchers have found that many of these variables are critical for the academic success of students. Besides these important differences in classroom behaviors between resilient and non-resilient students, a few common classroom processes deserve special attention. First, there was no verbal interaction between teacher and student or between students for both resilient and non-resilient ELL groups for over $65 \%$ of the time, and students spent relatively little time interacting with their teachers. Active learning is another critical instructional process that improves student outcomes, yet over $95 \%$ of the activities were assigned by teachers and students spent large proportions of time working on written assignments, watching, or listening. Second, these students were in whole-class settings over $75 \%$ of the time. This over-reliance on whole-class instruction may be detrimental to student outcomes, because teachers often have difficulty maintaining an appropriate pace that is suitable for all students.

In addition to the observation and survey data, the interviews with resilient and non-resilient ELLs also indicated differences between students' perceptions of school. Resilient students indicated that they liked school because they learned in school. They indicated that math was the subject that they liked the best; while reading and social studies were the hardest subjects. The majority of resilient students indicated that they did their homework because they did not want to get in trouble at school.

On the other hand, non-resilient ELLs said that they liked school because their friends were there and there were occasional parties. Similarly to the resilient students, non-resilient students stated that math was the subject that they liked the most and that reading was the hardest subject in
school. It is interesting that the non-resilient students did not mention social studies as a hard subject. This may be due to the fact that most of these students did not receive instruction in social studies because, according to the teachers, the books were too difficult for these students to read. The teachers also indicated that to teach social studies they needed to rewrite sections of the textbook and this was too time-consuming.

There were few differences in the types of instructional materials that resilient and non-resilient students said their teachers were using. Both groups indicated that they used textbooks and worksheets, and used computers for playing games. The percentage of students who indicated that they used computers to play games, and in math and reading classes, however, was less than $40 \%$ of the students interviewed. Interestingly, $65 \%$ of non-resilient students indicated that using the computer helped them to learn better.

A few differences were also found in students' aspirations. Both groups of students were looking forward to middle school, but the reasons were different for each group. Resilient students were looking forward to middle school to learn something new and have different classes and teachers; while non-resilient students were looking forward to middle school because it was different and would offer field trips, snack bars, and lockers. Although not supported by the observation data, the majority of resilient and non-resilient students indicated that they did group work in class. Furthermore, all the students stated that they like to work in groups, with over $70 \%$ of the non-resilient students indicating that they enjoyed working in groups because they felt that they learned more when they were helping each other.

In examining results across the observational, student learning environment, and interview data, the following profile of resilient and non-resilient students emerges. For resilient students, the classroom observations indicate that resilient students spent more time working on written assignments and-not surprisingly-were more on task. It may be that resilient students feel more positive about their learning environment, as indicated in the learning environment data, because they were able to do their classroom and get feedback from their teachers on their work. Being able to complete their work may help students feel more positive about themselves and how they view their ability to read. The interview data also indicates that resilient students overall had a more positive view of school, their teachers and principal. They felt that school was a place for them to learn.

For non-resilient students, the profile is very different. These students were more often off-task, distracted, and/or disruptive in the classroom, often socializing with other students or with the teacher. According to non-resilient students, one of their main reasons for "liking" school was the fact that it provided them with an opportunity to socialize. Non-resilient students, however, had a negative perception of school and their ability to do work. This may be attributed to the fact that they found schoolwork to be difficult, with reading being the most difficult subject. In examining the different profiles of resilient and non-resilient ELLs, there are several issues that may be attributing to the lack of resiliency for the ELL students in this study. First, these fourth and fifth-grade students were all in classrooms that had been identified as "bilingual classrooms." However, the amount of English spoken in the classrooms observed was over 80\% during the classroom observations. This percentage may not be unusual since these students
were in the upper elementary grades and should be working toward transitioning out of a bilingual program. Nonetheless, it is possible that some of the non-resilient ELLs had not achieved an appropriate level of academic language proficiency that would have provided them with the skills needed to be more successful in class, and thereby perceive their classroom and/or school more positively.

An example of the lack of language proficiency to be able to function successfully at grade level was demonstrated in the student interviews, when non-resilient ELLs were asked about the most difficult subject. Both resilient and non-resilient students indicated that reading was the most difficult subject, but resilient students also said that social studies was a difficult subject for them. Non-resilient students did not mention social studies until further probing was done by the interviewer. Non-resilient students indicated that they did not receive social studies instruction. The researchers' follow-up with their teachers indicated that the reason why the non-resilient students did not receive social studies instruction had to do with the fact that the books were too difficult for those students to read. Teachers needed to rewrite sections of the book for the students to be able to read the information, and this was time-consuming for the teachers to do.

Consequently, students seldom received instruction in social studies and never used the social studies textbook. It is interesting to note the importance of multiple data sources. The observations or interviews alone would not have provided this information, which may be important in understanding why non-resilient students are not doing well. Their lack of gradelevel appropriate language proficiency has hindered their ability to do classwork, and it is possible that this has resulted in negative perceptions of themselves and their classroom environment. That is, by the fourth or fifth grade, they no longer perceive school as a place "to learn," but rather a place "to socialize."

Future research needs to explicitly test intervention models where teachers try to alter instructional patterns and the learning environment, as well as consider language proficiency levels, in classrooms that consist of large numbers of non-resilient ELLs. One approach that has been found to be very effective is using feedback from classroom observation and learning environment measures to help teachers understand their current instructional strengths and weaknesses (Fraser, 1991; Waxman, 1995; Waxman, Huang, \& Padrón, 1995).

In previous studies, we have collected observation and survey data and provided individual teachers with an individual classroom profile. These profiles contained the teachers' individual data and a summary of the aggregated data across all the elementary schools. The class means for each of the indicators on both of the observation and survey instruments were presented along with the overall school district mean value. This allowed individual teachers to compare their class means to the district average. In some cases, school meetings were held where all the teachers and administrators received the profiles and discussed the implications. Feedback from these profiles was used to stimulate dialogue and discussion about instructional strengths and weaknesses in the school. The profiles also helped initiate discussion about specific instructional areas that needed to be improved in the school. The profiles provide teachers with concepts and criteria they can use to reflect about their own teaching (Nuthall \& Alton-Lee, 1990). In addition, feedback from classroom observation and survey data can be used as the catalyst for staff development activities.

Another approach to improving classroom instruction for non-resilient ELLs centers on employing explicit teaching practices that have been found to be effective for lower-achieving students. Padrón and Waxman (1999), for example, describe five explicit practices that have been shown to improve the education of English language learners: (a) cognitively-guided instruction, (b) culturally responsive teaching, (c) technology-enriched instruction, (d) cooperative learning, and (e) instructional conversation. These research-based instructional practices all stress a student-centered model of classroom instruction that emphasizes more active student learning and teachers becoming facilitators of learning. Other research may want to specifically investigate if the dramatic classroom process differences found in the present study diminish in more student-center classrooms. These approaches may help provide nonresilient students with the protective factors they need to become more successful in school.

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Table 1
Results of Independent t-Tests of Student Observations by Group


| Setting |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Whole class | 78.35 | 35.70 | 77.76 | 36.25 | 0.08 | 0.938 |
| Small group | 13.98 | 33.25 | 9.52 | 27.58 | 0.69 | 0.495 |
| Pairs | 3.40 | 10.90 | 8.26 | 22.15 | $1.29$ | 0.201 |
| Individual | 3.71 | 10.24 | 4.05 | 10.56 | $0.16$ | 0.878 |
| Student Engagement |  |  |  |  |  |  |
| On task | 86.60 | 16.92 | 59.60 | 33.30 | 4.75 | 0.000 |
| Waiting for teacher | 0.58 | 2.83 | 2.40 | 6.66 | $1.65$ | 0.105 |
| Distracted | 12.38 | 15.36 | 34.36 | 30.14 | $4.27$ | 0.000 |
| Disruptive | 0.00 | 0.00 | 3.12 | 7.14 | $2.83$ | 0.007 |
| Other | 0.00 | 0.00 | 0.48 | 3.09 | $1.00$ | 0.323 |
| Language Used English | 88.77 | 29.76 | 84.52 | 32.91 | 0.64 | 0.522 |
| Spanish | 7.06 | 23.93 | 10.24 | 27.26 | 0.59 | 0.558 |
| Both English and Spanish | 4.48 | 14.57 | 5.21 | 13.09 | $0.25$ | 0.803 |

Table 2
Resilient and Non-Resilient Students' Perceptions Of
Classroom Learning Environments

|  | Resilient <br> $(n=58)$ | Non-Resilient <br> $(n=46)$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $M$ | $S D$ | $M$ | $S D$ | $t$ | $p$ |
| Cohesion | 2.57 | 0.46 | 2.62 | 0.42 | -0.474 | 0.636 |
| Competition | 2.15 | 0.60 | 2.27 | 0.61 | -0.984 | 0.328 |
| Difficulty | 1.34 | 0.43 | 1.82 | 0.55 | -4.869 | 0.000 |
| Friction | 1.82 | 0.63 | 1.97 | 0.59 | -1.278 | 0.204 |
| Satisfaction | 2.72 | 0.44 | 2.54 | 0.52 | 1.926 | 0.057 |
| Self-Esteem | 2.30 | 0.60 | 1.75 | 0.73 | 4.289 | 0.000 |
| in Reading |  |  |  |  |  |  |

Table 3

Results of Interviews with Resilient and Non-Resilient ELLs

| Categories | Resilient ELLs | Non-Resilient ELLs |
| :---: | :---: | :---: |
| School In General | Likes school for academic reasons (64\%) | Likes school for non-academic reasons (100\%) |
|  | Most Liked Subject: Math (37\%) | Most Liked Subject: Math (29\%) |
|  | Hardest Subject: Reading \& Social Studies (28\% for each) | Hardest Subject: Reading (50\%) |
| Instructional Materials/Tools | Likes textbooks and worksheets | Likes textbooks and worksheets |
|  | Use of computers in class for games, math, reading ( $21 \%$ for each) | Use of computers in class for games( 33\%) |
|  | $44 \%$ think that more is learned with computers | $65 \%$ think more is learned with computers |
| Instructional Practices | $22 \%$ think that they decide what they do in class | $73 \%$ think that they decide what to do in class. |
|  | Like group work, thinks more is learned from group work | Likes group work, thinks more is learned from group work |
| Attitudes toward Reading Teacher | Think positive of teacher | Thinks positive of teacher |
|  | Think reading teacher thinks of students in positive academic terms (32\%) | Doesn't know what reading teacher thinks of students (50\%) |
| Discipline | 58\% gets in trouble | 92\% gets in trouble92\%) |
|  | Trouble is talking (64\%) | Trouble is fighting (35\%) |
|  | Unsure of why they get in trouble (50\%) | Sure of why they get in trouble (100\%) |
| Educational Aspirations | Looking forward to middle because of positive academic reasons (77\%) | Looking forward to middle school because of positive non-academic reasons (67\%) |
|  | Will finish high school (85\%) | $\begin{aligned} & \text { Will finish high school } \\ & (78 \%) \end{aligned}$ |
|  | Will finish college (85\%) | Will finish college (67\%) |

# Hispanic English Learners' Self-Esteem Related to Instructional Program Type, Language of Instruction, and Gender 

Beverly J. Irby<br>Sam Houston State University<br>Fuhui Tong<br>Texas A\&M University<br>Mary Nichter<br>Sam Houston State University<br>Rafael Lara-Alecio<br>Texas A\&M University<br>Florencia Hassey<br>Sam Houston State University<br>Cindy Guerrero<br>Texas A\&M University<br>Sallie G. Helms<br>Sam Houston State University


#### Abstract

The construct of self-esteem was examined related to instructional program, language of instruction, and gender for 378 third-grade Hispanic/Latino English language learners (ELLs). These students received either enhanced or control English-as-second-language (ESL) instructional intervention in English immersion or bilingual programs K-3. It was found that all ELLs held high self-esteem related to their English proficiency, while students in the English immersion program were less confident in their knowledge of their native language. Regardless of language of instruction, boys were more confident in English, while their confidence in Spanish was lower than that of girls in the English immersion program. We conclude that when quality English instruction is provided, including exposure to the native language, ELLs are more likely to develop high self-esteem.


Self esteem, as a construct, is the profound emotional opinion that people have of themselves; it could also be expressed as the love individuals have for themselves and their knowledge of self worth and/or competence (Alloy \& Abramson, 1988; Melendo, 2008; Vaughn \& Oldman, 1997).

Coopersmith (1967) referred to self esteem as "...a personal judgment of worthiness that is expressed in attitudes that the individual holds toward himself, ... and indicates the extent to which the individual believes in himself to be capable, significant, and worthy" (p. 4-5). More specifically, self esteem has been defined as "the extent to which one prizes, values, approves, or likes oneself" or "the overall affective evaluation of one's own worth, value, or importance" (Blascovich \& Tomaka, 1991, p. 115). Rosenberg (1979) explained self esteem as a selfreflexive attitude that results from conceiving oneself as an object of evaluation, while, Brown (1998) indicated that self esteem is the feelings of affection one has for self. Cigman (2004) maintained that self esteem is a significantly important part of confidence, and, therefore, it is the motivation that children need in order to succeed academically and as persons. Later, it was noted that habitual "self-doubt and self-recrimination are conceptually tied to lower self-esteem," while "habits of basic self-confidence to higher self-esteem" (Ferkany, 2008, p. 124); therefore, it is reasonable to consider that "self esteem can serve as a powerful motivational force and has significant influence on children's behavior and school success" (Usyzynska-Jarmoc, 2007, p.338).

According to several theories (e.g., attribution theory, self-efficacy theory, self-worth theory), children perform better and are motivated to select increasingly challenging tasks when they believe that they have the ability to fulfill such tasks (e.g. Bandura, 1994; Covington, 1984; Weiner, 1985). Ferkany (2008) recommended that children should be assisted in developing positive self esteem through the curriculum, and as students develop positive self esteem, they, in turn, have positive academic results (Rojas, 1999). Such outcomes are obtained through the curriculum, as Waxman and Padron (1995) noted, self esteem can be increased through exemplary classroom instruction.

Researchers have determined that how students perceive their own capabilities influences their self esteem (Goldsmith, 2004; Mills, Pajares, \& Herron, 2006; Wicker, Turner, Reed, McCann, \& Lee, 2004); however, few researchers have focused their empirical studies on the self esteem of Hispanic/Latino English language learners (ELLs). Most of the past 15 years of published research with Hispanic/Latino students has been focused on ethnic identity/pride (e.g., Martinez \& Dukes, 1997; Phinney et al., 2001; Roberts et al., 1999; Umana-Taylor \& Fine, 2004), ethnic socialization (e.g., Rivas-Drake, 2011), or acculturation (e.g., López, Ehly, \& Garcia-Vázquez, 2002; Smokowski, Rose, \& Bacalleo, 2010).

What is known regarding language and self esteem among Hispanic/Latino youth is limited. Only a few studies were found. For example, Perez (2011) found that self esteem among Hispanic adolescents is moderated by language acculturation and context, meaning that if students have less language acculturation, the more likely they are to have higher self esteem when with family than they would exhibit around their friends. Based on Perez' results, language level does relate to self esteem, and furthermore, it has been determined that when children realize their status of limited English proficiency, they may have diminished feelings of self worth (Collier 1995; Pappamihiel 2001; Suarez-Orozco \& Suarez-Orozco, 2001). Related to overall academic achievement, according to Carranza, You, Chhuon, and Hudley (2009), Mexican American adolescents' academic performance and educational aspirations are influenced by students' self-esteem. Furthermore, related to self esteem, several researchers found that ELLs often feel culturally, linguistically, and cognitively disengaged with classroom
experiences, particularly in science, and this disengagement negatively affects their academic achievement in science (Aikenhead, 2001; Bryan \& Atwater, 2002; Fusco \& Calabrese Barton, 2001; Lee, 2002). Not only is the published literature limited which would call for additional research to be published on the subject of ELLs and self esteem. In fact, Cavazos-Rehg and DeLucia-Waack (2009) called for research to better understand the association between self esteem and bilingual education program type, gender, and amount of primary language use. Also, significant to consider are the Hispanic/Latino student numbers and predictions of increasing numbers within the near future (National Center for Education Statistics [NCES], 2010) which imply that these students and their self esteem is a critical area for study since counselors, teachers, and other school leaders must address these students' learning and emotional needs. For example, the most recent demographics show that ELLs comprise $21 \%$ of the national enrollment in public elementary and secondary schools, with $79 \%$ of those students being Spanish speakers (NCES, 2010).

In 2009, Cavazos-Rehg and DeLucia-Waack (2009) called for research to better understand the association between self esteem and bilingual education program type, gender, and amount of primary language use. Therefore, the purpose of our study was to examine self esteem among Hispanic/Latino ELLs related to their Spanish and English proficiency across instructional program, language of instruction, and gender. The students in our study were derived from a longitudinal (K-3) federally-funded project, Project English Language and Literacy Acquisition (ELLA; R305P030032) which included four instructional programs; one treatment and one control group for students in transitional bilingual education (TBE), and one treatment and one control group for students in structured English immersion (SEI). The specific research questions of our current sub-study were as follows:

1. Do Hispanic/Latino ELLs' self esteem related to their second language (i.e., English) proficiency differ by instructional program and gender after four years of placement in the ELLA project?
2. Do Hispanic/Latino ELLs' self esteem related to their native language (i.e., Spanish) proficiency differ by instructional program and gender after four years of placement in the ELLA project?
3. Do Hispanic/Latino ELLs' self esteem in English differ from that in Spanish by instructional program and gender after four years of placement in the ELLA project?

## Review of the Literature

At present, there are four types of reports in the literature related to ELLs and their self esteem: (a) educator commentaries, (b) research reports on group identity and self esteem, (c) research and professional commentaries on second language acquisition and self esteem in schools, and (d) research on gender and self esteem among ELLs.

## Educator Commentaries on ELLs' Self Esteem

First, there are numerous accounts or commentaries in the literature from teachers of ELLs that indicate that with a specific instructional program, self esteem increases among their students, but none of those accounts are derived from tightly controlled studies. In their paper, Sumaryono and Ortiz (2004) recommended that teachers should utilize classroom structures incorporating
the native language to support a strong sense of self, a component of self esteem (Shaffer \& Kipp, 2010) for the students in their classroom. There are numerous other qualitative or positional reports on self esteem of ELLs that suggest that positive environments support acquisition of a second language and better academic achievement as self esteem is improved (e.g., Bernhard, Cummins, Campoy, Ada, Winsler, \& Bleiker, 2006; Freeman \& Freeman, 1999a; Padron, 2000; Thornberry, 2001).

## Group Identity Research with ELLs

There are several reports in which researchers have focused their work on self esteem with Hispanics, but they have related their work to group identity or image (Phinney, 1990, 1992; Phinney, Ferguson, \& Tate, 1997; Phinney \& Rotherman, 1987; Pugh \& Hart, 1999). Phinney et al. (1997) developed a model emphasizing the relationship between ethnic identity and self esteem, but Cavazos-Rehg and DeLucia-Waack did not find a relationship between identity and self esteem for Hispanics. With the exception of Cavazos-Rehg and DeLucia, there is a paucity of research specific to Hispanic ELLs and identity. Only a few scholars have commented on identity and language. For example, Sheets (2005) indicated that a healthy identity is related to taking pride in one's spoken language, who the individual is, and the group to which the individual belongs. Freire and Macedo (1987) commented, "The students' language is the only means by which they can develop their own voice, a prerequisite to the development of positive sense of self-worth" (p. 151). Brown (2007) noted that due to the connection of language and self worth, it is critical for teachers and classrooms to empower children in their language growth to develop identity. Identity is important for all students, but in particular for language minority students, as Dixon Rayle and Myers (2004) indicated, differences have been found between minority and non-minority adolescents with respect to ethnic identity. For example, the minority adolescents perceived they mattered less than did the non-minority adolescents.

## Second Language Acquisition and Self Esteem

There is literature, some over 20 years old, focused on second language acquisition and self perceptions of students in which authors have drawn a connection between the two with selfperception serving as a motivator strongly influencing achievement (Gardner \& Maclntyre, 1993; Ghaith, 2003; LeDoux, 1996; Stevick, 1980; Szostek, 1994). Further, such studies that exist with Hispanic ELLs are not, as indicated previously, tightly controlled, or they included a small sample for a descriptive study such as that of the Spanish-English AMIGOS program in Cambridge, Massachusetts. In the AMIGOS study, Lambert and Cazabon (1994) found that students' self esteem positively impacted their academic progress, particularly when their native language was used and valued in the instructional program. Similarly, Freeman and Freeman (1999b) proposed high expectations of ELLs effective approaches to bilingual programs with equal status of both languages affirmed by the teacher and school. Alexander and Baker (1992) reviewed the literature on the relationship between bilingual education programs and self esteem and found such programs had no effect on self esteem, so they questioned that the use of the native language in improving self esteem. Certainly, there are some researchers that have suggested that bilingual education does not affect self esteem (e.g., Curiel, 1979; Fernandez, 1988; Gallegos-Jaramillo, 1985; Moore \& Parr, 1978; Torres, 1987), but there are other researchers who have found a positive relationship between bilingual education and self esteem (e.g., Covey, 1973; Del Buono, 1971; Diaz, 1983; Huang, 1995; Noels, Pon, \& Clement, 1996; Pesner \& Auld, 1980).

More recently, in Leon's (2008) dissertation study in which she examined characteristics of a bilingual classroom over a 4 -year time period when students entered kindergarten through their completion third grade, one of the characteristics was students' self-perception in the fourth year. Leon found that students' self esteem was positive in bilingual education, and she reminded teachers to be cognizant of the importance of self esteem and students' strengths related to their native language in bilingual education. Though the native language appears to be an important factor relating to self esteem, a relationship also has been found between English language proficiency level and self esteem (Covert, 1996). Similarly, English language competence and educational achievement are found to be significantly and positively related to well-being; and "knowledge of English is strongly associated with self-esteem, underscoring the psychological importance of linguistic acculturation for children of immigrants in American social contexts, especially in schools" (Rumbaut, 1994, p. 783).

Related to literacy programs for language acquisition and development, Bernhard et al. (2006) found that a strong English language literacy instructional program had positive effects on ELLs’ reading and self-esteem. They indicated that

Language is one of the strongest elements in one's self-definition as an individual and a social being. Attending to and valuing a child's home language in the school context is an important way to show respect for the child and his or her family, community, and culture. All children can benefit from learning two or more languages, and a good education should provide the means to do so effectively. (p. 2385)

Almost 20 years ago, Krashen (1982) developed five hypotheses about second language acquisition. The fifth of his hypotheses is the Affective Filter Hypothesis which purports that a low-anxiety learning environment, student motivation, self-confidence and self esteem support second-language acquisition. On the other hand, he noted that low motivation, low self esteem, and high anxiety can increase the affective filter which may prevent optimal second-language acquisition. Such was born out in a study by Gold and Johnson (1982) in which a specific psycho-educational tutoring program composed of developmental reading and adult motivational theory developed for illiterate adults (though not for second language acquisition, rather for first) impacted self esteem positively as reading ability literacy increased.

## Gender and ELLs'Self Esteem

Gender studies focusing on ELLs are very limited, much less are such studies found in the area of self esteem. In general, gender differences have been reported in domain-specific self beliefs, relating to self esteem (e.g. Crain, 1996; Eccles, Wigfield, et al., 1993; Jacobs et al., 1998; Marsh, 1993; Marsh \& Yeung, 1998; Wigfield et al., 1997). The outcome for success and abilities in traditionally regarded and stereotypical male-typed domains (e.g. sports, math) have been found to be higher for boys than were found for girls, girls rated their expectations and abilities higher than did boys in female-typed domains (e.g. English or Language Arts) (Archer \& McDonald, 1990; Jacobs, Lanza, Ozgood, Eccles, \& Wigfield, 2002; Larson \& Verma, 1999; Shaw, Kleiber, \& Caldwell, 1995). Gender differences were noted as early as first grade in both values and competence beliefs (Marsh, 1989; Wigfield et al, 1997). However, these differences diminish as children gain experiences in and out of school during the years (Jacobs, et al, 2002).

Noting differences in genders and anxiety levels ELL students displayed within types of programs, Pappamihiel (2002) found that when highly anxious students were separated out to form the groups, there were many girls identified as highly anxious when using the English language. This main effect is consistent with other studies showing that girls tend to be more anxious than boys (Bernstein, Garfinkel, \& Hoberman, 1989; Gierl \& Rogers, 1996; Padilla et al., 1988; Plancherel \& Bolognini, 1995). However, this finding is tempered by reports that males are less likely to admit anxiety than females (Williams, 1996). (p. 342)
She further noted: In mainstream classes girls tended to be more anxious than boys were. Students were more stressed about the social aspects of interactions with peers in the mainstream classroom and more anxious about their academic performance in ESL classes. (p. 348)

Based on the review of literature of school-based programs and ELLs as described previously, we hypothesized that students who received targeted instruction in English, but who also were allowed to maintain their native language, would have higher self esteem than those students who were in English immersion programs. We considered the limited research base on gender and second language acquisition and hypothesized that gender may play a part in the acquisition of the second language and how the boys or girls felt about their level of language acquisition.

## Method

## Context, Participants, and Research Design

Our data were derived from a longitudinal, randomized research project, Project ELLA, with a purpose to implement a rigorous study related to alternative instructional models that reflected best practices for Hispanic/Latino second language learners in acquiring English language and literacy from kindergarten to third grade. All students participating in the project were identified as native Spanish-speaking ELLs who lived in low socio-economic families. The final sample consisted of 378 students who started in kindergarten ( 2004 school year), and remained throughout third grade ( 2007 school year) in their respective models. ${ }^{1}$ These models included an enhanced and control version of structured English immersion (SEI) and a transitional bilingual education (TBE) program. These models as interventions are described in the following section. The mean age of the final sample at the end of third grade was 9.27 years $(S D=0.38)$.

In accordance with the State law (Texas Education Code, 1995) which prohibits random assignment of individual students to educational programs, randomization was achieved at the school level only. Schools were selected based on availability of either SEI or TBE models. This quasi-experimental design minimized contamination of the intervention which otherwise would be the case if both experimental and control classrooms were placed on the same campus. The final sample resulted in 22 schools with 10 schools randomly assigned to receive enhanced practice and 12 schools randomly assigned to receive typical practice.

For the purposes of this component of the research on self esteem, we used an end-point analysis of the third grade students who started in kindergarten (2004 school year) and remained throughout third grade ( 2007 school year) in their respective program models. The research design for the self esteem analysis was a post-test only multiple group comparison derived from the overarching quasi-experimental design.

## Instructional Intervention

Students receiving the treatment started in kindergarten and subsequently matriculated through third grade. The instructional intervention was delivered during the separate English-as-a-second-language (ESL) block daily. For each grade level, a detailed scope and sequence was provided to guide teachers in the implementation of the specific instructional model interventions. In addition, structured lesson plans for the intervention components were provided to all experimental teachers. These lesson plans reflected the curricular alignment with the national, state, district, and instructional program academic standards and objectives.

There were two overarching levels of intervention. Level I was professional development in which teachers and paraprofessionals were provided with biweekly professional development workshops by research coordinators for 3 hours per session to (a) review and practice upcoming lessons, (b) reflect on and discuss student learning, (c) assess pedagogical progress as a teacher in the intervention, and (d) be instructed on the following ESL strategies (Herrell \& Jordan, 2007) that were incorporated into the researcher-developed lessons for kindergarten through second grade: language scaffolding, bridging, advanced organizers, communication games, realia and manipulatives, interactive read aloud, shared reading, leveled questions, partner work and tutoring, shared reading, vocabulary word dramatization, word walls, language experience approach, total physical response, and free voluntary reading.

Level II was student instruction, which was composed of three tiers. Tier I was the regular language arts, math, science, and social studies. For treatment students in SEI models, all instruction beyond the ESL block was delivered in English from kindergarten to third grade; for treatment students in TBE model, language distribution was $80 \%$ Spanish and 20\% English in kindergarten and first grade, then moved to 70/30 in second, and 60/40 in third, and finally reached $50 / 50$ by the second semester in third grade. In both treatment SEI and TBE models, the curriculum was aligned to state performance standards, the Texas Essential Knowledge and Skills (TEKS) per subject area. Tier II was the English intervention during the ESL block ( 75 minutes in Kindergarten, 90 minutes in first, second and third grade), which is identical in SEI and TBE models, except for some Spanish clarification in TBE classrooms. The instruction focused on increasing student achievement in both language and academic content. Following language developmental patterns, instruction in kindergarten and first grade was delivered as an English oracy intervention at a separate time block - focused and direct English teaching with amount of time increased for instruction. Starting the second semester of first grade and continuing through the second grade, the intervention focused on the development of reading fluency and comprehension skills and then moved to reading in the content area of science. This Tier II intervention included three integrated yet distinctive strands aligned to the TEKS: (a) daily tutorials in Santillana Intensive English (Ventriglia \& González, 2000) program, a research-based curriculum in teaching content areas (e.g., math, science and social studies) to Spanish speakers in English in kindergarten and first grade, and replaced by a large-group adaptation of Early Intervention in Reading (EIR) Level II (Mathes, Torgesen, Menchetti, Wahl, \& Grek, 2004) for 45 minutes in second grade; in third grade EIR was again replaced by Content Reading Integrating Science for English Language \& Literacy Acquisition (CRISELLA) for 55 minutes daily. It is an enhancement of Scott Foresman's third grade science adoption with scripted lesson plans integrating reading skills and expository text for ELLs; (b) Story Retelling
and Higher Order Thinking for English Language and Literacy Acquisition (STELLA; Irby, Lara-Alecio, Quiroz, Mathes, \& Rodriguez, 2008), in which leveled questions based on Bloom's Taxonomy were designed from culturally relevant literature for comprehension delivered in K-3; and (c) academic oral language (AOL), teacher-conducted daily oral language to develop students' oral language, for 10 minutes in kindergarten, modified by the researchers to AOL in science (AOLS) in first grade and academic oral and written language in science (AOWLS) in second grade to elicit students' writing.

Tier III of the instructional intervention was provided for the very lowest performing students identified by teachers via students' classroom functionality. Highly trained paraprofessionals delivered communication games for an additional 20 minutes during kindergarten and the first semester of first grade. During the second semester of first grade, a more aggressive reading intervention, EIR Level I, replaced communication games, and EIR I was continued in second and third grade. A more detailed description of each component can be found in Tong, LaraAlecio, Irby, Mathes, and Kwok (2008), and Irby, Tong, Lara-Alecio, Mathes, Acosta, and Guerrero-Valecillos (2010).

## Comparison/Typical Practice

The comparison students in both SEI and TBE typical practice models received regular ESL instruction for approximately 45-60 minutes daily with great variation across teachers. ${ }^{2}$ For example, in typical practice classrooms, code switching was observed to clarify and explain English concepts; however, in the intervention classrooms here were appropriately targeted clarifications (Lara-Alecio \& Parker, 1994). All curriculum in the typical practice classrooms was aligned with the state of Texas English language proficiency standards. No support was provided by the research team to the typical practice teachers. For TBE model, language distribution was 80 (Spanish)/20 (English) in kindergarten with a focus of oral language development provided through music, art, and physical education, and there was a gradual decrease of Spanish instruction and increase of English instruction when students matriculated to first grade and beyond. Students who passed Spanish language arts began formal English instruction by spring semester of 1st grade. In second grade, English was introduced in social studies, science, and English reading lessons, while Spanish language arts and math continued. In third grade, the language distribution reached a balance of 50/50. For SEI model, all instruction was conducted in English for the entire school day from kindergarten to third grade.

## Instrument

Due to the limited availability of standardized instruments that meet the purpose of our study, and in an attempt to capture students' feelings of self confidence which leads to self esteem related to learning in two languages or being bilingual, we developed a self esteem instrument, ELLA Self-Esteem Inventory, particularly for elementary Hispanic ELLs (see Appendix A). This instrument was modified from the Rosenberg self esteem scale (1979) as was used in Rumbaut (1994). Our instrument consists of 10 items measuring students' self esteem in Spanish, their native language, and English, their second language. The student participants were asked prior to completing the instrument to express their feelings about their learning in each language and whether they felt they could read well or speak well. Given the fact that this is an exploratory study, the internal consistency is satisfactory with a Cronbach Alpha of was .65 for the entire instrument. To ensure the construct validity of this instrument, an exploratory factor analysis
with Promax rotation was conducted. Two factors were extracted from the data (see Table 1). Five items (7, 9, 1, 5, and 3) were loaded on Factor 1, which was labeled self esteem in Spanish and explained $38.01 \%$ of the total variance. Factor 2 included the other 5 items (10, 6, 4, 2, and 8 ) and was labeled as self esteem in Spanish. It accounted for $18.53 \%$ of the total variance. Collectively, the two factors explained 56.54 \% of the total variance. In addition, the Cronbach Alpha was .87 in Factor 1 and. 70 in Factor 2. Students were asked to rate on items regarding their school performance in the language, for example, "I am proud of my school work in English (Spanish)", or "I can speak well in English (Spanish)." Choices include never (coded as 1 ), sometimes (coded as 2), and all the time (coded as 3 ), with the higher score corresponding to higher self esteem in the respective language. The total possible for each Factor is 15.

## Data Collection and Analysis

Data were obtained from 378 third-grade, Spanish-speaking ELLs at the end of the school year in May, 2008. These students were placed in experimental and control condition of two types of programs: transitional bilingual education (TBE) and structured English immersion (SEI). Therefore, there were four groups in this study, i.e., SEI-Experimental (SEI-E), SEI-Control (SEI-C), TBE-Experimental (TBE-E), and TBE-Control (TBE-C). To examine group and gender difference, a two-way ( $4 \times 2$ ) univariate analysis of variance (ANOVA) was used to compare students' rating based on the total score calculated from each respective language-related subscale. When a significant difference was present in the main effect of group, the Tukey's test was conducted. Because there are only two levels in the main effect of gender (i.e., boys vs. girls), no post hoc analysis is necessary. Interaction effect between group and gender was also included. Effect size in form of partial eta squared $\left(\eta_{p}{ }^{2}\right)$ was reported to quantify the magnitude of significance. In addition, we compared students' self esteem between English and Spanish within each group using a paired-sample t-test with a Bonferroni correction ( $\alpha=.0125$ [.05/4]). Effect size in the form of Cohen's $d$ with pooled standard deviation was reported. General descriptive statistics are presented in Table 2.

## Results

Results are presented by research question.

## Difference in Self-esteem in English by Group and Gender

The results of the first research question, Do Hispanic ELLs' self esteem related to their second language (i.e., English) proficiency differ by instructional program and gender after four years of placement in the ELLA project?, are presented as follows. In general, all students in this study had high self esteem on their English language proficiency ( $M=13.05, S D=1.73$ ). ANOVA yielded significant main effect of group, $F=52.74, p<.001, \eta_{p}{ }^{2}=.14$. Post hoc analysis suggested that experimental SEI students statistically outperformed TBE-E and TBE-C students ( $p \mathrm{~s}<.001$ ); and control SEI students scored higher than TBE-E and TBE-C students ( $p \mathrm{~s}<.001$ ). There was no significant difference in self esteem in English between SEI-E and SEI-C students, nor between TBE-E and TBE-T. The main effect of gender was found to be statistically significant, $F=5.11, p=.024, \eta_{p}{ }^{2}=.014$, with male students having a higher average score $(M$ $=13.31)$ than that of female students $(M=12.93)$, although the magnitude of such difference was
small. No interaction effect between group and gender was identified ( $F=.83, p=.48$ ) (see Figure 1).

## Difference in Self-esteem in Spanish by Group and Gender

The results of the second research question, Do Hispanic ELLs' self esteem related to their native language (i.e., Spanish) proficiency differ by instructional program and gender after four years of placement in the ELLA project?, follow. Comparatively all students reported lower self esteem in their Spanish language proficiency as compared to that in English ( $M=11.73, S D=$ 2.81). Such low self esteem was more evident in SEI students, with the two-way ANOVA yielding significant main effect of group, $F=87.54, p<.001, \eta_{p}{ }^{2}=.42$, with experimental TBE outscoring SEI-E and SEI-C group ( $p \mathrm{~s}<.001$ ); and control TBE outscoring SEI-E and SEI-C group ( $p<.001$ ). There was no difference found in self esteem in Spanish between SEI-E and SEI-C students, nor between TBE-E and TBE-C. The main effect of gender was also statistically significant, $F=4.94, p=.027, \eta_{p}{ }^{2}=.013$, with female ELLs having a higher average score $(M=$ $11.69)$ than that of male ELLs $(M=11.19)$, although the magnitude of such difference was small. In addition to the main effect, a marginally significant interaction effect was detected ( $F=2.38$, $p=.069, \eta_{p}{ }^{2}=.019$ ). Further analysis of this interaction effect revealed that the gender difference was more evident in SEI-E and SEI-C groups ( $p \mathrm{~s}<.01$ ) (see Figure 2).

## Difference in Self-esteem between English and Spanish

Results of the third research question, Do Hispanic ELLs' self esteem in English differ from that in Spanish by instructional program and gender after four years of placement in the ELLA project?, suggested the following. The paired-sample t-test yielded a significant difference in group SEI-E, SEI-C, and TBE-C, with the SEI students having a higher self esteem score in English than in Spanish ( $|t| \mathrm{s}>12.73, p \mathrm{~s}<.001, d \mathrm{~s}>1.79$ ), and TBE-C students having higher self esteem score in Spanish than in English $(t=4.43, p<.001, d=.75)$. However, no statistical significant difference was identified among TBE-E students regarding their self esteem scores between English and Spanish $(t=1.34, p=.18)$ (see Figure 3).

## Discussion

Results indicated that ELLs taught in English only were more confident in their school performance in English as compared to students taught in both English and Spanish, their native language. Similarly, ELLs taught in both English and Spanish were more confident in their school performance in Spanish than their counterparts in English only settings. We suggest that no exposure to native language instruction deprived the students of the opportunity to maintain or develop academic language in Spanish, and therefore, they were less confident about their knowledge and skills in the native language. Hence, language of instruction plays a critical role in self esteem of that language. Considering the strong connection between language and identity, a "prerequisite to the development of positive sense of self-worth" (Freire \& Macedo, 1987), the findings of our study for language minority students underscore the importance of a healthy self esteem, and furthermore, identity (reflected as being confident about and proud of
one's own language) as described in Sheets (2005). It is critical for teachers and classrooms to empower ELLs in their language growth so that they can develop identity (Brown, 2007).

When gender was taken into account, our findings suggest that (a) gender difference in self esteem of English language is independent of language of instruction in that boys demonstrate a higher level and (b) gender difference in self esteem of native language is dependent of language of instruction in that generally boys are lack of esteem than girls when taught in English while exhibiting similar level of esteem when taught in Spanish and English. Such findings support our hypothesis that gender difference may exert influence on how boys and girls feel about language learning. Although we did not know if girls were more anxious than boys in second language learning as was found in Pappamihiel (2002), her finding related to gender in our study may imply a connection between level of anxiety and self esteem in second language acquisition.

When self esteem was compared between the two languages within each of the four groups, it seems that ELLs in English immersion classrooms were less confident in their Spanish language proficiency as compared to their English language performance. Interestingly, ELLs receiving English intervention and taught in both English and Spanish had a comparable level of confidence in both languages. Such findings suggest that when ELLs are provided with quality instruction and are taught in English along with their native language, they are more likely to develop confidence in both languages, thus increasing their self esteem. This supports our hypothesis and also corroborates with the existing research findings that native language instruction has impact on ELL children's self esteem (Huang, 1995; Noels, Pon, \& Clement, 1996).

## Limitations

It is important to address the limitations of our study when assessing its contribution to the current literature. One limitation was that we used a researcher-developed instrument to measure the construct of self esteem, which may compromise the validity of our study. However, as was noted earlier, there is a limited availability of standardized instruments designed specifically to measure elementary Hispanic/Latino ELLs' self esteem related two languages. An exploratory study of this kind can serve as a first step in understanding this topic, and future research is much needed in developing instruments that can yield valid and reliable results that fit the purpose of similar studies. Second, due to the inherent limitation embedded in any longitudinal study, there was a high mobility rate of students from the initiation of the larger project, and, therefore, we were not able to study the least stable group. Finally, one might question the lack of language proficiency data obtained from the participants; however, that was beyond the scope of our study. Previous findings derived from the larger project have evidenced the higher performance of ELLs receiving intervention and being instructed in both languages (Tong, Lara-Alecio, et al., 2008; Tong, Irby, Lara-Alecio, \& Mathes, 2008)

## Conclusion

The findings of our study indicated all ELL participants held high self esteem related to their English proficiency, while students receiving instruction only in English were less confident in their knowledge of native language. In addition, regardless of language of instruction, boys demonstrate a higher level of confidence in English, while their confidence in Spanish was lower
than that of girls when placed in an all English (SEI) program. Finally, when ELLs were provided with quality instruction and were expose to English along with their native language, they were more likely to develop self esteem in both languages. We contend that teachers should (a) collaborate with other school personnel to work with Hispanic/Latino ELL students as placement decisions in program types are made, (b) be cognizant of potential differences in self esteem between Hispanic/Latino male and female ELLs, and (c) utilize the native language of the students in individual and group counseling and/or in the curriculum developed for counseling Hispanic/Latino ELL students.

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## Footnotes

${ }^{1}$ The original sample in 2004 included 889 individual participants. Due to high mobility rate and retention in grades (which is beyond the control of the research team), the sample that was consistent for four grade levels ended with 378 participants.
${ }^{2}$ The comparison/control groups were those that participated in the school districts' typical practice ELL instructional programs.

Table 1
Factor loadings and communality for principal component analysis with Promax rotation for Self esteem items

| Label | Spanish | English |  |
| :--- | :---: | :---: | :---: |
| Item | Factor 1 | Factor 2 | Communality |
| Item 7 | .872 |  | .559 |
| Item 9 | .844 |  | .496 |
| Item 1 | .788 |  | .446 |
| Item 5 | .769 |  | .532 |
| Item 3 | .744 |  | .379 |
| Item 10 |  | .747 | .713 |
| Item 6 |  | .721 | .594 |
| Item 4 |  | .676 | .555 |
| Item 2 |  | .581 | .620 |
| Item 8 |  |  | .760 |

Table 2
Descriptive Statistics of Self-esteem in English and Spanish by Group

| Factor |  |  | SEI-E | SEI-C | TBE-E | TBE-C | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English | Girls | $n$ | 30 | 42 | 56 | 55 | 183 |
|  |  | $M(S D)$ | 13.40(1.38) | 13.90(1.30) | 12.29(1.72) | 12.12(1.96) | 12.79(1.81) |
|  | Boys | $n$ | 37 | 51 | 58 | 48 | 194 |
|  |  | $M(S D)$ | 13.70(1.56) | 13.96(1.17) | 13.03(1.49) | 12.54(1.86) | 13.28(1.62) |
| Spanish | Girls | $n$ | 30 | 42 | 56 | 56 | 184 |
|  |  | $M(S D)$ | 10.07(2.35) | 10.17(2.41) | 12.91(2.15) | 13.61(1.73) | 12.03(2.63) |
|  | Boys | $n$ | 36 | 49 | 58 | 48 | 191 |
|  |  |  |  |  |  |  |  |
|  |  | $M(S D)$ | 8.55(2.18) | $9.65(2.57)$ | 13.14(2.20) | 13.40(1.43) | 11.45(2.96) |

[^0]Figure Caption
Figure 1. Self-esteem in English by Group and Gender
Figure 2. Self-esteem in Spanish by Group and Gender
Figure 3. Self-esteem in English and Spanish by Group




## Appendix A

## ELLA Self-Esteem Inventory

Please complete the items below to the best of your ability.

1. I think that I do well in school in English.

| All the time | Sometimes | Never |
| :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

2. I think that I do well in school in Spanish.

All the time
$\bigcirc$
Sometimes
$\bigcirc$
3. I am proud of my school work in English.

All the time
Sometimes
$\bigcirc$
Never

4. I am proud of my school work in Spanish.
All the time
5. I can speak to people well in English.

6. I can speak to people well in Spanish.

All the time


Sometimes

7. I can read well in English.

8. I can read well in Spanish.

9. I can write well in English.

All the time


Sometimes


Never
$\bigcirc$
10. I can write well in Spanish.

All the time
$\bigcirc$
Sometimes
$\bigcirc$

Never
$\bigcirc$

# ¿Se Habla Español? Parental Report v. Picture Vocabulary Scores in Classifying the Language Dominance of Bilingual Mexican-American 3- to 7-year-olds 

Amy A. Weimer<br>Katrina Meza<br>Philip G. Gasquoine<br>University of Texas - Pan American


#### Abstract

This study compared parental reports of children's language use with picture vocabulary test scores, as methods for classifying children's language dominance. The sample included 103 bilingual Mexican American 3 to 7 year old $\left(M_{\text {age }}=5.81\right.$ years) children from the Rio Grande Valley of Texas. Parental responses to language use questions agreed with picture vocabulary test score classifications into Spanish-dominant, balanced, and English-dominant bilingual groups about $70 \%$ of the time. To demonstrate how language dominance affects scores on language based cognitive tests, vocabulary test scores were compared among the three groups. Spanish-and English-dominant bilingual children were each higher in the respective dominant language while balanced bilinguals scored lower than both language-dominant groups on picture vocabulary measures in both English and Spanish. Results are discussed with regard to implications for educational policy and practice.


The percentage of bilingual school children, variously termed English Language Learners (ELL), Limited English Proficient (LEP), Second Language Learners (SLL), English as a Second Language (ESL), or Culturally and Linguistically Diverse (CLD) students (Schon, Shaftel, \& Markham, 2008) increased from 9 to 21 percent of all school children between 1979 to 2008 (U.S. Department of Education, National Center for Education Statistics, 2010). In Texas, bilingual learners increased from 12.0 percent to 14.2 percent in the decade to 2005 (National Clearinghouse for English Language Acquisition and Language Instruction Education Programs, 2011). Reports from the Texas Education Agency (2010) indicate that the number of Texas students receiving bilingual instructional services has increased by 56 percent in the decade ending in 2010, and the number of students identified as LEP grew by 47 percent. SpanishEnglish bilingual learners make up the majority of ELLs in US schools, far outnumbering the next largest grouping of Vietnamese speakers (Rhodes, Ochoa, \& Ortiz, 2005).

Criteria that define bilingual learners are non-uniform across and within school districts (Guitiérrez-Clellen \& Kreiter, 2003). Texas Education Code, Chapter 29, Subchapter B, Sec. 29.052 defines LEP students (in grades K through 12) as learners whose principal language is other than English and whose English language skills affect performance on class work in

English. This definition is necessarily vague since bilingual learners come from diverse cultural, linguistic, and educational backgrounds. Some have excellent academic preparedness, while others have had only limited experience in formal educational settings. Curricula across schools for bilingual learners also vary, affecting student learning and levels of language abilities. In Texas, instructional requirements differ depending on the number of students from a particular language group who enroll in each district (Texas Education Agency, 2010), with language programs mandated whenever a school has 20 or more ELLs in the same grade level (Collier, Thomas, \& Tinajero, 2006). Correct identification of student language abilities is needed to determine when such curricula should be offered. Given the variability across students and programs, decisions regarding identification of children for placement into bilingual language instruction programs are made on an individual student basis.

Such decisions are not only important to each student, but they also impact educational policies, planning, administration, and research. Texas public schools use reports of the number of children identified as ELL at the regional and state levels to make decisions about the future educational needs of the state. Enrollment data are used as the premise for hiring bilingual educators and enhancing student/teacher ratios. Importantly these data also are considered when reporting the percentages of students passing the Texas Assessment of Knowledge and Skills (TAKS) test. It is therefore imperative that decisions regarding identification of children for placement into ELL/LEP language instruction programs are made accurately. This study addressed the agreement between two methods that have been used for ELL placement: (a) parental report of child language use; and (b) a standardized measure of language proficiency. Each of these methods has advantages and disadvantages.

## Parental Report of Child Language Use

Parental reports of children's language use are inexpensive to obtain, but are of questionable validity. Studies with English-speaking children have indicated that parents are valid reporters of child language abilities (Gilger, 1992), but the validity of parental reports for bilingual children has not been examined extensively. It is possible that parents might underreport child Spanish language use because of social stigma. That is, the use of Spanish is often influenced by the attitudes and behavior of the sociocultural environment (Garcia, Evangelista, Martinez, Disla, \& Paulino, 1988). Parents also might underreport levels of Spanish language use by their children based on the perceived social contextual value of bilingualism, because of their own desires for their child to learn English only and quickly (without fully understanding the process of second language acquisition), or even because of a desire to receive increased government service benefits. For example, one criterion of eligibility into the Communities in School Program, a policy initiative that delivers desirable resources to increase student achievement in Texas, is limited English-language proficiency.

Researchers have studied the validity of parents as reporters of bilingual Hispanic American child language use. For example, Pearson, Fernández, and Oller (1995) investigated children's language proficiency using parent surveys. They assessed the vocabulary levels of 25 Englishand Spanish-speaking young children (7- to 30-month-olds) via MacArthur Communicative Development Inventories (CDI). MacArthur CDIs assess comprehension and expression and were completed in English and Spanish by parents. MacArthur CDI reports strongly correlated
with estimates of language input in the children, although they were not as highly related for children with lower levels of exposure to Spanish. Interestingly, bilingual children had vocabulary levels about half that of monolinguals, although their English and Spanish combined scores were similar to monolingual children.

Similarly, Gutiérrez-Clellen and Kreiter (2003) examined parents and teachers as reporters of bilingual child narrative skills. They asked the parents of 57 low-income second-graders to rate current levels of language input and output on an hour-by-hour basis and to provide information about their children's history of exposure to both languages at home and school. These were compared with child language scores derived from the proportion of grammatical utterances in narrative samples in Spanish, English, or both. Parental reports of Spanish language use and child Spanish grammatical utterances were highly correlated and parental reports of English use and child English grammatical utterances were moderately correlated.

## Bilingual Standardized Assessment Measures

Standardized language tests have been used to assess bilingual children's language proficiency for consequent ELL placement, but there are several disadvantages to these tests. Critics have stated that standardized test scores normed on monolinguals underestimate bilingual abilities in that they assess only a portion of the bilinguals' knowledge (Pearson, 1998). Tests are also expensive, time-consuming for school districts, and require trained personnel to administer. Furthermore, test results vary depending on the language of administration and the degree of language dominance (Gutiérrez-Clellen, \& Kreiter, 2003).

Researchers have found that balanced bilinguals (i.e., equal proficiency in two languages) score below monolinguals on language processing tasks like receptive vocabulary (Bialystok, 2007; Oller \& Eilers, 2002); picture naming (Gollan \& Acenas, 2004; Gollan Fennema-Notestine, Montoya, \& Jernigan, 2007; Gollan, Montoya, Fennema-Notestine, \& Morris, 2005; Kohnert, Hernandez, \& Bates, 1998; Roberts, Garcia, Desrochers, \& Henandez, 2002) and category fluency (Bialystok, Craik, \& Luk, 2008; Gollan, Montoya, \& Werner, 2002; Portocarrero, Burright, \& Donovick, 2007). There are a number of factors that might explain these low scores. In particular, socioeconomic status might be an important variable to consider. For example, Prifitera, Weiss, and Saklofske (1998) found that among Hispanic-American children, those with better educated parents scored higher than those with less educated parents on Verbal IQ measures from the Wechsler Intelligence Scale for Children-III (Wechsler, 1997). This suggests that it is important to assess within group variability on predictors and outcomes related to linguistic abilities among bilinguals, given the heterogeneity within this group. Bilingualism is a multidimensional continuous construct with many possible discrete classification schemes (Rhodes et al., 2005), but the two main dimensions are proficiency (an ability rating in each language) and dominance (a difference score between proficiency measures in two languages). Proficiency and dominance can vary across expression, comprehension, reading, and writing tasks, being influenced by language use characteristics, such as age of second language acquisition or amount of second language exposure (e.g., Gutierrez-Clellen \& Kreiter, 2003; Portocarrero et al., 2007). The present study compared language dominant and balanced bilingual learners' performance on a language proficiency measure of picture vocabulary.

## Purpose

There is a clear need to investigate criteria for correctly classifying bilingual children's language abilities for appropriate placement into language programs and to help educational policy makers gain an accurate count of children who are in need of these services for future planning. The present study examined parental reports of child language use and compared them to standardized measures of English and Spanish picture vocabulary scores. To demonstrate the importance of classification, a secondary goal of this study was to compare balanced bilingual learners' performance on picture vocabulary to that of both English- and Spanish-dominant children.

## Method

## Participants and Recruitment

Consecutive participants were recruited from one private, two public elementary, and two local childcare centers located in the Rio Grande Valley of Texas. Inclusion criteria were: (a) age 3 to 7 years; and (b) identification by teachers and/or school staff as bilingual. It was emphasized to school personnel that participants did not have to be proficient in both languages, just able to converse and understand each language. Children with any developmental or language delays were not considered. Six children who lacked a minimal language proficiency (i.e., the ability to respond correctly to at least 6 items) in both English and Spanish, as determined by the Picture Vocabulary Subtest of the Woodcock-Muñoz Language Survey-Revised (WMLS-R; Woodcock, Muñoz-Sandoval, Ruef, \& Alvarado, 2005) were excluded. The final sample consisted of 103 children between the ages of 3.67 and $7.50(M=5.81, S D .74)$ years. Participants were not selected by ethnicity or socioeconomic status, but demographic data were obtained. For those parents who reported ethnicity, $96 \%$ of mothers and $94 \%$ of fathers were of Mexican-American descent. Data was missing for $24 \%$ of mothers and $36 \%$ of fathers, as the child was living with only one parent and/or there were issues of disclosure. Mexican-Americans tend to be reluctant to disclose socioeconomic information especially if they are not legal residents (Knight, Roosa, Caderón-Tena, \& Gonzales, 2009). Data from the $89 \%$ of participants who reported total household income information, indicated that the sample was of higher economic status than the average for the area. The average income for families in the sample was between $\$ 50,000$ and $\$ 60,000$, whereas the regional median household income for the county was $\$ 30,513$, according to the 2010 Census data.

## Procedure

Participants were tested in a quiet area of the child's school or care center in accordance with American Psychological Association ethical guidelines. Examiners included three trained undergraduate research assistants, who were proficient in speaking, understanding, reading, and writing in both English and Spanish. Testing occurred over two sessions with an average intertest interval of approximately two and a half weeks ( $M=17.95$ days, $S D=16.98$, Range $=1-84$ days). At each session, only Spanish or English was spoken by the bilingual examiner and participants were instructed that they could only respond in that same language. Fifty-four participants (randomly chosen) were tested in Spanish at the first session and English at the
second, and 49 participants were tested in English at the first session and Spanish at the second. The length of each session was approximately 15-20 minutes.

## Measures

Parent Questionnaires. Parents were administered a demographic survey in English or Spanish on which they were instructed to circle all that apply. Items included questions about basic household information (e.g., How many adults currently live in the home? What is the yearly total household income?). They also were asked four questions in English or Spanish about their child's language usage: 1) What language(s) does your child speak?; 2) What language did your child first learn to speak?; 3) What language can your child currently speak better?; and 4) What language does your child currently understand better? Response options for Questions 1 and 2 were: English, Spanish, and Other, with a space provided for parents to write-in another language after the last. Response options for Questions 3 and 4 were: English and Spanish. There final question requested the age at which the child began speaking the second language. Thirteen parents did not respond to this question.

Standardized Test. Children were administered the English and Spanish versions of the Picture Vocabulary Subtest of the WMLS-R (Woodcock et al., 2005).

## Results

Raw scores on the Picture Vocabulary Subtest were converted into standard scores ( $M=100, S D$ $=15$ ). A difference score was calculated for each participant by subtracting WMLS-R Picture Vocabulary Scale scores in English from that in Spanish. Positive scores indicated greater Spanish proficiency. The difference scores ranged from -84 to $+85(M=9.47 ; S D=38.67)$. These scores were used to form three groups of participants: (a) English-dominant bilingual (EDB: WMLS-R Spanish-English difference score $\leq-10$; (b) balanced bilingual (BB: WMLS-R Spanish-English difference score between -9 and +9 ); and (c) Spanish-dominant bilingual (SDB: WMLS-R Spanish-English difference score $\geq+10$ ).

## Classifying Language Ability

Parent responses about child language use correctly classified participants into EDB, BB , or SDB language groups, but at different percentage rates for each question: What language(s) does your child speak? Correctly classified $53 \%$; What language did your child first learn to speak? Correctly classified $72 \%$; What language can your child currently speak better? Correctly classified 68\%; and What language does your child currently understand better? Correctly classified 72\%.

## Comparing Language Groups

Table 1 shows parental education, income levels, means, and standard deviations for children's age and WMLS-R Picture Vocabulary scores in Spanish and English by language group. A MANOVA examining whether the groups differed in age, maternal education, paternal education, and approximate total family income was nonsignificant, $F(8,144)=.45$, $n s$. Given the possibility that there might still be significant effects within the model even though the omnibus test was not significant, we also conducted individual analyses for each variable. All
were nonsignificant: $F_{\text {Age }}(2,74)=.61, n s ; F_{\text {Mother's Education }}(2,74)=.37, n s ; F_{\text {Father's Education }}(2,74)$ $=.49, n s ; F_{\text {Income }}(2,74)=.69, n s$.

Table 1
Parental Education, Income Levels, and Means (SD) for Children's Age and WMLS-R Picture Vocabulary Scores in Spanish and English By Language Group

|  | Spanish- <br> Dominant | Balanced <br> Bilingual | English- <br> Dominant |
| :--- | :--- | :--- | :--- |
| $N$ | 53 | 24 | 26 |
| Children's age in years | $5.97(.70)$ | $5.60(1.71)$ | $5.70(1.80)$ |
| \% of mothers with college degree | 75.0 | 62.5 | 54.5 |
| \% of fathers with college degree | 57.1 | 52.4 | 42.9 |
| Approximate yearly household income | $\$ 55,000$ | $\$ 56,000$ | $\$ 67,000$ |
| Children's WMLS-R score in English | $64.58(17.46)$ | $88.33(12.47)$ | $104.81(17.41)$ |
| Children's WMLS-R score in Spanish | $104.08(12.24)$ | $89.58(12.91)$ | $60.65(17.57)$ |

Key: WMLS-R = Woodcock Munoz Language Survey - RevisedA 3 (group) $\times 2$ (language of administration) mixed ANOVA with language of administration as the repeated measure showed no significant main effects of group or language, but there was a significant group by language effect, $F(2,100)=218.52, p<.001, \eta_{p}^{2}=.81$. Figure 1 illustrates this interaction, showing that language dominant children were more proficient in their dominant language as indexed by WMLS-R Picture Vocabulary scores and that balanced bilinguals were lower than EDB and SDB in both English and Spanish proficiency.

Figure 1
Means of Children's WMLS-R Picture Vocabulary Scores By Language Group


Key:
$\mathrm{EDB}=$ English Dominant Bilingual
$\mathrm{BB}=$ Balanced Bilingual
$\mathrm{SBD}=$ Spanish Dominant Bilingual

## Discussion

This study aimed to: (a) compare parental reports of child language use with picture vocabulary test scores in classifying bilingualism in Mexican-American children; and (b) to compare the language proficiency scores in Spanish and English of the resulting groups. Parental reports correctly classified children into EDB, BB, and SDB language groups at about $70 \%$ accuracy. The data suggest that teachers should go beyond just asking What language(s) does your child speak? When surveying parents about child language usage as responses to this question correctly classified children at only about $50 \%$. Asking parents about current use (both speaking and comprehending) improved the predictive validity of parental reports compared to the picture vocabulary scores. Parental reports about a child's first spoken language also correctly classified children into the appropriate language group at about $70 \%$. These results fit with past research that has reported a similar congruence rate among adult bilingual Hispanic American self-reports of language proficiency and standardized language proficiency measures from the WMLS-R in the classification of language dominance (Gasquoine, Croyle, Cavazos-Gonzalez, \& Sandoval, 2007).

The second goal of this study was to demonstrate the importance of language dominance classification by comparing WMLS-R Picture Vocabulary subtest scores for balanced and language dominant children. For the SDB group, mean standardized scores in Spanish were higher than scores in English and for the EDB group, mean standardized WMLS-R Picture Vocabulary scores in English were higher than scores in Spanish. Balanced bilinguals did not differ in Spanish and English picture vocabulary scores. Comparing group performance for English language of administration only, the EDB mean picture vocabulary score was higher than the means for the BB and SDB groups. Similarly, for Spanish, the SBD mean picture vocabulary score was higher than the means for the BB and the EDB groups. Of interest though, the BB group did not score as highly in either English or Spanish, compared to the two languagedominant groups. In fact, the BB mean picture vocabulary score was almost $1 S D$ below the national mean (standardized on monolinguals) in both English and Spanish. This result fits with past findings about balanced bilingual language abilities (Bialystok, 2007; Bialystok et al., 2008; Gollan \& Acenas, 2004; Gollan et al., 2002; 2005; 2007; Kohnert et al., 1998; Oller \& Eilers, 2002; Portocarrero et al., 2007; Roberts et al., 2002). Given that bilingual children are acquiring more words than monolingual children, it might be expected that their vocabulary scores, as measured only in one language, are lower comparatively (Pearson et al., 1995).

The balanced bilingual learners in our sample scored below the language dominant learners on a language test normed for monolinguals. Importantly, the results from this study suggest that this effect is not likely due to a socioeconomic disadvantage, as there were no significant differences across the language groups in parental education or family income levels. It also is not likely related to differences in instructional techniques, as most of these young children are just beginning their adventures in the elementary school system and some had only begun to experience preschool educational settings. Bilingual instruction is known to significantly affect
the long-term outcomes for these children, as "bilingual children bring to the language learning process a wider set of skills than do monolingual learners" (Uccelli \& Páez, 2007, p. 226). For example, Thomas and Collier (2002) conducted an extensive five-year study focused on examining the outcomes of various ELLs/LEPs' academic achievement in Grades K-12. They found that English language learners who did not receive bilingual/ESL services showed large longitudinal decreases in reading and math achievement in comparison to students who received bilingual/ESL services. Dual language programs, in particular, were associated with positive academic outcomes. Yet providing the most effective educational programs and practices for academic attainment begins with identifying the criteria that defines bilingual learners. To that end, this study has importantly shed light on the accuracy of parental report of bilingual child language use.

When using standardized tests for special education service placement, the current recommended practice for school psychologists is to assess bilingual children in both languages (e.g., CoboLewis, Pearson, Eilers, \& Umbel, 2002; Overton, Fielding, \& Simonsson, 2004; Rhodes et al., 2005). Financial and practical constraints (e.g., lack of bilingual personnel) can limit this practice for many school districts (Caesar \& Kohler, 2007; Ochoa, Riccio, Jimenez, Garcia de Alba, \& Sines, 2004), meaning bilingual children are tested in one language. If bilingual children are only to be assessed in one language, it is imperative to appropriately select their dominant language. Parental report and standardized test scores should be considered in this process.

## Study Limitations

This study relied on a single measure of language proficiency (picture vocabulary), in part due to the short attention span of young children. Future research in this area should make use of an increased set of language proficiency subtests. There also should be more questions of parents and the inclusion of questions to children themselves and their teachers about language use. This study did not investigate older, school-age children, limiting the generalization of conclusions to young children. It is possible that parents have different amounts of insight about their child's language use at various age points (Gilger, 1992). Future research should include a broad age range of bilingual children to examine these possibilities. Lastly, the study is limited in its generalizability to a broad population of Mexican-Americans, given the relatively high SES of the sample, which is not often a characteristic of Spanish-speaking populations in the United States (Snow, Burns, \& Griffin, 1998). Future research should continue to examine bilingual children from a variety of SES backgrounds.

## Implications for Educational Policies

Despite the listed limitations, results of this study have implications for educational practice and policy. Data from this study can be used to inform teachers/administrators of the accuracy of parental reports of child language use among bilinguals. This finding is especially important as the number of bilingual language learners in our schools steadily rises while funding does not, stressing the need to find the most practical and cost-effective ways to correctly classify child language skills. This will not only help in the accurate placement of children into appropriate learning environments thereby prompting long-term academic success, but also will help educational administrators with planning for the future needs of bilingual school programs. While using multiple criteria for classification is recommended, understanding the accuracy of
parental reports of child language use is a useful beginning to finding the most accurate, inexpensive, and time-efficient method of classification.

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# Raising Children to be Balanced Bilingual in a Predominantly English Speaking Society: Chinese Immigrant Parents' Viewpoints 

YuLin Feng<br>Valentin Ekiaka Nzai<br>Texas A\&M University - Kingsville


#### Abstract

In a predominantly English-speaking society, immigrant parents face several challenges to raise bilingual-biliterate-bicultural children. This paper, from a pilot qualitative research project, explores Chinese immigrant minority parents' narratives on how to raise balanced bilingual children in the United States in order to inform other parents committed to raise their children bilingually. Six Chinese immigrant minority parents residing in South Texas participated in this study. Participants were asked to write down their narratives by answering the main research question of this project. Findings suggested that most Chinese immigrant minority parents’ advocacy for their children bilingualism is not only based on instrumental motivational sources, but also on their desire to help their children pass as cultural insider in their heritage society. Overall, data analysis suggested some challenges faced by Chinese immigrant parents in enhancing their children heritage language in South Texas where such as (1) perception of the heritage language by their own children and the absence of heritage in a predominantly English speaking society; (2) bilingual children's language preference; (3) choice of community; (4) heritage - language support; and bilingualism strategies are possible challenges faced by Chinese immigrant parents' when raising their children bilingually in a predominantly monolingual setting.


## Introduction

The number of children whose first language is not English in the United States has grown dramatically in recent years. Data from the National Center for Children in Poverty (Elmelech, McCaskie, Lennen \& Lu, 2002) indicated that 30 million foreign-born immigrants reside in the U.S., and this percentage has increased 57 percent from 1990. One in five children under eighteen years old is a child of immigrant; this means that they have, at least, one foreign-born parent (Protopsaltis, 2005). The aforementioned data do not include of US-born children from immigrant families and immigrants without legal status. The growing numbers of foreign-born and US-born children from immigrant families raise a serious educational challenge for parents: How can immigrant parents teach their U.S-born or foreign-born children to remain an old-timer of their heritage culture within a predominantly English speaking setting? The term old-timer
means, in other words, being culturally and linguistically a committed cultural insider of a specific society of culture (Hundeide, 2003)

A rich body of research has emphasized the advantages of raising children bilingually in a monolingual setting (Bernier-Grand, 2009; Castilla, Restrepo, \& Perez-Leroux, 2009; Sheng, McGregor, \& Marian, 2006; Vasquez, 2007). Several scholars have highlighted parents’ rationales to raise their children bilingually (Ben-Zeev, 1977; Bernier-Grand, 2009; Fitts, 2009; Dorner, 2010). In fact, raising children bilingually, allows children to (1) maintain cultural ties with their parents' heritage (2) have academic and cognitive advantages, (3) facilitate crosscultural understandings, communications, and relationships, (4) become competent users of more than one language, and (5) increase career opportunities (Ben-Zeev, 1977; Bernier-Grand, 2009; Fitts, 2009; Dorner, 2010; DeHouwer, 1999; Ianco-Worrall, 1971; McLeay, 2003; Reyes, 2008; Palij \& Homel, 1987; Peal \& Lambert, 1962; Tokuhama-Espinosa, 2001).

However, the more English immigrant children learn, the more heritage language loss they experience (Fillmore, 2000). According to Fillmore (2000) the lost of native language takes place over two generations because second-generation parents seldom use their native language with their children. Partly, children's language delay/confusion and learning problems are concern of parents (Bernier-Grand, 2009; Goodz, 1989; DeHouwer, 1999; King \& Fogle, 2006a).

Due to the above concerns and challenges, parents who are bilingual might convince themselves that bilingualism might have a negative influence on how children acquire the dominant language, or the potential may not always be achieved in the United States. Lessons of history demonstrated that naturally, acquiring a second language or learning two or three languages at the same time, in a predominantly monolingual setting should not ipso facto imply a loss of heritage language and culture (Ekiaka, 2009).

It does follow, from the above postulate that, even in a highly assimilative setting, parents of children bilingual play a crucial play a role in their children's bilingual-biliteracy development (Ekiaka, 2009). Parental involvement or participation can make a difference in children's language learning. For example, King and Fogle (2006a) declared that family language policies influence children's bilingual-biliterate development. Children should be aware of how languages are allotted when communicating with family members. Furthermore, Taylor, Bernhard, Garg, \& Cummins (2008) highlighted that the importance of family involvement for non-native English speaking kindergarten children' language and biliteracy development.

Many recent studies on educating bilingual children have been conducted in school settings (Bernhard, Garg, \& Cummins, 2008). However, bilingual researchers have placed very little attention to culturally and linguistically diverse parents' challenges and viewpoints in raising their children bilingually at home settings. Exploration of Foreign-born and US-born immigrant children's bilingualism dynamic outside classrooms and /or schools has been poorly researched. Moreover, some minority parents whose children speak another language at home have limited research-based information on how to effectively raise a balanced or effective bilingual child in a predominantly monolingual English speaking society (King \& Fogle, 2006b).

This paper reports data from a pilot qualitative research project conducted during the fall semester of 2009. The purpose of this research project consisted of exploring Chinese immigrant minority parents' narratives on how to raise balanced bilingual children in the United States in order to inform South Texans parents who are, committed to raising their children bilingually.

At this stage of the research, developing balanced bilingualism competences refers to people who are able to use their two languages equally (Brown, 2004). From the community of practice approach (Cunningham-Andersson \& Andersson, 2002; Ekiaka, 2009; Kim, 2001; Wenger, 1998), developing balanced bilingualism goes beyond the linguistic ability to speak with a native or native-like accent, to include reading, writing and comprehending in two languages. It empowers the bilingual child to become linguistically and culturally a cultural insider or oldtimer (native) of both cultures, even in a predominantly subtractive bilingual setting. In other words raising a child to be a balanced bilingual has more to do with the linguistic and cultural feelings of belonging to both primary reference groups (Ekiaka, 2009).

What kind of challenges Chinese immigrant parents are facing when raising balanced bilingual children in South Texas?, and b) how do Chinese immigrant parents overcome these boundaries to ensure their children old-timer status in their heritage culture in a predominantly English speaking society?

Certainly, the answers to the above questions will evoke professional awareness, spark interest, stimulate thoughts and discussions, and disseminate knowledge and skills needed for raising effective bilingual children in a monolingual setting. To help our readers better understand the structure of this paper, first we will provide an overview of some research debunking bilingualism misconceptions. Afterwards, we will present the research findings, implications and recommendations bearing in mind that the terms "native language," "heritage language" and "minority language" are used interchangeably in this paper.

## Debunking some bilingualism misconceptions

There is no simple and precise definition of bilingualism. Bloomfield's (1933) definition states that a bilingual individual has the native-like ability to control two languages without losing his or her native language. Traditionally, bilingual individuals are mostly seen by monolinguals as two monolinguals inside one person (Baker, 2006). There is a wide range of definitions of bilingualism, forming a continuum from individuals who have native or near-native fluency in two languages to individuals who can use more than one language even to a minimal degree.

Simply put, in this paper, bilingualism refers to the ability to function in more than one language; whereas, monolinguals can function in only one language. In a predominantly subtractive setting such as the United States of America, there exist some misconceptions regarding bilingualism which have led some monolingual parents of bilingual children to espouse the assimilative approach of learning English as second language when they favor English over their own heritage language.

Some people believe that being bilingual is an advantage, whereas others consider it a disadvantage. To challenge the importance of bilingual education, some conservative studies
have used biased tests of intelligence and cognitive measurement to compare the academic performance of bilingual students to their colleagues' monolinguals (Valdes \& Figueroa, 1994). However, Brown (2004) rebuked the biased trend in bilingualism studies by highlighting that bilingualism is associated with higher cognitive flexibility development.

Data some research (Caldas, 2006; Cunningham-Anderson \& Anderson, 2004) on bilingual children from mixed - raced families suggested that some monolingual parents of bilingual children do not believe in their children's cognitive potential of learning two or more language simultaneously. They believe that exposure to a second language in early childhood might impair the native language development, resulting in language delay. Language delay may not hinge on bilingualism. For example, Harding-Esch \& Riley (1996) examined the influence of bilingualism on children's speech. There is no scientific evidence to date that hearing two or more languages lead to delays or disorders in language acquisition (Castilla, Restrepo, \& Perez-Leroux, 2009; DeHouwer, 1999; King \& Fogle, 2006b). Many children throughout the world are growing up with two or more languages without showing any signs of language delays or disorders. Thus, bilingualism or multilingualism does not cause language delay.

It does follow from the above discussion that raising balanced bilingual children, in today's global world, means empowering and equipping them with comparative and absolute advantages (Ekiaka, 2009). It is our hope that an exploration of Chinese immigrant parents' experiences about raising balanced bilingual children in the United States might motivate immigrant parents to make an implicit or explicit commitment to raise balanced bilingual

## Methods

Six Chinese immigrant parents who have been living in the United States for $5-10$ years participated in this qualitative study. The rationale for the qualitative tradition selection relied on its potential to unpack explorative issues by giving a voice to each participant (Creswell, 2005). All parents were bilingual to some degree in both Mandarin and English. They acquired their native language (Mandarin) in early childhood, and by the time they were of school age, they learned English in formal classroom settings. Unlike random sampling, purposeful sampling allows researchers to select participants who have in-depth knowledge of the subject at hand or where information is rich (Patton, 1990). For this research, the participants were recruited through a network of friends who represent participants who are raising balanced bilingual children in a predominantly English speaking society.

The types of variation we were looking for include the participants' experiences of raising their children to be bilingual and their concerns and challenges. The theoretical sampling we used for participants' selection included: being bilingual English - Mandarin with foreign-born children and the participants' categorization as immigrant minority in the United States. According to Ogbu's (1990) typology of minorities in the United States, immigrant minorities are those who voluntarily move to another society because they believe that the move may help them improve their economic situations and have better opportunities or more political freedom.

Participant ages ranged from 35-45 and had family responsibilities. For the sake of confidentiality and clarity in describing the data, we labeled the research subjects by assigning them the following pseudonym: YuFa, Chofo, Veng, Hui, Shanyu, and Chia. Signature of an informed consent which included procedures and protection of human subjects was obtained from each participant before collecting the data through two in-depth interviews. Each in-depth interview was conducted in Mandarin by phone and lasted approximately 90 minutes.

Data were recorded through an interview protocol, which is a form consisting of some general questions developed by the researchers. Data include the protocol as an appendix or summarize the questions from the interview were transcribed and analyzed by the researchers. Research findings were categorized into five themes. A data triangulation process (interview data - theory -review of findings by three participants) was used to validate the accuracy and credibility of the finding themes. From the themes, we interpreted the data by reflecting on how the findings related to this article's theoretical frame.

## Findings

This section provides a brief description of this pilot research project's findings. Discussion and some implications for bilingual/dual-language education will follow. The first research question was: What kind of challenges Chinese immigrant parents face when raising balanced bilingual children in South Texas? Three themes emerged from data analysis.

Perceptions of the heritage language in a predominantly English speaking society All participants revealed that attitudes and perceptions of people from mainstream America toward heritage native language of Chinese immigrant parents have a strong effect on children's decisions regarding the use of the language. For example, Chofo argued that:
> "When some monolingual English children heard my older son speaking Chinese or Mandarin at age of 3, they felt a strong antagonism towards him, and they also mocked him for his accent. My older son then was not willing to use Chinese when those children were around. By age of 6, he changed his perceptions and attitudes toward the Chinese language regardless of people's perceptions because he was influenced by his younger brother who and ignored people's disapproval of the use of our heritage language" (quote from interview of November 7, 2009).

Chia, likes Chofo, said that attitudes and perceptions toward bilingual children's heritage language held by the majority of teachers from the mainstream society potentially impact children's language use. During the second in-depth interview, she explained her frustration in the following terms:
> "We moved to the United States when my daughter was in fourth grade. Initially, she did not speak any English before attending English-only mainstream classes. Her teacher had a positive perspective on the Chinese language because she believed that China was poised to become the driving economic force in the world; therefore, it is important to learn Chinese. There was a boy from China who already had high degree of English as well as Chinese.

The fourth-grade teacher allowed my daughter to use Chinese as a language translation tool for clarification. In addition, the Chinese language was used to foster the integration of my daughter into the classroom. The next year, things changed dramatically. Her $5^{\text {th }}$ grade teacher completely forbade speaking Chinese in classes and separated my daughter from the Chinese boy in order for my daughter to learn English as quickly as possible. I was ok with that at the beginning. But later on, I found out that her $5^{\text {th }}$ grade teacher intolerance when defending the English-only policy during a parent-teacher conference the same year" (quote from interview of November 10, 2009).

## Bilingual children's language preference

Overall, data analysis demonstrated that all participants claimed that they were concerned about their children second language acquisition process. They clearly knew that their children would learn English since it is the dominant language of their surrounding environments. They were concerned about their children not being able to speak or use Chinese because they do not have sufficient opportunities to practice the language. Even if children do have the opportunities, they might unconsciously use the language spoken by most people and tend to drop their Chinese language in favor of English especially when in public. Moreover, they were mostly worried about their children not having any opportunity to learn academic Mandarin.
For example, YuFa argued that:
"My children prefer to speak English because the complicated Mandarin confounded them; they only understand certain simple words. Also, English is the language that they could easily and completely express themselves. I personally experienced a lot of problem to communicate with my children using abstract concepts in Mandarin, at some point. The lack of abstract and complex vocabulary, together with their preference to use mandarin only in private settings, like home or Chinese parties motivate me to find additional strategies aimed at helping them gain full command of Mandarin like someone who grew up and went to school in my home country" (quote from interview of November 13, 2009).

Similarly, Chia recalled her language allocation for her two children despites their capacity to switch from one language to another when playing:
"I foresaw that my children would need academic Mandarin when we go back home in the future. Clearly, I emphasize the language (Mandarin) spoken and used at home. So far, they can understand and speak it; however, they cannot read and write it. It is hard for me to teach them academic Chinese due to the time it takes. Children find out the complexity of handling full conversation in mandarin, so they prefer to talk to each other in English. This situation motivates me to allocate time and settings for each language and find what I need to do as a parent to help them improve their oral fluency in Mandarin" (quote from interview of November 10, 2009).

Contrary to YuFa, Chofo and Chia, Shanyu adopted a different approach. She wanted her three year-old daughter to start her bilingualism process at a younger age. She summed up her experience as followed:
"I always encouraged my child to speak both Mandarin and English at home. When she spoke English to me, I responded to her in English. When she spoke Mandarin to me, I responded to her in Mandarin" (quote from interview of November 5, 2009).

## Choice of community

Demographic data collected at the beginning of the first in-depth interview demonstrated that all participants resided in racially integrated neighborhoods where their children might grow up in multilingual settings. The role of the community setting in enhancing their children bilingualism was highlighted by two participants, especially Veng when he commented that:
"We live in a community that does not share our heritage language, so interacting with people from a variety of cultural and linguistic background was a challenge for my children when we first moved here in South Texas. We currently face the challenge of finding a network of people speaking mandarin to provide our children with an opportunity listen and speak our heritage language, since there is not an integrated community of Chinese around here. (quote from interview of November 15, 2009).

Furthermore, the importance of community choice was also emphasized by Chofo who assented:
"One of the biggest challenges of raising a balanced bilingual child in the United States is that we live in a place where people speak different languages (English and Spanish) than my heritage language. There is a very small Chinese-speaking community in South Texas. When my child noticed the difference between the main languages spoken in this area and my heritage language, she consciously opted to speak English. She quickly learned how to choose language when talking to different audiences. She, now know exactly to whom and where she has to talk to in us or our Chinese friends in Mandarin" (quote from interview of November 16, 2009).

The second research question was: how do Chinese immigrant parents overcome these boundaries to ensure their children old-timer status in their heritage culture in a predominantly English speaking society? Two themes emerged from interviews' data.

## Heritage - Language support.

Almost all of the participants (five of six) have real concerns qualms finding support for their heritage language in public school districts in South Texas for their children. Hui, contrary to Shanyu who adopted a different bilingual approach, stated her discomfort in the following terms:
> "My child is located in a disadvantaged situation since the majority of her classmates are Hispanics and Americans. She does not have any Chinese friend at school. Even though teachers support and instruct bilingualism at school, the languages would be English and Spanish, not Mandarin. I have to find additional support for her in order to make sure that she will not lose our heritage language and culture. I do not want her to be called a banana (Yellow outside but white inside) a label used to) when visiting our home country. Banana is a label used in my home country to call children born from Chinese parents raised in the United States who can pass as native. I have to do whatever I can to build up her Chinese
feeling, pride and identity as a Chinese - born person. Thus, I am committed to do extra investments in order to achieve this parietal's objective (quote from interview of November 13).

Similarly, YuFa expects her child to be able to achieve the required fluency and academic proficiency in Mandarin. She seconded Shanyu's viewpoints arguing that:
"My child's teachers barely provide language support for my child and show little interest toward our language and culture. At school, some of the teachers and staff are only interested in learning some survival Mandarin. The school does not provide a structural heritage support. Once, the school requested me to give a talk on the Chinese New Year. However, in this area of South Texas, teachers barely pride other minority students' heritage language and cultures within elementary classrooms. The focus here is mainly on English and Spanish. Other minority parents have to fight in order make their voices heard. I hope that teachers and schools, here in South Texas, can do more to bolster up my child's pride of being Chinese" (quote from interview of November 13, 2009).

After collecting participants' narratives through the first in-depth interview, the second one focused on investigating on extra investments? Chinese Immigrant parents in South Texas do in order not only to support their children heritage language learning process, but also to enhance their pride in being Chinese.

## Chinese Immigrant Parents' Bilingualism Strategies

During the second in-depth interview, the authors asked participants to summarize their different balanced bilingualism strategies in other to inform other parents who are experiencing the same situation in a predominantly English speaking setting. Participants agreed that there are no recipes to ensure immigrant children bilingualism-biculturalism developmental competences. The experience could vary from one family to another. At least, they recognized that raising bilingual children requires some careful planning and extra time in order not only to ensure their children's oral fluency and proficiency in Mandarin, but also to build their Chinese identity, feeling and pride.

Those additional investments included some key strategies like: extensive use of Chinese language TV (especially children's TV and cartoons); building up a network of peers for their children while attending Chinese language and cultural school after schools and on weekends; fostering abundant interactions with peers and adults from the heritage culture in Mandarin; participation in heritage culture festivals - parties and encounters in the United States or back home; enrollment of their children in summer camps taught in Mandarin in the United States or back home; home-based reading practices in Mandarin; the use of heritage movies and music; extended visits to home country during summer periods, at least one every two years, providing their children with the linguistic and cultural opportunity to learn from Chinese cultural sources in order to be completely immerse within the culture; extended visits of grand-parents or relatives who do not understand and speak English at all, etc.

All these additional activities required large investments from parents and had two objectives: a) ensure their children old-timer status in their heritage culture in a predominantly English speaking society; and b) to avoid their children dropping consciously or unconsciously their heritage language in favor of using the dominant one, English, when with siblings, peers and others from the heritage culture in a predominantly English speaking community. The above assumptions were shared by all participants, except for Shanyu who favored the use of both languages simultaneously in public or private settings.

## Discussion \& Implications

Data analysis demonstrated that (1) perceptions of the heritage language in a predominantly English speaking society; (2) bilingual children's language preference;
(3) choice of community; (4) heritage - Language support; and (5) Chinese immigrant parents' bilingualism strategies are real challenges faced by participating parents when raising their children bilingually in South Texas where the main focus of bilingualism, especially duallanguage education is English - Spanish. In fact, Chinese immigrant minority parents’ perception's and attitudes toward their heritage language instruction are quite different from the majority of minority in South Texas.

Lessons from participants supported previous work cited in our literature review section regarding the selection of a language setting for bilingual children. Data confirmed that English is found to be used in public, formal academic, and work contexts; conversely, minority languages are found to be used in private and informal relational family contexts (Fitts, 2009; Urciuoli, 1996).

Data from the interview suggested that the majority of participants stressed the importance of their heritage language in private settings. Such viewpoint might make their children consider their heritage language - Mandarin- as inferior, old-fashioned, and valueless (Baker, 2000). Moreover, findings suggested that there is a lack of minority language learning resources and environments, and support from schools for Chinese immigrant minority parents and children. This is due to participants' place of residence in predominantly Hispanic areas where Chineseoriented language learning resources and Chinese-speaking communities were limited.

Although researchers have studied the impact of bilingualism on children's cognitive, intelligent, and academic skill development in school settings, researchers know relatively little about bilingual parents of bilingual students' viewpoints and experiences in raising balanced children in a predominantly English speaking society or in a predominantly Spanish speaking communities when the focus of school-aged children's bilingualism is English and Spanish. In such settings, other immigrant minority students' linguistic and cultural experiences are likely to be left out in elementary classrooms, at least.

Actually, raising balanced bilingual children is an ultimate parental goal for most participants in a monolingual setting. Interview data analysis demonstrated that all participants did whatever they could to avoid their children being called "banana" by their peers back home. It is a parents' failure if your child(ren) is/are considered as a banana assumed all participants. In other words,
raising a balanced bilingual child, in a predominantly English speaking society, means developing not only linguistic competencies and proficiencies, but also an intercultural identity, feeling and pride to be considered as an authentic old-timer (cultural insider) of our research participants' heritage culture.

From the above discussion, we suggest that Chinese immigrant parents' expectations for their children differ from the majority of minority parents in South Texas. They have to teach their children how to ignore mainstream and other minorities' negative perceptions about their heritage language and culture. That is, any language must not be considered as superior to another. Simply put, a minority language has its right (May, 2007) to exist in a predominantly monolingual society and do not require approval from the mainstream to stand up.

Moreover, in South Texas, where emphasis on bilingual education is mainly put on English and Spanish, educators should realize that there are other immigrant minorities whose heritage language is not Spanish with different schooling expectations for their children. Therefore, school district educational managers and school teachers and staff in charge of dual-language education in South Texas, especially at the elementary level, should be aware this situation . They should find alternative strategies to dual-language education English-Spanish aimed at providing Chinese immigrant families with the opportunity to raise balanced bilingual children too.

## Implications Dual Language Education

Findings from this paper have some implications for dual-language teacher education and teacher education. First of all, for an informed reader of bilingual teacher education, research results reported here suggested that raising balanced bilingual children in South Texas is crucial for dual language teacher preparation. In fact, the ultimate goal of enrichment dual language programs cannot be limited to the reduction of the academic achievement gap in second and in first language (Collier and Thomas, 2004). In other words, dual language education goes beyond closing the academic gap. It prepares children to becoming cultural insiders or old-timers of two cultures. Thus, dual language teachers cannot teach what they don't know (Howard, 2006).

In fact, becoming a cultural insider of two or more cultures is a complex process (Hundeide, 2003) which cannot be fully achieved while pre-service teachers are enrolled in dual language teacher education programs (Ekiaka, 2009). It is practically impossible for bilingual teacher educators to fully train dual-language pre-service teachers to become old-timers of at least two cultures in two to four years. Thus, preparing effective dual-language teachers intrinsically depend on how parents of future bilingual children raise them to be balanced bilingual or not.

Certainly, Chinese Immigrant parents experiences in raising balanced bilingual children in a South Texas community where the target languages for dual-language programs is English and Spanish is different from other minority groups. It does follow from data analysis that immigrant families' ultimate parental goal of raising bilingual - biliterate-bicultural children consist of helping their children also old-timer of their heritage culture.

Data analysis suggested directly the importance of maintaining a cultural insider status in heritage culture. This parental endeavor set the bases for dual-language teacher education. Because, developing the old-timer status in heritage and mainstream cultures is, without any doubt, one of the required qualifications of a balanced dual-language teacher. Therefore, strengthening unbalanced dual-language pre-service teachers, cultural insider status in both cultures maybe a daunting mission for dual-language teacher educators.

This study underlined participants' struggles when raising balanced bilingual children. Findings illustrated the different strategies they used in order to achieve their parental goals. Definitely, extra investments are key factors for raising balanced bilingual children in a predominantly English speaking society.

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# Hispanic Students and Hispanic Teachers; a Comparison of Student Demographics and Teacher Employment Rates in Northeast Texas Public Schools 

Chuck Holt, Maria Hinojosa \& Art Borgemenke<br>Texas A\&M University - Commerce


#### Abstract

The purpose of this study was to examine the rate of change in Hispanic student enrollment and to compare that shift in demographics to the number of Hispanic teachers in Northeast Texas public schools. Researchers in diverse school settings in one Texas educational service center area conducted this study. Additionally, this research examines the growth rate of Hispanic students in the public schools over determined time periods in an attempt to ascertain whether a correlation exists between the numbers of Hispanic teachers in public schools to the growth rate of Hispanic student enrollment. Findings indicate that the number of Hispanics in teaching roles is not increasing in proportion to the growth rate of Hispanic students in this geographic area. Keywords: Hispanic teachers, diversity, demographics


"For the first time in modern Texas history, Hispanic students now make up a majority of those enrolled in Texas public schools. Newly released enrollment statistics from the Texas Education Agency (TEA) for the 2010-2011 school year show there are 2,480,000 Hispanic students in the public schools, representing 50.2 percent of the total enrollment" (TEA, 2011). Close to half of Hispanic students in the state of Texas are Limited-English Proficient (LEP), (TEA, 2008). The population growth of LEP students in the region (North Central and East Texas) has been 23.9\% since school year 2003-04. Many school districts are having difficulty meeting the needs of their English language learners (ELLs), which include many Hispanic students.

Non-English speaking students represent the fastest growing student population segment in the United States (Camarota, 2004). Children of U.S. undocumented immigrants comprise $6.8 \%$ of the total student population, with $73 \%$ of them born in the United States and therefore are U.S. citizens (Passel \& Cohn, 2009). In 2007, the Hispanics accounted for $60 \%$ of the population growth in Texas; it is projected that by 2015, Hispanics may outnumber Anglos in the state (Eschbach, 2009). By the year 2010, one out of every five Americans will identify themselves as Hispanic with cultural ties to a Spanish-speaking country such as Mexico (Dingfelder, 2005).

Not surprisingly, Hispanic students represent the single fastest growing Texas student demographic category by a wide margin. Hispanic children from birth to 11 years of age are the majority ethnicity in the state (Eschbach, 2009). The number of Limited English Proficient
(LEP) students in Texas is likewise increasing. The Texas Education Agency (TEA) announced in the publication Enrollment in Texas Public Schools, 2009-10 (2010b) an increase of LEP students of " 47.1 percent between school year 1999-00 and school year 2009-10". TEA also reports "the number of students receiving bilingual or ESL instructional services increased by 56.5 percent. Both LEP students and students receiving bilingual or ESL services experienced increases of more than a quarter of a million students" (p. 20).

## Significance of the Research

The U.S. Census Bureau projects that by the year 2050; about 50 percent of the U.S. population will be African American, Hispanic, or Asian. These relatively youthful minority populationsHispanics in particular-will drive demographic growth and diversification well into the twentyfirst century (Alliance for Excellent Education's Fact Sheet, 2009). Ruiz-de-Velasco, Fix, and Clewell (2000) contended that there is no American institution that has felt the effect of immigration flows more forcefully than the nation's public schools, and no set of American institutions is arguably more critical to the future success of immigrant integration. This shift in demographics will impact the future economic and social well being of the United States. The resulting impact on the socio-economic well being of the country is one of many reasons why it is imperative to maintain high educational standards for these students; however, current statistics demonstrate that there is a wide achievement and attainment gap that must be bridged before that goal is met (Fact Sheet, 2009). Staggering educational realities from the report are listed below.

1. In the year 2005 , only $52 \%$ of all Hispanic males graduated from high school on time, compared to $74 \%$ of all White males. In Texas, Hispanic dropout rates are nearly triple the number of white students who dropout. (TEA, Division of Performance Reporting. (2010c). Pocket edition: 2009-10 Texas public school statistics.)
2. Only $20 \%$ of Hispanic students leave high school prepared for college, compared to $40 \%$ of Whites.
3. Of students entering college, only 7 percent are Hispanic, while 76 percent are white.

In the ESC 8 area studied, the 2008 dropout rate for Hispanic students is double that of all students in the area and five times that of White students (TEA, 2008).

## Purpose of the Study

The purpose of this study was to investigate the growth rate of Hispanic student enrollment in the ESC 8 service area during the selected five academic years and compare that growth rate to the growth rate of Hispanic teachers in the same service area. The researchers also investigated the correlation between the number of Hispanic teachers and the number of Hispanic students in the ESC 8 public schools.

## Review of Literature

The results of this study reveal rapid change in student demographics in Northeast Texas. The shifting student demographics described herein signal a need for educators to try and anticipate the educational needs of the new population. The Center for Applied Linguistics (2000) emphasized the need for second language learners to have role models that demonstrate cultural diversity. Seeing others who have experienced the same educational challenges that the second language learner is experiencing can provide motivation for success in the school setting. This issue of second language learner success has become of greater importance to schools, as the accountability system requires continued improvement in student achievement and graduation rates, especially within the fast-growing Hispanic subgroup.

## Lack of Diversity

According to TEA's Division of Performance Reporting (2010), in the school year 2009-2010, $48.6 \%$ of Texas students were Hispanic. Although the demographic shift continues and Texas is becoming a majority-minority state, only $2 \%$ of teachers in ESC 8 area are Hispanic (Texas Education Agency, 2009a). In comparison, 22.5\% of Texas teachers are Hispanic (Texas Education Agency, Division of Performance Reporting, 2010). The statewide growth of Hispanic teachers was over 3\% during the study period while the growth rate in ESC 8 was only $1 \%$.

Across the United States in school year 2007-2008 the U.S. Department of Education (USDE) National Center for Education Statistics (2010) reported that there were approximately 3,404,520 public school teachers. Of the public school teachers, "83 percent were non-Hispanic White, 7\% were non-Hispanic Black, and 7\% were Hispanic. During the same period in Texas, there were 321,729 teachers, $22 \%$ of the teachers were Hispanic. In the study area (ESC 8 ) only $2 \%$ of teachers (95) were Hispanic (TEA, AEIS, 2008 p.3). According to the Texas Education Agency's PEIMS statistics, between 2003 and 2008 there was an increase in the number of Hispanic teachers or about a 3\% increase but the percent change in Region 8 was much smaller, an approximate $1 \%$ increase.

## English Language Learners

Many Hispanic students are challenged to learn English while simultaneously studying core academic courses. The number of LEP students in Texas is on the rise, according the Texas Education Agency (TEA) publication Enrollment in Texas Public Schools 2009-2010 (2009c). The publication denoted a $47.1 \%$ statewide growth rate in LEP students over the previous ten years; the number of students receiving bilingual or ESL services increased by $56.5 \%$.
Regionally, the growth of LEP students during the same years was $58.7 \%$ (TEA, 2011). English language learners face many problems and barriers as they attend public schools (Ruiz-deVelasco et al, 2000), including social, economic, cultural, and educational challenges.

## Student Achievement

Historically, in the United States, Hispanic students have not achieved at the same educational level as their non-minority peers. Comparing Asian, Anglo, African American, and Hispanic students ages 18-24, Hispanics have the lowest enrolled in-school percentage rate as well as the
lowest post-diploma percentage rate (Eschbach, 2009). A significant number of Hispanic students, many of whom are LEP students, are lost annually prior to graduation (Johnson, 2006).

With the increased accountability standards mandated by state assessments and the No Child Left Behind Act (NCLB) of 2001, schools must be concerned with improving low academic performance and decreasing the high dropout rates of the immigrant student population (Fry, 2003). Hispanic students are often served in schools with the most at-risk students. In academic year 2007-2008, approximately $78 \%$ of U.S. secondary school students attended high-poverty campuses while $73 \%$ of U.S. elementary students attended high poverty campuses. (USDE National Center for Education Statistics, 2010b,).

Significant research exists as to why Hispanic students struggle and drop out at higher levels than other student groups. Low expectations; archaic decision-making structures; ill- prepared teachers and administrators; lack of coordination among schools, parents, and communities on behalf of children; negative self-image; peer group pressure; poverty; tracking; and other school policies are among the major factors that contribute to vulnerability of Hispanic students (Reyes, et al, 1999).

## Hispanic Culture

Hispanic culture differs significantly from the current majority Anglo culture in the United States (Neuliep, 2006). Skogrand, Hatch, and Singh (2005) posited that the core cultural values of Hispanics are more connected to the importance of the family and a sense of belonging to a group. Hispanics typically have close-knit extended family units where children and elderly members of the family are important group. Hispanics have a strong sense of responsibility, duty, and loyalty to their extended families. According to Ehrlich (1995) and Pajewski and Enríquez (1996), Hispanics view the familial group as being more important than any one member or individual and cooperation is also valued more than competition in the Hispanic culture. These attributes and values are not limited to the family but extend to the classroom and the workplace as well. It is important that school leaders understand Hispanic culture to help create a school climate where these students are allowed to reach their potential

## Methods and Procedures

Setting. The ESC 8 area defines the geographic area of the study. The region encompasses 15 counties in Northeast Texas and includes 33 public school districts. The public schools located in Region 8 educate over 56,000 students. This investigation used existing demographic data from both TEA and local school districts to establish Hispanic student growth rates as well as to verify minority representation in school staff roles over time.
Participants. Hispanic students and teachers in Texas over 1, 3, and 5-year study periods were evaluated. The number of students and teachers in Texas, categorized by year, were examined (see Tables 1-2). Academic school years 2002-03 through 2007-08 were examined to determine if any demographic anomalies existed between Hispanic student population and Hispanic teacher numbers.
Data collection and analysis. Data were retrieved from the Texas Education Agency (TEA) Academic Excellence Indicator System (AEIS) database
(http://ritter.tea.state.tx.us/perfreport/aeis/). The TEA AEIS
(http://ritter.tea.state.tx.us/perfreport/aeis/about.aeis.html) contains an array of data regarding teacher and student characteristics, student performance, and school-related factors. For purposes of this investigation, data [(including student ethnic percentages (i.e, Hispanic and all students) and teacher percentages (i.e., Hispanic and all teachers)] for school years 2002-03, 2005-06, and 2007-08 were retrieved for Texas and Region 8. Regional and district AEIS reports were used to analyze Hispanic student achievement data. All data were transferred into the Statistical Package for the Social Sciences (SPSS) for analysis. An SPSS data file was created for the 1, 3, and 5-year study periods.

Descriptive statistics were examined (see Tables 1 and 2) and correlations of growth (see Table 3) were developed from the data to establish growth trends as a baseline of study. The study did not include an examination of reliability and concurrent validity. Archived data from the TEA were utilized. Data were not reported by individual, but rather identified as population subgroups as reported by the Texas Education Agency. Student ethnicity is collected upon registration for school; ethnicity is self-reported by teachers to their respective human resources offices. Thus, the findings of the current study are based upon the assumption that the student and teacher percentages were reported correctly.

## Results and Conclusions

The Hispanic student population continues to grow in Texas and Region 8. While overall student enrollment in Region 8 is stable, Hispanic student enrollment has grown $24 \%$ in the five years examined. Hispanic student performance has improved over the 5 -year study period; however Hispanic student completion rate and dropout rates lag behind both the White and all student subgroups. While the growth is not uniform among the 33 school districts included in Region 8 ESC, most schools experienced Hispanic student increases. It is theorized that this growth in the Hispanic demographic exists due to local industries typically utilizing recent immigrants for their labor force, therefore impacting the Hispanic student growth rate-an increase of almost double the state's rate of growth. This trend was consistent over 1, 3, and 5year study periods.

The number of Hispanic schoolteachers is proportionally smaller than the representative Hispanic school population in the area studied. In the five years studied, the Hispanic student enrollment grew from $12 \%$ to $15 \%$, while Hispanic teachers' numbers grew from $1 \%$ to $2 \%$ of the total teachers employed in Region 8. Statewide, Hispanic student enrollment grew from $43 \%$ to $48 \%$, while Hispanic teachers' numbers grew from $18 \%$ to $21 \%$

After retrieving the totals number of Hispanic students and Hispanic teachers in Northeast Texas, correlations were calculated to determine the relationships between Hispanic students and Hispanic teachers. Prior to such calculations, linearity and normality of data occurred (Onwuegbuzie \& Daniel, 2002), thus verifying the appropriateness of parametric correlation procedures.

The Pearson's $r$ for the 2002-2007 school between Hispanic student enrollment and Hispanic teachers yielded a statistically insignificant relationship, $(r(3)=.947, p<.001)$, a large effect size (Cohen, 1998). The strength of association was $.89 \%$ (i.e., squaring the $r$ value) and revealed a large degree of overlap between Hispanic students and Hispanic teachers. The $r, r$ squared values and the effect size range for the three time periods were analyzed (see Table 3). The research provided the Pearson correlation, the significance, and the number of academic years examined.

## Implications for Practice

The Public Education Department of the State of New Mexico described the challenges of second language teaching and learning thusly:

Language is the most overt expression of culture, and most of the learning process, both in school and in the home, is carried out through language. The child must relate and accommodate what has been learned in the home to the language and culture of the school. For the child whose language and culture matches that of the school, this can be, in itself, a challenge. For students whose linguistic and cultural fabrics are different from that represented in the school, the task is monumental. (New Mexico State Department of Education, 1989)

Reyes, Scribner, and Paredes-Scribner (1999) surmised that Hispanic students not only face challenges of language and culture differences; they are further challenged by the inadequate supply of professionals who share their cultural identity. Minority group recruitment and participation in teacher certification programs remain below expectations (Glassman, Chibulka, \& Ashby, 2002). Thus, there is a need for universities to actively recruit diverse candidates to enter the field of education.

In the geographic area examined in this study, the reduced student performance and increased drop-out rates of Hispanic students experienced by many of the representative schools might well be mitigated by the employment of additional Hispanic teachers. A study published by the Education Resources Information Center, overseen by the U.S. Department of Education reinforces the need for more Hispanic teachers. According to (Tan, 2001) Hispanic students who considered their teachers to be knowledgeable about their cultural experiences and backgrounds were more likely to succeed. Low-dropout schools had higher numbers of bilingual and Hispanic staff.

Understanding of the cultural and language barriers experienced by students and by ensuring that non-Hispanic leaders have a satisfactory level of understanding of LEP challenges and cultural issues is imperative (Reyes et al, 1999). As the demographics of these schools change rapidly, the recruitment of Hispanic teachers and specific cultural and best practices training for the existing teacher workforce might prove beneficial to student achievement in the public schools represented in this study.

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## Appendix

Table 1
Descriptive Statistics for Hispanic Teachers and Hispanic Student Enrollment in Northeast Texas Public Schools and Texas Public Schools from 2003-2008

|  | Northeast Texas Public Schools |  |  |  | Texas Public Schools |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Teachers |  | Student Enrollment |  | Teachers |  | Student Enrollment |  |
|  | Total | Hispanic | Total | Hispanic | Total | Hispanic | Total | Hispanic |
| Year | $n$ | $n$ | $n$ | $n$ | $n$ | $n$ | $n$ | $n$ |
| 2003- |  | 46.5 | 56,034 | 6,612 |  | 52,436 | 4,311,502 | 1,886,319 |
| 2005- |  | 66.78 | 56,832 | 8,100 |  |  | 4,505,702 | 2,040,449 |
| 2007- |  | 95.3 | 56,604 | 8,734 |  | 68,985 | 4,749,571 | 2,275,098 |

Table 2
Descriptive Statistics for Hispanic Student Completion Rate I / Drop-Out Rate from 2003-2007

|  | Completion Rate I |  |  | Drop-Out Rate |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Total | Hispanic |  | Total | Hispanic |
| Year | $n$ | $n$ |  | $n$ | $n$ |
| $2003-2004$ | 89.1 | 82.2 |  | $0.4^{*}$ | $0.7^{*}$ |
| $2005-2006$ | 92.5 | 84.6 |  | 1.2 | 2.2 |
| $2006-2007$ | 90.9 | 82.2 |  | 1.3 | 2.5 |

Note. Dropout rates for 2002-03 were calculated by Texas Education Agency using prior formula.

Table 3
Correlation Coefficients, Coefficients of Determination, and Effect Sizes for Hispanic Teachers and Hispanic Students in Northeast Texas Public Schools (2003-2008)

| Correlation | $r$ | $r^{2}$ | Effect Size |
| :--- | :---: | :---: | :---: |
| Hispanic Teachers and Hispanic Students <br> $2003-2008$ | .947 | $0.89 \%$ | Large |

## Research Briefs

# A Note on English Language Development in One-Way vs. Two-Way Bilingual Programs 

Pauline Dow<br>Ysleta Independent School District<br>Josefina V. Tinajero<br>University of Texas at El Paso<br>Stephen Krashen<br>University of Southern California

After a review of research on two-way versus one-way programs, Krashen (2005) concluded that only a handful of studies exist, and "they report generally positive but variable attainment in academic English among English learners. In studies comparing two-way children with those in other options, sample sizes are often small, there is usually no control for initial differences, and scores are sometimes high at the beginning and then decline. In this study, we present a two-way/one-way comparison that attempts some control for initial differences, and that looks at performance over a long term (six years).

## Procedure

## Subjects

Two hundred children participated in the study. All entered $2^{\text {nd }}$ grade in 2002-2003 and entered $6^{\text {th }}$ grade in 2007-2008. Students were English Learners (ELs) in a one-way bilingual education program ( $\mathrm{n}=69$ ), ELs in a two-way bilingual program $(\mathrm{n}=45)$, Non-ELs in a two-way bilingual program ( $\mathrm{n}=34$ ), and Non-ELs in a non-bilingual program $(\mathrm{n}=52)$. Nearly all the EL children were classified as economically disadvantaged, while only about $1 / 4$ to $1 / 3$ of the non-EL children were economically disadvantaged (table 1).

Table 1: SES status of subjects

|  | free meals | reduced cost meals | not economically <br> disadvantaged |
| :---: | :---: | :---: | :---: |
| EL one-way | $63(91 \%)$ | $5(8 \%)$ | $1(2 \%)$ |
| EL two-way | $38(84 \%)$ | $3(7 \%)$ | $4(10 \%)$ |
| Non-EL two-way | $21(62 \%)$ | $5(15 \%)$ | $8(24 \%)$ |
| Non-EL regular | $25(48 \%)$ | $11(21 \%)$ | $16(31 \%)$ |

Source: Canutillo ISD PIEMS Family Survey, 2002
Spanish was the language spoken in the home for all ELs. There were small pretest differences in spoken English, with the 2-way children slightly outperforming the 1-way children on the LAS oral test $(\mathrm{d}=.26)$, given in pre-K, K , and grade 1 (table 2 ).

Table 2: Performance on LAS

| pretests | N | English | Spanish |
| :---: | :---: | :---: | :---: |
| one-way | 69 | $1.45(.87)$ | $3.87(.84)$ |
| two-way | 45 | $1.69(.32)$ | $3.93(.78)$ |
| effect size |  | 0.26 | 0.07 |

## Measures

Three measures were used.

The TAKS (Texas Assessment of Knowledge and Skills) measures reading comprehension and vocabulary and English. The TAKS is a criterion-referenced test administered in the spring of each year. Scores presented here are raw scores, which range from zero to 42 . All students in this analysis took the TAKS in grade 6 .

The APRENDA 3 (La prueba de logros en español, Tercera edición), is also a test of reading comprehension, but in Spanish, and has sections for reading comprehension and vocabulary. ELs took the APRENDA 3 in grade 4.

The Stanford Achievement Test 10 (SAT-10) is produced by the same company as the APRENDA 3 and is considered to be similar. It also measures reading comprehension and vocabulary and English. All students in this study took the SAT-10 in grade 6. Results are presented as normal curve equivalents.

## Treatment

Students were assigned to either the one-way (90/10) or the two-way (50/50) program in Kindergarten (5-6 year olds) through sixth grade (11-12 year olds). In the one-way program, children received $90 \%$ of instruction in Spanish (L1) and 10\% in English (L2); this pattern begins in Kindergarten, with a gradual decrease in the percent of Spanish and an increase in the percent of English until the two languages are used in equal amounts by the fifth grade. In the two-way program children are taught in Spanish $50 \%$ of the day and English $50 \%$ of the day. In both programs (one-way and two-way), formal literacy instruction, in Kindergarten through second grade, is provided in the native language of the child. This means that children whose native language is Spanish learn to read in Spanish. Formal literacy instruction in the second language of the child begins in third grade, and all other core subject matter is delivered in two languages from Kindergarten through sixth grade.

## Results

One-Way versus Two-Way: English Learners
As presented in table 1, the two-way children significantly outperformed the one-way children on the SAT 10 reading test $(\mathrm{t}=2.69, \mathrm{df}=103, \mathrm{p}=.008$, two tails $)$ and math test $(\mathrm{t}=3.43, \mathrm{p}=$ .001 , two tails) and the size of the effect was fairly substantial in both cases.

Table 1: SAT 10 results, grade 6

| SAT 10 | reading | math |
| :---: | :---: | :---: |
| one-way | $40.98(17.2)$ | $52.36(17.7)$ |
| two-way | $50.28(17.1)$ | $63.25(13.7)$ |
| n | 65,40 | 64,41 |
| ES (Cohen d) | 0.54 | 0.69 |

The two-way children also scored better on the TAKS reading and math tests, but the difference was small and not statistically significant (table 2 ; for reading, $\mathrm{t}=1.09, \mathrm{df}=107, \mathrm{p}=.276$, two tails; for math, $\mathrm{t}=.330, \mathrm{df}=107, \mathrm{p}=.742$, two tails.

Table 2: TAKS results, grade 6

| TAKS | Reading | math |
| :---: | :---: | :---: |
| one-way | $32.63(7.4)$ | $34.69(9.6)$ |
| two-way | $34.22(7.3)$ | $35.32(9.6)$ |
| n | 68,41 | 68,41 |
| ES | 0.22 | 0.07 |

Two-way students also did better on the APRENDA 3 test in Spanish, given in grade 4. The difference in reading was on the borderline of statistical significance $(\mathrm{t}=1.63, \mathrm{df}=107, \mathrm{p}=$ .104 , two tails), but the math results were clearly significant $(t=2.58, \mathrm{df}=107, \mathrm{p}=.011$, two tails).

Table 3: APRENDA 3 results, grade 4

| APRENDA 3 | reading | math |
| :---: | :---: | :---: |
| one-way | $65.9(17.2)$ | $70.02(20.2)$ |
| two-way | $70.94(15.0)$ | $79.13(18.8)$ |
| n | 63,40 | 66,40 |
| ES | 0.31 | 0.47 |

Two-way versus Regular Program: NON-ELs
Tables 4 and 5 show that participating in the two-way program did not impede the development of NON-EL students. On the SAT 10 (table 4), NON-ELs in two-way were slightly but not significantly better in reading than NON-ELS in regular programs ( $\mathrm{t}=.502 ; \mathrm{df}=79 ; \mathrm{p}=.617$ ) and on math they were significantly better $(t=2.387 ; \mathrm{df}=81 ; \mathrm{p}=.019)$.

Table 4: SAT 10, grade 6, NON-ELs

| SAT 10 | reading | math |
| :---: | :---: | :---: |
| Two-way | $56.87(20.4)$ | $69.95(15.9)$ |
| regular | $54.66(18.6)$ | $60.56(18.6)$ |
| n | 32,49 | 33,50 |
| ES $($ Cohen d) | .12 | .88 |

TAKS test results followed a similar pattern, with two-way NON-ELs once again doing slightly but not significantly better in reading ( $\mathrm{t}=.848 ; \mathrm{df}=84 ; \mathrm{p}=.399$ ), and clearly doing better in math, with the difference falling just short of statistical significance using a two-tail test $(\mathrm{t}=$ $1.530 ; \mathrm{df}=84 ; \mathrm{p}=.130$ ).

Table 5: TAKS, grade 6, NON-ELs

| TAKS | reading | math |
| :---: | :---: | :---: |
| Two-way | $36.71(4.8)$ | $38.15(7.3)$ |
| regular | $35.62(6.4)$ | $35.62(7.6)$ |
| n | 34,52 | 34,52 |
| ES (Cohen d) | .19 | .34 |

ELs compared to Non-ELs
Tables 6 and 7 present a comparison of 2-way ELs after six years in two-way bilingual education with 2-way Non-ELs. In this comparison, no attempt was made to control for socio-economic class.

Table 6: SAT 10, grade 6. ELs vs. NON-ELs

| SAT 10 | reading | math |
| :---: | :---: | :---: |
| Two-way ELS $(\mathrm{n}=40)$ | $50.28(17.1)$ | $63.25(13.7)$ |
| Two-way NON-ELS $(\mathrm{n}=$ | $56.87(20.4)$ | $69.95(18.6)$ |
| 32$)$ | -.35 | -.41 |
| ES (Cohen d) |  |  |

Table 7: TAKS, grade 6, ELs vs. NON-ELs

| TAKS | reading | math |
| :---: | :---: | :---: |
| Two-way ELS $(\mathrm{n}=41)$ | $34.22(7.3)$ | $35.32(9.6)$ |
| Two-way NON-ELS $(\mathrm{n}=$ | $36.71(4.8)$ | $38.15(7.3)$ |
| 34$)$ | -.35 | -.33 |
| ES (Cohen d) |  |  |

## Discussion and Conclusion

English learners in the two-way program scored significantly better than ELs on the SAT 10 in both English reading and math in grade 6. The effect sizes were .54 (reading) and .69 (math), which is considered a medium effect (. 8 is considered a large effect). They also did better in math when tested in Spanish in grade 4, and were marginally better in Spanish reading (Aprenda $3)$.

Recall, however, that the two-way children did slightly better on the LAS-O pretest of oral English, given between pre-K and the end of grade 1. Although the LAS-O is a measure of conversational English, and is only a modest predictor of tests of academic language, such as the SAT 10, (e.g. Saville-Troike, 1984) it is of interest to consider its potential effect. A crude way of determining this is simply to subtract the pretest effect size $(\mathrm{d}=.26)$ from the posttest effect sizes, resulting in an adjusted reading effect size of .28 , a small but positive effect.

Two-way ELs also did better on the TAKS in grade 6, but the differences were not significant. Subtracting the pre-test (LAS-0) effect size from the TAKS grade six reading score results in a near zero effect size (-.04).

Thus, two-way students do as well as or better than one-way students, even with conservative adjustments of the grade six results. They also do slightly better on tests of Spanish reading.

Our results also confirm that parents of non-ELs have nothing to fear by allowing their children to participate in 2-way bilingual programs: Non-ELs in two-way programs do at least as well as those in regular programs, and appear, in fact, to do slightly better on tests of English and math.

As expected, non-ELs outperformed ELs on tests of English and math. What is remarkable, however, is that the ELs clearly did well, performing well above national norms in math, and just above the $50^{\text {th }}$ percentile in English. In fact, the "achievement gap" between ELs and non-ELs was six and a half percentiles on the SAT10 in reading, which could easily be made up by reading about ten books over the summer vacation (Kim, 2003).

The results of this one study do not, of course, make the case for the superiority of two-way airtight, but they certainly provide reasons for optimism.

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## Call for Papers

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[^0]:    Note. SEI=structured English immersion; TBE=transitional bilingual education; E=experimental; $\mathrm{C}=$ control.

