INVESTIGATING THE RELATIONSHIP BETWEEN URBAN FIRST
AND SECOND GRADE CLASSROOM TEACHERS’ SENSE OF
EFFICACY FOR LITERACY INSTRUCTION AND THE
READING ACHIEVEMENT OF THEIR
HIGHLY MOBILE STUDENTS

A Dissertation

by

CORINNE MONTALVO VALADEZ

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2006

Major Subject: Curriculum and Instruction
INVESTIGATING THE RELATIONSHIP BETWEEN URBAN FIRST
AND SECOND GRADE CLASSROOM TEACHERS’ SENSE OF
EFFICACY FOR LITERACY INSTRUCTION AND THE
READING ACHIEVEMENT OF THEIR
HIGHLY MOBILE STUDENTS

A Dissertation

by

CORINNE MONTALVO VALADEZ

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY

Approved by:

Co-Chairs of Committee, Norvella P. Carter
Patricia J. Larke

Committee Members, Stephanie L. Knight
Diane Kaplan

Head of Department, Dennie L. Smith

August 2006

Major Subject: Curriculum and Instruction
ABSTRACT

Investigating the Relationship Between Urban First and Second Grade Classroom Teachers’ Sense of Efficacy for Literacy Instruction and the Reading Achievement of Their Highly Mobile Students. (August 2006)

Corinne Montalvo Valadez, B.S., Texas A&M University - Corpus Christi; M.S., Texas A&M University - Corpus Christi

Co-Chairs of Advisory Committee: Dr. Norvella P. Carter
Dr. Patricia J. Larke

This correlation design study investigated the relationship between urban first and second grade classroom teachers’ sense of efficacy for literacy instruction and the reading achievement of their highly mobile students. Teachers’ sense of efficacy for literacy instruction was shown in previous studies to be correlated to student achievement.

To obtain data for this study, a modified version of the Teachers’ Sense of Efficacy for Literacy Instruction Scale (TSELS) questionnaire was administered to 48 urban first and second grade classroom teachers within a single school district located in the southwestern region of the United States. Students’ pre and posttest scores in fluency and comprehension obtained from beginning- and end-of-the-year Texas Primary Reading Inventory (TPRI) provided additional data on student achievement.

Analyses using a multivariate analysis of variance (MANOVA) determined that there was not a statistically significant difference between urban first grade classroom
teachers’ sense of efficacy and urban second grade classroom teachers’ overall sense of efficacy for literacy instruction for their highly mobile students: F(2, 45a0 = .94, p = .40; Wilks Lambda = .96 at p, .05; partial eta squared = .04. There was not a statistically significant difference between first and second grade classroom teachers’ sense of efficacy on the subscales of efficacy for integrating the language arts and differentiating instruction.

Paired sample t-tests determined there was significant growth in the reading achievement of highly mobile first grade students and highly mobile second grade students. Independent samples t-tests found no significant difference in the growth of reading achievement between highly mobile first grade students and highly mobile second grade students. Finally, multiple regression analyses concluded that there was not a statistical relationship between teachers’ sense of efficacy for literacy instruction and the reading achievement of their highly mobile first and second grade students.
DEDICATION

This work is dedicated to my wonderful and loving family. My pursuit of this degree has caused me to miss many family functions, and yet, you have continued to provide me with support and encouragement to follow my dreams. Thanks to each of you, this dream has become a reality. I look forward to spending time with each and every one of you.
ACKNOWLEDGEMENTS

This work has been completed because of the support of many individuals. First of all, I would like to thank Dr. Daniel Pearce for believing in me. You were the first person to suggest and encourage my pursuit of a doctorate.

I would like to collectively and individually acknowledge and thank the members of my committee, four strong and intelligent women who have graced me with their scholarship, support, and guidance. I would like to thank Dr. Diane Kaplan for her support during this process. I would like to acknowledge her for being my mentor in the reading component of this study. I am also indebted to Dr. Stephanie Knight for providing guidance and support when I needed it the most. Thanks are due to my co-chair, Dr. Patricia Larke, for her support and guidance. I want to express my sincere appreciation to my chair, Dr. Norvella Carter. Thank you for your countless hours of support, guidance, and prayer.

I am also indebted to the Corpus Christi Group: Vickie Moon-Merchant, Kim Livengood, Shanah Yandell, Debbie Vera, Ouida Plimper, and my dear friend, Patty Walter. Each of you has played an important part to my success. I did not know many of you when this journey began. However, throughout this journey, friendships have been made, bonds that will last a lifetime.
TABLE OF CONTENTS

| ABSTRACT | iii |
| DEDICATION | v |
| ACKNOWLEDGEMENTS | vi |
| TABLE OF CONTENTS | vii |
| LIST OF TABLES | x |
| CHAPTER |  |
| I | INTRODUCTION | 1 |
| Background of the Study | 1 |
| Social Cognitive, Socio-Cultural, and Social Learning Theories | 4 |
| Statement of the Problem | 7 |
| Purpose of the Study | 7 |
| Significance of the Study | 8 |
| Research Questions | 9 |
| Definition of Terms | 10 |
| Assumptions | 11 |
| Limitations of the Study | 12 |
| Summary | 13 |
| II | REVIEW OF LITERATURE | 14 |
| Background | 14 |
| Homelessness | 16 |
| Resilient Teachers | 20 |
| McKinney-Vento Act | 23 |
| Locally Transient Students | 28 |
| Reading Achievement | 34 |
| Beginning Reading Instruction | 35 |
| The Role of Comprehension in Beginning Reading Instruction | 37 |
| The Role of Fluency in Reading Instruction | 40 |
# TABLE OF CONTENTS (continued)

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficacy</td>
<td>47</td>
</tr>
<tr>
<td>Teacher Efficacy</td>
<td>48</td>
</tr>
<tr>
<td>Measures of Teacher Efficacy</td>
<td>52</td>
</tr>
<tr>
<td>Summary</td>
<td>56</td>
</tr>
<tr>
<td>III METHODOLOGY</td>
<td>58</td>
</tr>
<tr>
<td>Demographics of the Study</td>
<td>58</td>
</tr>
<tr>
<td>Population</td>
<td>64</td>
</tr>
<tr>
<td>Sample</td>
<td>64</td>
</tr>
<tr>
<td>Research Questions</td>
<td>68</td>
</tr>
<tr>
<td>Instruments</td>
<td>68</td>
</tr>
<tr>
<td>Pilot Study</td>
<td>71</td>
</tr>
<tr>
<td>Validity of the TSELS Instrument</td>
<td>71</td>
</tr>
<tr>
<td>Reliability of the Modified TSELS Instrument</td>
<td>72</td>
</tr>
<tr>
<td>Validity of the Modified TSELS Instrument</td>
<td>72</td>
</tr>
<tr>
<td>Reliability and Validity of the Texas Primary Reading Inventory</td>
<td>73</td>
</tr>
<tr>
<td>Research Design</td>
<td>73</td>
</tr>
<tr>
<td>Data Collection</td>
<td>74</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>76</td>
</tr>
<tr>
<td>Summary</td>
<td>78</td>
</tr>
<tr>
<td>IV RESULTS</td>
<td>79</td>
</tr>
<tr>
<td>Results and Analysis</td>
<td>79</td>
</tr>
<tr>
<td>Tests of Normality</td>
<td>79</td>
</tr>
<tr>
<td>Research Questions</td>
<td>80</td>
</tr>
<tr>
<td>Summary</td>
<td>94</td>
</tr>
<tr>
<td>V SUMMARY AND CONCLUSIONS</td>
<td>96</td>
</tr>
<tr>
<td>Research Questions</td>
<td>98</td>
</tr>
<tr>
<td>Discussion</td>
<td>103</td>
</tr>
<tr>
<td>Recommendations</td>
<td>106</td>
</tr>
<tr>
<td>Further Research</td>
<td>108</td>
</tr>
<tr>
<td>Summary</td>
<td>110</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>111</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>Page</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>A</td>
<td>130</td>
</tr>
<tr>
<td>B</td>
<td>133</td>
</tr>
<tr>
<td>C</td>
<td>136</td>
</tr>
<tr>
<td>D</td>
<td>138</td>
</tr>
<tr>
<td>E</td>
<td>140</td>
</tr>
<tr>
<td>F</td>
<td>142</td>
</tr>
<tr>
<td>G</td>
<td>144</td>
</tr>
<tr>
<td>H</td>
<td>146</td>
</tr>
<tr>
<td>VITA</td>
<td>167</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Teacher Participants for Selected Campuses</td>
</tr>
<tr>
<td>3.2</td>
<td>Teachers’ Cultural/Ethnic Identification for Selected Campuses ....</td>
</tr>
<tr>
<td>3.3</td>
<td>Teachers’ Years of Experience for Selected Campuses</td>
</tr>
<tr>
<td>3.4</td>
<td>First and Second Grade Student Population of Selected Campuses</td>
</tr>
<tr>
<td>3.5</td>
<td>Student Demographics of Selected Campuses</td>
</tr>
<tr>
<td>3.6</td>
<td>AEIS Indicators for Selected Campuses</td>
</tr>
<tr>
<td>3.7</td>
<td>Teachers’ Years of Experience</td>
</tr>
<tr>
<td>3.8</td>
<td>Teachers’ Level of Education</td>
</tr>
<tr>
<td>3.9</td>
<td>Teachers’ Ethnic Identity</td>
</tr>
<tr>
<td>4.1</td>
<td>Multivariate Tests</td>
</tr>
<tr>
<td>4.2</td>
<td>Tests of Between-Subjects Effects</td>
</tr>
<tr>
<td>4.3</td>
<td>Measures of Central Tendency for Efficacy Scores</td>
</tr>
<tr>
<td>4.4</td>
<td>Descriptive Statistics of the Reading Achievement of Highly Mobile Students</td>
</tr>
<tr>
<td>4.5</td>
<td>Comprehension Means by Grade Level</td>
</tr>
<tr>
<td>4.6</td>
<td>Wilcoxon Test Statistics</td>
</tr>
<tr>
<td>4.7</td>
<td>Mann Whitney Test</td>
</tr>
<tr>
<td>4.8</td>
<td>Paired Samples t-Test for Fluency Rates</td>
</tr>
<tr>
<td>4.9</td>
<td>Independent Samples Test of Reading Fluency Gain Scores</td>
</tr>
<tr>
<td>4.10</td>
<td>Independent Samples t-Test for Fluency Gain Scores</td>
</tr>
<tr>
<td>TABLE</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4.11</td>
<td>ANOVA A, B, and C Sense of Efficacy and Comprehension Scores</td>
</tr>
<tr>
<td>4.12</td>
<td>A, B, and C Standard Multiple Regression of Comprehension Scores for Highly Mobile Students and Teachers’ Sense of Efficacy</td>
</tr>
<tr>
<td>4.13</td>
<td>A, B and C ANOVA Sense of Efficacy and Fluency Gain Scores</td>
</tr>
<tr>
<td>4.14</td>
<td>A, B, and C Standard Multiple Regression of Gain Scores in Fluency and Teachers’ Sense of Efficacy</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

For nine months the infant grows and grows in the womb … At the end an x-ray shows the small but developed body quite bent over on itself and cramped; yet so very much has happened – indeed, a whole new life has come into being. For some hundreds of thousands of American children that stretch of time, those months, represent the longest rest ever to be had, the longest stay in any one place. (Coles, as cited by Kozol, 1988, p. 24)

Background of the Study

Schools are faced with growing numbers of homeless and locally transient students who have been perceived by many teachers as being underserved academically (Lash & Kirkpatrick, 1990; Masten et al., 1997). The majority of research regarding homeless and locally transient students presented a deficit view of highly mobile students (Masten et al., 1997; Pawlas, 1994). Homeless and locally transient students have been depicted as representing low-income families, single-parent head of household, unemployed parents dependent on welfare, parents with minimal levels of education levels, and low self-esteem (Fisher, Matthews, Stafford, Nakagawa, & Durante, 2002; Kerbow, 1996; Lash & Kirkpatrick, 1990; National Coalition for the Homeless, 2001). These same students have families who face precarious housing or uncertain employment often contributing to frequent moves (Stronge, 1993). Homeless children or locally transient students share risk factors with millions of other impoverished

The style and format for this dissertation follow that of *The Journal of Educational Research*. 
children in the United States. Further, they have had unique problems related to educational access, such as residency requirements and the social stigma attached to living in a place other than a traditional home.

Since homeless and locally transient children share certain risk factors, they will be considered one group: highly mobile students. Highly mobile students included homeless and locally transient students for the purpose of this study. The number of highly mobile students have been growing at an alarming rate. Kerbow (1996) reported that constant mobility was a growing trend in western society. He defined highly mobile students as students who moved at least once every academic year. The McKinney-Vento Act, federal legislation that mandated programs to assist the homeless, defined homeless as individuals or families who may be living doubled up with other families or friends; children served by foster care; individuals living in emergency and/or transitional shelters; and people living in locations not designed for residential living, e.g., automobiles, storage sheds, and parks (U.S. Department of Education, 2001).

In 1994, Pawlas estimated that the numbers of homeless children range from 225,000 to 500,000. In 2001, it was estimated that as many as one million children lack a traditional home (Biggar, 2001) making families the fastest growing segment of the homeless population (Pawlas, 1994; Shinn, 1996). The Urban Institute (2000) estimated that 3.5 million people, of whom 1.35 million were children, experience homelessness each year.
Primary-grade children were more mobile than older students (Lash & Kirkpatrick, 1990). The early elementary years are considered the foundation years for reading acquisition and development (Mehana & Reynolds, 2004). School mobility is believed to be a risk factor that can “adversely affect learning if it occurs frequently or during children’s formative school years” (Mehana & Reynolds, 2004, p. 95). Further, Mehana and Reynolds (2004) found that mobility was associated with lower levels of reading achievement. The term, Mathew Effect, was used by Stanovich (1986) to describe how, in reading, the rich get richer and the poor get poorer. In other words, early success in acquiring reading skills usually leads to later successes in reading as the learner grows, while failing to learn to read before the third or fourth year of schooling may be indicative of lifelong problems in learning new skills.

Educators found themselves facing serious challenges in addressing the literacy needs of high mobility students. Despite the challenges, there were examples of high mobility students achieving academically (Lash & Kirkpatrick, 1990; Noll & Watkins, 2003/2004). How is it that some highly mobile students achieve academically while so many do not? Teacher efficacy may be one answer (Haberman, 1995; Tschannen-Moran & Hoy, 2001).

Tschannen-Moran and Hoy (2001) defined teacher efficacy as a belief that one has the ability to have a positive affect on learning outcomes for all students. Further, it was associated with instructional practices, teacher attitudes toward students (Deemer & Minke, 1999), and student performance (Howard, 1995). Efficacious teachers are resilient when faced with setbacks and persist even in difficult situations (Haberman,
1995). In the classroom, the two most important social-psychological factors that influenced teacher behaviors and student outcomes are teacher efficacy expectations and teacher outcome expectations (Guskey, 1987). The construct of teacher efficacy had implications for both classroom teachers and students (Bandura, 1997; Haberman, 1995; Howard, 2003; Hoy, 2000).

**Social Cognitive, Socio-Cultural, and Social Learning Theories**

The issues brought forth in this study borrow from the works of social cognitive theory (Bandura, 1997), socio-cultural theory (Vygotsky, 1978), and social learning theory (Rotter, 1966).

*Social Cognitive Theory*

Bandura’s (1997) self-efficacy theory had its basis in social cognitive theory. He emphasized the importance of observing and modeling behaviors, attitudes, and reactions of others. He suggested that learning would be difficult and even dangerous if people were left to their own devices in learning to perform tasks. He further stated that human behavior was learned through observations through modeling. Social cognitive learning explained human behavior as a type of continuous reoccurrences between cognitive, behavioral, and environmental influences. Three principles associated with social cognitive theory included:

1. Individuals organized and rehearsed the modeled behavior symbolically and then enacted overtly to achieve the highest level of observational learning.
2. Individuals were more likely to adopt a modeled behavior if it resulted in outcomes they valued.
3. Individuals were more likely to adopt a modeled behavior if the model was similar to the observer’s behavior and had an admired status or if the behavior had functional value. (Bandura, 1995, p. 13)

Bandura (1997) identified four sources or influences that enhance efficacy. The first influence for enhancing efficacy, mastery experiences, provided individuals the most effective way of creating a strong sense of efficacy through “acquired cognitive, behavioral, and self-regulatory tools for creating and executing appropriate courses of action to manage ever-changing life circumstances” (Bandura, 1997, p. 3). The second influence, vicarious experiences, was defined as observing others who were similar to themselves succeed (Bandura, 1997). The third source or influence for enhancing efficacy was social persuasion, which is verbal persuasion that one has what it takes to succeed. Finally, physiological and affective states include focuses on good physical and mental health for increased feelings of efficacy (Bandura, 1997). It was these sources or influences that allowed for the reciprocal interaction between cognitive, behavioral, and environmental influences.

**Socio-Cultural Theory**

Vygotsky’s (1978) social development theory proposed that social interaction profoundly influenced cognitive development. Central to socio-cultural theory was the belief that biological and cultural development failed to occur in isolation. Instead, he believed that this life-long process of learning was dependent on social interaction between an individual and a more learned peer or adult. Further, he posited that social learning actually led to cognitive development. This phenomenon, called the Zone of
Proximal Development (ZPD), was described as “the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978). The ZPD bridged that gap between known and unknown knowledge. In other words, the novice could perform a more difficult task under an expert’s guidance or with peer collaboration that could not be achieved alone.

**Social Learning Theory**

Rotter’s (1966) social learning theory consisted of the locus of control (LOC) construct in addition to reinforcement value and social context. Reinforcement values were defined as rewards, both positive and negative, anticipated following specific behaviors. Social context was viewed as the sociological equivalent of the personal or psychological situation (Rotter, 1966). These three elements interacted to explain behaviors and expectancy beliefs about outcome attribution. LOC was defined as one’s perception in a given social context and the degree to which behavioral outcomes are due to personal (internal) or external (forces outside oneself) control.

Relative to one’s social learning was teacher’s sense of efficacy. This sense of efficacy was contingent upon one’s past and present experiences. The concept of teacher efficacy has implications for both teachers and students (Bandura, 1997; Haberman, 1995; Howard, 2003; Hoy, 2000). Efficacious teachers believed they possessed the capabilities necessary to improve student learning and resulted in an increased student achievement (Bandura, 1997; Haberman, 1995; Howard, 2003).
Statement of the Problem

A positive relationship has been documented between efficacious teachers and student achievement (Bandura, 1997; Haberman, 1995; Howard, 2003). Efficacious teachers believed they possess the capabilities necessary to increase student learning (Bandura, 1997). Further, efficacious teachers were resilient when faced with setbacks and persisted even in difficult situations (Haberman, 1995). Teachers with a strong sense of efficacy were better organized (Allinder, 1994), more willing to try new ideas to meet their students’ needs (Stein & Wang, 1988), less critical of students when errors were made (Ashton & Webb, 1986), more positive about teaching (Guskey, 1984), less likely to refer children for special education services (Podell & Soodak, 1993), and more likely to use positive strategies for classroom management (Emmer & Hickman, 1990). Additionally, efficacious teachers provided a higher quality of instruction (Rubeck & Enochs, 1991), planned more (Allinder, 1994), and worked longer with low-achieving students (Gibson & Dembo, 1984).

With research demonstrating a positive relationship between teacher efficacy and student achievement, one might infer that increasing teacher efficacy could foster gains in the reading achievement scores of students. Yet, the research regarding teacher efficacy and literacy instruction was virtually nonexistent in the literature.

Purpose of the Study

Over the past several years, there has been an increasing interest in preparing students for the increased literacy demands of our society (Cummins & Sayers, 1995). Teachers have been challenged to prepare all students to meet the literacy demands of
the twenty-first century. Teachers faced this challenge along with increased accountability. The purpose of this correlational study (Gall, Gall, & Borg, 2003) was to investigate the relationship between first and second grade teachers’ sense of efficacy for literacy instruction for highly mobile students. This study was also interested in finding out if there was a statistically significant difference between the reading achievement of highly mobile students in first grade and the reading achievement of highly mobile students in second grade. Finally, this study wanted to know if there was a statistical relationship between teachers’ sense of efficacy and the reading achievement of highly mobile students.

**Significance of the Study**

Literacy instruction has been a daunting task for many teachers (Ivey, 2002). Many states use standardized tests to hold schools and teachers accountable for the academic success of all students. One of the requirements consisted of students being able to read on grade level by third grade. Without fulfilling this requirement, students risk grade level retention. Research (Ashton & Webb, 1986; Tschannen-Moran & Hoy, 2001) demonstrated a positive relationship between teachers’ sense of efficacy and student achievement.

Research studies focusing on aspects of teaching highly mobile students (Kerbow, 1996; Sanderson, 2003), literacy instruction for homeless students (Biggar, 2001; Noll & Watkins, 2003/2004), and teacher efficacy (Ashton & Webb, 1984, 1986; Bandura, 1997; Tschannen-Moran & Hoy, 2001; Tschannen-Moran, Hoy, & Hoy, 1998); however, the data for determining if there is a relationship between first and
second grade teachers’ sense of efficacy and the reading achievement of their highly mobile students were missing from the literature.

Educators must be able to refer to the literature to determine effective literacy instruction for highly mobile students. The contribution of the study’s results in assisting educators to design literacy instruction will lead to increased reading achievement for highly mobile students and increase the quality of literacy instruction in our urban school district.

**Research Questions**

This study examined the relationship between first and second grade classroom teachers’ sense of efficacy for literacy instruction and the reading achievement of their highly mobile students. The following questions guided this study:

1. Is there a difference in urban first grade classroom teachers’ sense of efficacy and urban second grade classroom teachers’ sense of efficacy for literacy instruction for highly mobile students?
2. Is there a difference between the growth in the reading achievement of highly mobile students in first grade and the growth in the reading achievement of highly mobile students in second grade?
3. What is the relationship between urban teachers’ sense of efficacy and the reading achievement of highly mobile students?
Definition of Terms

Efficacy – People’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives (Bandura, 1995; Deemer & Minke, 1999).

External locus of control – The perception that control over one’s destiny is determined by sources outside the self, e.g., fate, chance, luck, or powerful others (Gershaw, 1989).

External mobility – Refers to student mobility from one school district to another school district (Kerbow, 1996).

Highly mobile students – Within the literature, students who have moved six or more times in the course of their K-12 education and come from a variety of backgrounds (Walls, 2003). For the purpose of this study, highly mobile students will be defined as first or second grade students who have moved at least once during the academic year. The term will be used to include homeless students and transient students.

Homeless – Individuals who have lost regular housing and accommodations may include sharing the housing of other persons due to loss of housing, living in motels, trailer parks, or camping grounds due to the lack of alternative accommodations, or are living in an emergency or transitional shelter (U.S. Department of Education, 2001).

Housed students – Students who are not homeless. This term is specific to this study.
**Internal locus of control** – the perception that people control their destiny (Gershaw, 1989).

**Internal mobility** – Student mobility within a single school district (Kerbow, 1996).

**Locally transient students** – Students who have changed schools within a school district or between neighboring school districts at least once an academic school year.

**McKinney-Vento Education Assistance Act** – Federal law that entitled children who are homeless to a free, appropriate public education and required schools to remove barriers to their enrollment, attendance, and success in school (U.S. Department of Education, 2001).

**Mobility** – A student thought to be mobile “if he or she has been in membership at the school for less than 83% of the school year (i.e., has missed six or more weeks at a particular school)” (Texas Education Agency [TEA], 2005).

**Personal teaching efficacy** – teachers’ evaluations of their own capabilities to bring about student learning (Bandura, 1997; Deemer & Minke, 1999).

**Self-efficacy** – the belief in one’s capability to execute the actions necessary to achieve a certain level of performance (Bandura, 1995; Deemer & Minke, 1999).

**Teacher efficacy** – belief that one has the ability to positively affect the learning outcomes of all students (Tschannen-Moran & Hoy, 2001).

**Assumptions**

This study utilized a correlational research design and made the following assumptions:

1. Information was gathered honestly.
2. Yielded survey results represented honest and unbiased responses.
3. Data collection techniques provided adequate data for the purposes of this study.
4. Participants were representative of first and second grade teachers working with highly mobile students.

Limitations of the Study

According to Isaac and Michael (1995), limitations of correlational research studies included:

1. Respondents may have given a professional response instead of an open, honest answer when utilizing surveys for data collection.
2. Correlational studies failed to identify cause-and-effect relationships.
3. Correlational studies were less rigorous than an experimental approach since less control is exercised over independent variables.
4. Surveys questioned only accessible and cooperative respondents.
5. Surveys may have aroused “response sets” such as acquiescence, a proneness to agree with positive statements or questions.
6. Surveys were vulnerable to over-rater bias or under-rater bias, the tendency for some respondents to give consistently high or low ratings.
7. Relational patterns were often arbitrary and ambiguous. Threat to internal validity because there was not a comparison group (Gall et al., 2003).
9. Conclusions drawn from this study must be tempered because there are many other variables that could account for teachers’ sense of efficacy and reading achievement scores of highly mobile students (Gall et al., 2003).

**Summary**

This chapter discussed the growing population of highly mobile students in public education, teacher efficacy, and its four types of influences. Furthermore, while there have been studies that investigated teacher efficacy, data investigating the correlation between first grade classroom teachers’ sense of efficacy and second grade classroom teachers’ sense of efficacy and the reading achievement of highly mobile first and second grade students was missing from the literature.
CHAPTER II

REVIEW OF LITERATURE

Background

American children and families have the highest rate of residential and school mobility in the industrialized world (Mehana & Reynolds, 2004). Every day hundreds of students withdraw from their schools and are re-enrolled in different schools (Kerbow, 1996; Lash & Kirkpatrick, 1990; Masten et al., 1997). According to Sanderson (2003), 4% of all third graders have changed schools at least once, while 17% had changed schools two or more times (U.S. General Accounting Office, 1994b). Factors contributing to student mobility include: “lack of adequate subsidized housing, family instability, avoidance of problematic environments associated with the home or school, and alternative schools that seem especially attractive” (Kerbow, 1996, p. 153). Consequences of changing schools appear to have pervasive consequences for the students involved and creates some disjuncture in the learning process (Alexander, Entwistle, & Dauber, 1994; Ingersoll, Scamman, & Eckerling, 1989; Sanderson, 2003).

While the mobility of migrant children and the children of military personnel often involves great distances, the median distance moved in the United States is six miles (Tucker, Marx, & Long, 1998). Students who are highly mobile and move short distances within the local school district are designated as “locally transient” (Kerbow, 1996). Locally transient students have changed schools within the local district at least once within an academic school year and share many academic concerns associated with mobility with homeless students (Lash & Kirkpatrick, 1990; Stronge, 1993). The
increasing mobility of students in the United States has raised important questions about the effect of mobility on student achievement that include schools motivating students to engage in their learning (Sanderson, 2003) and the effect student mobility has on student achievement (Kerbow, 1996) in literacy.

The locally transient and homeless student is often culturally, linguistically, ethnically, and/or economically diverse (P. Larke, personal communication, September 28, 2002) and represent single parent or no-parent households (Fisher et al., 2002; Kerbow, 1996; Lash & Kirkpatrick, 1990; Sanderson 2003). Highly mobile students follow distinct patterns of movement (Kerbow, 1996). Kerbow (1996) found that locally transient students tend to transfer in and out of “clusters of schools” that were within three miles of each other. These “clusters of schools” are often stratified by (a) achievement levels, (b) cultural and ethnic composition, and (c) socio-economic status. Mobility occurs both internally and externally to a school district (Kerbow, 1996). Internal mobility includes students who move from school-to-school within one school district, while external mobility denotes students who move from school district-to-school district.

Mobility is an important factor to consider when measuring the reading achievement of students. Hodgkinson (2003) suggested that transience associated with student mobility was the “enemy of the community” (p. 4) because it contributed to the inability to provide children with “equality of opportunity in school and in life” (p. 1). Kerbow (1996) believed that students could adjust to changing schools; however,
“repeated student movement between schools often results in continued deficiencies and learning gaps” (p. 14).

**Homelessness**

The U.S. Census of 2000 identified the following situations or living conditions as a state of homelessness:

1. Housing units containing people living doubled up with other families or friends.
2. Housing units identified by completing a “Be Counted” questionnaire and providing the address of a friend or relative as their usual place of residence.
3. Foster care serving children.
4. Emergency and transitional shelters.
5. Halfway houses, jails, group homes, worker dormitories, and targeted non-sheltered outdoor locations.

The Urban Institute (2000) reported that the inability to measure homelessness accurately was due to the situations of homelessness itself. A lack of facilities for the homeless nationwide to provide services to the homeless makes it difficult to provide an accurate assessment of the number of homeless people living in the United States. Many homeless families were living “doubled up” with family members or in places not designed as housing. Homeless people who live “doubled up” or in places not designed as housing have become invisible (Books, 1998), which masks the true numbers of homeless in the United States.
Two methods have been utilized to measure the number of homeless: point-in-time counts and period prevalence counts (National Coalition for the Homeless, 2002). Point-in-time counts determine the number of homeless on a given day or during a specific week. Period prevalence counts examined the number of people who were homeless over a given period of time. These two different methodologies explain why Duffield (2001) and the Urban Institute (2000) estimated 1.35 million children were homeless in the United States of which more than 40% of them were under the age of five in the United States (Burt & Aron, 2000), while the U.S. Census (2000) identified 170,706 people living in emergency and transitional shelters with 43,887 children under the age of 18 (Smith & Smith, 2001).

**Reasons for Homelessness**

One reason for the high numbers of homelessness in the United States identified in a report released by the U.S. Department of Housing and Urban Development (HUD) in January 2004 was affordable housing. Affordable housing fails to exist for 5.3 million American households (HUD, 2004). This number consists of 10% of the nation's renters, which includes 4.5 million children under the age of 18. These families live on less than 50% of the median income of families in the United States (Conniff, 1998). To afford a two-bedroom apartment, individuals earning minimum wage would have to work 87 hours per week, which was calculated to be 30% of their income (National Coalition for the Homeless, 2003).

The National Association of State Coordinators for the Education of Children and Youth listed seven additional causes of homelessness as unemployment,
deinstitutionalization of the mentally ill, divorce or abandonment, substance abuse, natural catastrophe, physical abuse, and eviction (Reganick, 1997). Single, female parents headed approximately 90% of homeless families (National Coalition for the Homeless, 2004) resulting in the “feminization of poverty” (Polakow, 1998). A Ford Foundation study concluded that 50% of women with children who were homeless were escaping abuse (Flohr, 1998). Gracenin (1994) stated that a homeless child’s family background may be unstable and abusive. In fact, the U.S. Conference of Mayors (1998) identified domestic violence as a primary cause of homelessness.

Homeless families were one of the fastest growing groups of the homeless population (National Coalition for the Homeless, 2004). Some figures estimated that more than 1 million youths were homeless on any given night. Of these, more than 750,000 were of school age (Collignon & Nunez, 1997). Children and youth in homeless situations often did not fit society’s stereotypical images of homelessness of drunks on skid row. A critical lack of shelter and affordable housing in the United States forced many families experiencing homelessness to share housing with friends or relatives, stay in motels or other temporary facilities, or live on the streets, in abandoned cars, and in woods and campgrounds.

The U.S. General Accounting Office (1994a) found that 52% of the children who were homeless living in urban family shelters were 5 years old or younger; 36% were between 6 and 12; and 12% were between 13 and 16. Further, a small number homeless of men with children presented a unique problem since most shelters did not allow men and their children to reside together. Some shelters split intact families.
Imposed separation increased the stress experienced by a family during a period of homelessness.

*The Impact of Homelessness on Children’s Literacy Experiences*

According to Daniels (1992), the number of homeless children attending elementary school was sizable. Due to frequent mobility, regular school attendance was difficult for many homeless children (National Coalition for the Homeless, 1999). Klein, Bittel, and Molnar (1993) identified a theme of mistrust existed both socially and physically for many homeless children. Homeless school-aged children from these situations often distrusted authority and were quite cautious about school (Klein et al., 1993).

The constant mobility associated with homelessness appears to have an impact on reading achievement (Homes for the Homeless, 1999). In New York City, 38% of homeless children studied scored at grade level in reading (Homes for the Homeless, 1999, p. 4). However, 62% of the homeless children were one to two grade levels below the students’ actual grade level.

To raise the level of reading achievement, teachers need professional development of how socioeconomic situations affect students academically, and for students to be successful in the classroom there is a need for teachers to provide varied educational opportunities especially in the area of reading instruction (Brown, Pressley, Van Meter, & Schuder, 1993). Brown et al. (1993) suggested that student performance increased when assignments were relevant to the student. According to Carter and Larke (2003), resilient teachers “employ strategies that enable students to achieve high
academic performance” (p. 60). By linking the work to the students’ culture or experiences, students will be better motivated to learn, thereby increasing their chance of academic achievement.

Resilient Teachers

Webster’s Encyclopedic Unabridged Dictionary of the English Language (1996) defines resilient as “springing back; rebounding; returning to the original form or position” (p. 1220). Masten (as cited in Luthar, Cicchetti, & Becker, 2000a, 2000b) believed that the terms resilience and resiliency have been used interchangeably despite differences in their meanings. Resilience refers to “competence despite adversity” (Luthar et al., 2000b, p. 546) and resiliency refers to personal attributes. Characteristics exhibited by resilient teachers includes social competence, critical problem-solving skills, mastery, autonomy, and a sense of purpose and a future (N. Carter, personal communication, September 28, 2001; Howard & Johnson, 2000; Winfield, 1994).

The first characteristic social competence may be evidenced by positive self-esteem, self-reliance, and positive relationships with others (Mandleco & Peery, 2000). Resilient teachers know their strengths and weaknesses and may seek support when faced with challenges (N. Carter, personal communication, September 28, 2001). A sense of purpose and future is another characteristic of resilience (N. Carter, personal communication, September 28, 2001; Howard & Johnson, 2000; Winfield, 1994). Resilient teachers view their situation whether or not it is filled with adversity as purposeful (Mandleco & Peery, 2000). Resilient teachers display intrinsic faith (N. Carter, personal communication, September 28, 2001). This faith is usually linked to
religion because it reinforces parental policies and provides peer influences consistent
with parental values (Mandleco & Peery, 2000). Finally, resilient teachers are adept
problem-solvers (N. Carter, personal communication, September 28, 2001; Howard &
Johnson, 2000; Winfield, 1994). Resilient teachers are able to use problem-solving
skills to ensure success with students who have been traditionally underserved
(Bandura, 1995; Gibson & Dembo, 1984).

An example of teacher resilience can be found in Noll and Watkins’s
homelessness on the literacy learning of homeless children. They investigated ways
homeless children in second through sixth grades drew upon their life experiences
outside of the classroom to develop comprehension skills (Noll & Watkins,
2003/2004). Participants in this study included children who attended an after-school
tutoring and enrichment program, summer day camp, and an intensive literacy and
mathematics summer program designed specifically for homeless children. Noll and
Watkins (2003/2004) reported that homeless children had gaps in their knowledge of
literacy skills; however, they found that “their interpretive skills were sometimes
remarkable” (p. 364). Through the use of literature discussion groups, the homeless
students involved in this study demonstrated the ability to make text-to-self
connections by relating the character’s plight to their own experiences with
homelessness. While the text-to-self connections of homeless students differed from
the text-to-self connections of housed students, their interpretations demonstrated
insight and the ability to integrate literacy to out-of-school literacy experiences.
Further, Noll and Watkins (2003/2004) reported that the homeless children study used literacy skills of explaining, interpreting, and synthesizing during their out-of-school experiences on a daily basis in order to survive daily challenges. Noll and Watkins (2003/2004) found that many homeless families often depended upon their children to assist with completing the myriad of paperwork required for admittance into shelters. Situations arose that forced the roles to be reversed and homeless children had to assume the responsibility of filling out forms, answering questions, and “navigat[ing] the social services system” (Noll & Watkins, 2003/2004, p. 366). Noll and Watkins suggested educators should always start “where children are in their development and move ahead, rather than teach from where we think they should be at any given age” (p. 366). An alternative to teaching reading comprehension to underserved students was to utilize students’ prior knowledge to interpret new information (Mean & Knapp, 1991). Teachers should use the “funds of knowledge” (Moll, Amanti, Neff, & Gonzalez, 1992; Moll & Greenberg, 1990) students brought with them in order to provide literacy experiences that built upon background knowledge and strengths rather than focusing on deficits.

Many teachers and administrators utilize the deficit model and believe that children who are highly mobile are unable to learn because “they live in poverty, come from broken homes, have family members who are in gangs, or some other environmental reason” (Carter, Gayles-Felton, Hilliard, & Vold, 1999, p. 92). Many educators prefer to assign responsibility for the education of highly mobile students to the next school. Believing that if they wait, the student will move once again and
relieve them of their responsibility. Fortunately, there is federal legislation that holds all educators accountable for the education of highly mobile students.

**McKinney-Vento Act**

The first major federal legislative response to homelessness was the Stewart B. McKinney Homeless Assistance Act (PL100-77) signed into law by President Ronald Reagan in 1987. Initial responses to homelessness during the 1980s were primarily local. In 1983, the Reagan Administration did not believe that homelessness required federal intervention (National Coalition for the Homeless, 1999). The first task force created to address the issue of homelessness in 1983 focused on providing information to local agencies on how to obtain surplus federal property rather than through programmatic or policy actions (National Coalition for the Homeless, 1999). In 1986, the Homeless Person’s Survival Act was introduced into both houses of Congress and enacted small measures dealing with emergency relief, prevention, and long-term solutions to homelessness. This act would later be introduced as the Urgent Relief for the Homeless Act and renamed the Stewart B. McKinney Homeless Assistance Act after the death of its chief Republican sponsor, Representative Stewart B. McKinney of Connecticut. The Homeless Eligibility Clarification Act of 1986 eliminated permanent address requirements that restricted access to existing programs such as Supplemental Security Income, Aid to Families with Dependent Children, Veterans Benefits, Food Stamps, and Medicaid (National Coalition for the Homeless, 1999). This same legislation also created the Emergency Shelter Grant program as well as a transitional
housing demonstration program administered by the Department of Housing and Urban Development (HUD).

According to the National Coalition for the Homeless (1999), The McKinney Act originally consisted of 15 programs that provided a range of services to homeless people. The services included emergency shelter, transitional housing, job training, primary health care, education, and some permanent housing. The McKinney Act included nine titles. Some of the titles under the McKinney Act include: Title I, which included findings statements and provided a definition of homelessness; Title III authorized the Federal Emergency Management Agency to administer the Emergency Food and Shelter Program. Title IV authorized the emergency shelter and transitional housing programs administered the Department of Housing and Urban Development. Title V imposed requirements on federal agencies to identify and make available surplus federal property for use by states, local governments, and nonprofit agencies to assist homeless people. Title VI authorized the Department of Health and Human Services to provide health care services to homeless persons. Title VII authorized four programs: the Adult Education for the Homeless Program and the Education of Homeless Children and Youth Program, administered by the Department of Education; the Job Training for the Homeless Demonstration Program, administered by the Department of Labor; and the Emergency Community Services Homeless Grant Program, administered by the Department of Health and Human Services.
Amendments to the McKinney Act

The McKinney Act has been amended four times in order to expand the scope and strengthen the provisions of the original legislation (National Center for Homeless Education, 2001; National Coalition for the Homeless, 1999; Texas Homeless Education Office, 2003). The various amendments alter the majority of programs authorized by the original act and create a few new programs. The Shelter Plus Care program was created in order to provide housing assistance to homeless individuals with disabilities, mental illness, AIDS, and drug or alcohol addictions. A demonstration program under the auspices of the Health Care for the Homeless program was created to provide primary health care services to underserved and homeless children. The amendments also increased the Education of Homeless Children and Youth program’s authorization and required states to make grants to local education agencies (LEA) for the purpose of implementing the law. The amendments call for the creation of “safe havens” or very low-cost shelters for persons unwilling or unable to participate in supportive services. The amendments also created a process under which service providers could apply to Local Redevelopment Agencies to use property at closed military bases to assist homeless persons (National Coalition for the Homeless, 1999). In 1998, many programs associated with the McKinney Act were repealed, eliminated, or faced dramatic restructuring (National Coalition for the Homeless, 1999).

January 2002, President Bush signed into law the “No Child Left Behind Act.” This legislation reauthorized the McKinney-Vento Homeless Assistance Act’s Education for Homeless Children and Youth (EHCY) program, along with most other
federal elementary and secondary education programs. The McKinney-Vento Act was the federal law that entitled children who were homeless to a free, appropriate public education and required schools to remove barriers to their enrollment, attendance, and success in school.

Many people, including educators, may not have realized the breadth of students who were considered homeless under the McKinney-Vento Act and as such qualified for its protections and services (National Coalition for the Homeless, 1999; U.S. Department of Education, 2001). The reauthorized McKinney-Vento Act, therefore, contained a specific definition of homelessness that included a broad array of inadequate living situations, including students sharing the living accommodations of others due to economic hardship or lack of housing (“doubled-up”), students in motels, and many other homeless situations. This definition of homelessness incorporated categories from current U.S. Department of Education guidance and was applicable only to the education subtitle of the McKinney-Vento Act.

According to the U.S. Department of Education (2001), state educational agencies (SEA) and local educational agencies (LEA) must ensure that homeless children and youth have equal access to the same free public education that is provided to housed children and youth. SEAs and LEAs must ensure that laws, regulations, practices or policies do not hinder or prevent the enrollment of homeless children and youth. School districts cannot separate homeless students from the mainstream school environment on the basis of their homelessness. Homeless students must have access to
education and needed services so that they may have an opportunity to meet the same challenging academic achievement standards to which all students are held.

Each LEA designated an appropriate staff person to serve as the local educational agency liaison for homeless children and youth (National Coalition for the Homeless, 2002; U.S. Department of Education, 2001). The liaison was responsible for ensuring that school personnel identified homeless children. The liaison informed the families, children, and youth of available educational services for which they were eligible. The liaison also informed parents or guardians of educational and related opportunities, transportation services, and disseminated public notices of the educational rights of homeless children and youth. The LEA liaison collaborated with state coordinators, school personnel, and local community services responsible for the education of homeless children and youth.

Each SEA (National Coalition for the Homeless, 2002; U.S. Department of Education, 2001) prepared and submitted a state plan that described strategies for addressing enrollment delays as a result of immunization and medical records requirements, residency requirements, and missing or lost birth certificates and school records. Each SEA demonstrated that barriers regarding guardianship issues and uniform or dress code requirements were addressed in their state plan. The state plan submitted by the SEA addressed transportation barriers and assured that the LEA adopted practices and policies provided or arranged for the transportation of homeless children and youth to and from the school of origin. The McKinney-Vento Act defined “school of origin” as the school that the child or youth attended when they were last
permanently housed or the school in which the child or youth last attended. Finally, services provided with funds distributed through the McKinney-Vento Act must not replace the regular academic program (U.S. Department of Education, 2001). Funds associated with the McKinney-Vento Act should be used to expand or improve services provided as part of the school’s regular academic program. While there were federal mandates in place to help meet the academic needs of homeless students, there were not any available to assist the academic needs of transient students.

**Locally Transient Students**

There was a popular belief that urban schools were subject to more highly mobile student populations (Brent & DiObilda, 1993); yet, this phenomenon was not exclusively urban. Suburban districts on the fringe of major metropolitan areas were also feeling the sting of student mobility (Sanderson, 2003). Large cities struggled with student mobility rates of 70%, 80%, and 90% (Kerbow, 1996). Suburban schools near urban centers had mobility rates that reach 40% to 50% (Sanderson, 2003). Every day students left their schools and re-enrolled in new schools. According to Sanderson (2003), this constant turnover disrupted the school environment, the teachers’ lessons, and the mobile students’ level of engagement.

**Engaging Highly Transient Students**

Sanderson (2003) looked at how teachers engage their highly transient students. This study included 33 elementary teacher interviews conducted between April 1999 and May 2000. The teachers selected for this study taught at a diverse and highly mobile suburban/urban area located outside of Philadelphia, Pennsylvania. The
interviews revealed three interconnected themes: (a) behavior and attitude, (b) academic foundations, and (c) time as significant in helping to define the actions taken by these teachers to accommodate highly transient students.

The first theme that emerged from this study was teacher perceptions of behavior and attitude. Teachers spoke of the new students’ negative outlooks on their new classroom and school. Teachers perceived that the students’ negativity and sometimes aggressiveness made it difficult for highly transient students to assimilate to their new school environment; provided the highly transient student with a group of friends for social support; and assessed the highly transient students’ academic foundations. Teachers’ comments about struggles with highly transient students’ attitudes and the help teachers provided to their students to assist in the adjustment to their new school reflected an understanding that transience may affect students’ behaviors. Yet, despite comments that reflected an understanding of the difficulties experienced by highly transient students, teachers continued to voice their discontent with the placement of highly transient students in their classrooms.

Sanderson (2003) identified a second theme that centered on academic foundations. Teachers expressed concerns that highly transient students have educational gaps in their learning due to a discontinuity in instruction. The academic histories of highly transient students caused many of the teacher participants to question academic levels, school behaviors, and personal issues that may impact highly transient students’ academic foundations. Teacher participants expressed a need to address student transience, academic foundations, and student disengagement. Teachers
felt challenged to quickly assimilate highly transient students into “established classrooms so instructional time is not lost and gaps in learning are kept to a minimum” (Sanderson, 2003, p. 603).

Teacher participants in Sanderson’s (2003) study felt that the most important issue when engaging highly transient students was the issue of time, the third identified theme. Teacher participants made reference to the loss of instructional time for both highly transient students and students who were not transient. Many highly transient students enrolled into their new school without prior school records. This resulted in the teacher screening students in order to establish a baseline for students. Teacher participants made mention of instructional adaptations to compensate for highly transient students’ gaps in learning and, therefore, had to devote time to constant reviewing. New students needed to be acclimated to classroom routines, which took away instructional time.

Sanderson (2003) asked teacher participants how they combat the identified issues, behavior and attitude, academic foundations, and time, in order to engage their highly transient students. Teacher participants expressed the importance of providing academic as well as emotional accommodations for their highly transient students. Some responses shared by the teacher participants included assigning a buddy/partner to assist new students to the classroom. Students selected to serve as buddy/partner were chosen based upon academic, behavioral, and personality characteristics that the teacher believed would best help the highly transient student quickly assimilate into the classroom culture. Another prevalent response shared by teacher participants was to
provide the highly transient student with additional professional support from colleagues, building aides, the school psychologist, school social workers, or other transient students who have successfully acclimated to the classroom. Personalized attention from the classroom teacher was another strategy that was mentioned by many of the teacher participants.

In an effort to maximize instructional time teacher participants reported that they adapted lessons and delivery of instruction by changing the number of students they instruct at a time. Teacher participants discussed “chunking the curriculum into smaller, more manageable pieces so it was more palatable for all the children” (Sanderson, 2003, p. 604). Other academic accommodations mentioned by teacher participants included alternate assessments, reading the test to the students, and flexible grouping within the classroom and across grade levels. A pull-out enrichment program was offered for advanced students.

Teacher participants suggested that they were willing to do whatever it takes to assure the academic success of their highly transient students. Yet, despite the variety of strategies used by the teacher participants in Sanderson’s (2003) study, one cannot but reflect back upon the comment shared by the teacher participants of their feelings of discontent when highly transient students were placed in their classroom. One cannot help but wonder if the respondents provided professional answers and if their responses truly reflected their practice.
Student Mobility: A Negligible and Confounded Influence on Student Achievement

Wright (1999) examined the effect of student mobility on achievement test scores of third and fourth graders in 33 schools in a large urban Midwest school district during the 1996-1997 academic school year. The study included all students who completed the assessments, including students who were mildly physically challenged and English language learners. Among the participating students, 68% were ethnically diverse, and 71% were eligible for free or reduced lunch programs. Students were assigned to two different categories of mobility: location mobility and temporal mobility. Location mobility refers to students who moved into or out of the district or within the district. Temporal mobility included students who moved either before or after the spring 1997 assessments.

Findings from Wright’s (1999) study suggested that temporal mobility had no demonstrable influence on achievement across large groups of students. Location mobility had a moderately consistent main effect in accounting for achievement differences. Low achievement scores were associated more highly with internal mobility than with external mobility. When examined with multiple-regression procedures, the practical importance of mobility receded. Wright concluded that mobility, as a factor for achievement differences, was subordinate to factors of ethnicity, family, income, and gender. More succinctly, the explanation for differences in academic achievement “are likely attributable more directly to poverty” (Wright, 1999, p. 352).
Pupil Mobility, Attainment, and Progress During Key Stage 1:
A Study in Cautious Interpretation

Strand (2002), a British researcher, attempted to find out if there was an association between pupil mobility and attainment in national end of KS1 tests at age seven. He defined mobile pupils as those students who joined the school part way through a key stage. A key stage included age four through age seven. Strand explored the association between pupil mobility and achievement on the national end of Key Stage 1 (KS1) tests for 6400 students in an inner London local education authority. The data looked at three cohorts of pupils who completed the KS1 in 1995, 1996, and 1997.

The data indicated that pupils who transferred between the ages of four and seven scored on average 0.132 of a level lower than the stable group in KS1 reading test. At first glance, it appeared that there was a negative correlation between student mobility and low achievement on the KS1. However, upon closer study, low family income and English language learners appeared to be the prime variables associated with low achievement on the KS1. The results of the data analysis for each KS1 test indicated that pupil mobility appeared to have a significant impact on progress in mathematics but not on progress in reading or writing. Strand (2002) wrote that mobile pupils were often recent immigrants to London who were in need “significant support of cultural and language adjustment” (p. 70) and it would “be misleading to interpret their performance in terms of changing schools” (p. 74). Strand’s findings supported Wright’s (1999) conclusion that factors that included socioeconomic status and English
language learners impacted the student achievement of mobile students more than mobility.

**Reading Achievement**

Attention to reading comprehension is crucial in a society determined to minimize the achievement gaps between culturally, linguistically, ethnically, and economically diverse (P. Larke, personal communication, September 14, 2003) children. According to Snow, Burns, and Griffin (1998), differences in the reading achievement gap “may be explained by cultural and social issues” (p. 6) that included attending schools with fewer resources, inexperienced teachers, and an curriculum that focused on remediation rather than academics. These same students were likely to attend a school with lower performance expectations placed on them by their teachers and school administrators.

Differences in reading achievement are shown to be strongly related to learning and experience and specifically to learning and experience with print and print concepts rather than to poverty, handedness, dialect, gender, IQ, mental age, or any other such difficult-to-alter circumstances (Adams, 1990). A response issued by the National Reading Panel (NRP) in 2000 to a congressional mandate to help parents, teachers, and policymakers identified specific skills and methods central to reading achievement (Snow et al., 1998). Children at risk for reading failure often require more structure and greater emphasis on phonics (Bateman, 1991; Berninger, Thalberg, DeBruyn, & Smith, 1987; Carnine, Silbert, & Kameenui, 1990; Chall, 1967, 1989; Chaney, 1990; Oakhill & Garnham, 1988; Stahl & Miller, 1989; Stahl, Osborn, & Lehr, 1990). Reading
difficulties are often due to differences that can be addressed provided, of course, that teachers have the knowledge, sensitivity, and support to do so.

Readers bring an array of capabilities and dispositions to the task of reading (Snow, 2002). The capabilities include oral language ability, fluency, and domain knowledge. Disposition includes the reader’s motivation, goal, and purpose. The interaction of the reader’s capabilities and disposition along with the text are vital to reading comprehension. The reader’s capabilities and disposition are shaped by cultural influences, socioeconomic status, home and family background, and classroom culture (Au, 1993; Larke, Webb-Johnson, Rochon, & Anderson, 1999; Moll et al., 1992). Snow (2002) referred to the product of the reader’s differences in capabilities and dispositions as reader variability. Gee (1990) wrote that a child’s first discourse community was their home and surrounding community. An awareness of how members of particular discourse communities construct their identities as readers (through their ways of behaving, interacting, valuing, thinking, believing, speaking, reading, and writing) was one important step in understanding the variability in readers which accounted for gaps in achievement.

**Beginning Reading Instruction**

“All students will learn to read by third grade.” This ubiquitous phrase has become a focal point in the current national conversation about beginning reading instruction and intervention (Coyne, Kame’enui, & Simmons, 2004). Coyne et al. pointed out that the phrase “all students will learn to read by third grade” was a single statement with two goals. The first goal was concerned with all students, whereas the
second was concerned with each student. The competing goals are embraced by many of today’s educators because the ability to read is essential to success in our society. Many children learn to read well, yet, too many children struggle with learning to read. Reading failure has many long-term consequences for children’s developing self-confidence, motivation to learn, and future academic success (Armbruster, Lehr, & Osborn, 2001).

Reading is a process of translating visual codes into meaningful language. Decoding letters into corresponding sounds and linking those sounds to single words takes place in the earliest stages of reading in an alphabetic system. Reading skills provide a crucial piece of the foundation for children’s success. Children who read early and well experience more print exposure and consequent growth in numerous knowledge domains (Cunningham & Stanovich, 1997). Children who lag behind in their reading skills receive less practice in reading than other children do (Allington, 1984), and miss opportunities to develop reading comprehension strategies (Brown, Palinscar, & Purcell, 1986). Such processes may lead to what Stanovich (1986) termed the Matthew effect, in which poor reading skills impeded learning in other academic areas that increasingly depended on reading across the school years. Those children who do experience early difficulties in learning to read are likely to continue to experience reading problems throughout the school years (Felton, 1993). Juel (1988) suggested that children who were poor readers at the end of first grade continue to be poor readers at the end of the fourth grade.
Reading is often thought of as a continuum of skills, from the processing of individual letters and their associated sounds to word recognition to text-processing competencies. Skilled comprehension requires fluid articulation of all these processes, beginning with the sounding out and recognition of individual words to the understanding of sentences in paragraphs as part of much longer texts. There are many skills associated with reading; however, this review focused on word fluency and comprehension.

**The Role of Comprehension in Beginning Reading Instruction**

Children develop narrative comprehension skills prior to any formal instruction that are critical for constructing meaning during early literacy activities. Despite the importance of narrative skills for young children in beginning reading instruction, comprehension has been given inadequate attention in early reading theory and teacher’s sense of efficacy for instruction. Anderson and Pearson (1984) wrote that the content of meaning was influenced by the text and the contribution of the reader’s prior knowledge.

The essence of reading is reading comprehension. Durkin (1973) described comprehension as active and intentional thinking in which the meaning was constructed through interactions between the text and the reader. Comprehension is a complex cognitive process that involves the intentional interaction between reader and text to extract meaning. Anderson and Pearson (1984) wrote that the content of meaning was influenced by the text and the contribution of the reader’s prior knowledge.
Good readers are extremely active as they read, as is apparent whenever excellent adult readers are asked to think aloud as they go through text (Pressley, Brown, El-Dinary, & Afflerbach, 1995). According to Cordon and Day (1996), good readers are metacognitively aware of the text being read. Good readers are aware of why they are reading a text. They gain an overview of the text before reading and make predictions about the upcoming text. Good readers read selectively based on their overview and are able to associate ideas in text to what they already know. They note whether their predictions and expectations about text content are being met. Good readers revise their prior knowledge when compelling new ideas conflicted with prior knowledge. Good readers figure out the meanings of unfamiliar vocabulary based on context clues. They underline, reread, make notes, and paraphrase to remember important points. Good readers interpret the text, evaluate its quality, review important points as they conclude reading, and think about how ideas encountered in the text might be used in the future. Young and less skilled readers, in contrast, exhibit a lack of such activity.

In *Using Multiple Methods of Beginning Reading Instruction*, the International Reading Association (IRA) (1999) stated that there was no single method or single combination of methods that could successfully teach all children to read. The IRA stressed that teachers must possess a wide repertoire of methods for teaching reading and know the children in their care in order to create the appropriate balance of methods needed for each child. Further, these professionals must have the flexibility to modify methods when they determine that particular children are not learning.
Schema theorist argued that knowledge was stored in schematic structures that represented a person’s background experiences or organized knowledge of the world (Anderson, 1984). Our social interactions and cultural background also influence these schematic structures. As readers, we call upon schematic structures to provide an interpretive framework when dealing with text (Pritchard, 1990). Comprehending texts requires a reader to bring forward or recall specific images, ideas, thoughts, and knowledge (schema) that helps decode and give meaning to the written passage. Thus, comprehension involves the automatic retrieval of schema that provides a clear explanation of the text (Anderson, 1984).

Successful interactions with written narratives require constructive processes of meaning-making. Information must be integrated. The inner world of the landscape of consciousness must be integrated with the outer reality of the landscape of action to create an emergent whole (Bruner, 1986; Snow & Ninio, 1986). Bruner (1986) stated that individuals, when interacting with stories, sought “precisely how plight, character, and consciousness are integrated” (p. 21). Next, constructing meaning from narrative texts is also about personalized interpretations about “a reader making a strange text his own” (p. 35). This has been called the “problem” of written narratives, or the “interpretation problem” (Olson, Wise, Conners, & Rack, 1990). Writing, as compared to oral narratives, preserves the form of a text, but it does not preserve the meaning. It is the role of the reader to make his/her own interpretations, to construct his/her own sense of story. In order for individuals to understand that it was their responsibility to interpret text, they need to acquire a meta-discourse concept called the
text/interpretation or say/mean distinction (Olson et al., 1990). Until children understand that text features can be interpreted in numerous ways, they fail to actively transform text in ways that make them comprehensible. Narrative text requires inference-making in order to construct meaning, especially given that narratives are often left it up to the individual to infer the internal responses and intentions that underlie external actions. The individual must mentally fill in concrete details or possibilities in order for the narrative to make sense (Yussen, Rembold, & Mazor, 1989).

The Role of Fluency in Reading Instruction

Fluency is the ability to read a text accurately, quickly, and with prosody (Harris & Hodges, 1995). When fluent readers read silently, they recognize words automatically (Keehn, 2003). They group words quickly to help them gain meaning from what they read. Fluent readers read aloud effortlessly and with expression. Their reading sounds natural, as if they are speaking. Fluent readers pay attention to the prosodic features of print, which includes question marks, commas, exclamation marks, and bolded print (Allington, 1983). Allington suggested that an understanding of these prosodic features helps readers read with expression. Readers who have not yet developed fluency, read slowly, word-by-word. Their oral reading is choppy and plodding.

Fluency is important because it provides a bridge between word recognition and comprehension (Kuhn & Stahl, 2003). Because fluent readers do not have to concentrate on decoding the words, they focus their attention on what the text means.
They make connections among the ideas in the text and between the text and their background knowledge (Pressley et al., 1992). In other words, fluent readers recognize words and comprehend at the same time. When words cannot be read accurately from memory as sight words; they must be analyzed. Less fluent readers, however, focus their attention on figuring out the words, leaving them little attention for understanding the text.

The National Reading Panel (NRP) identified fluency as one of five critical components of reading (National Institute of Child Health and Human Development, 2000). The NRP defined reading fluency as “the ability to read text quickly, accurately and with proper expression” (National Institute of Child Health and Human Development, 2000, p. 3). Kuhn and Stahl (2003) characterized fluent readers as those who read accurately, rapidly, and with expression. Hudson, Lane, and Pullen (2005) agreed that a strong correlation between reading fluency and reading comprehension existed. “Without accurate word reading, the reader was unable to access the author’s intended meaning, and inaccurate word reading led to misinterpretations of the text” (Hudson et al., 2005, p. 703). Researchers (Hudson et al., 2005) believed that the components of fluency, reading accuracy, reading rate, and prosody, were necessary for students to become proficient readers. The Literacy Dictionary: The Vocabulary of Reading and Writing included “freedom from word identification problems that might hinder comprehension” (Harris & Hodges, 1995, p. 85) in their definition of fluency.
Automatic Information Processing in Reading

Laberge and Samuels’ (1974) seminal article suggested that human beings could only attend to one thing at a time. We are able to do more than one thing at a time if we alternate our attention between two or more activities, or if one of the activities is so well learned that it can be performed automatically (Laberge & Samuels, 1974). According to Laberge and Samuels (1974), the ability to read well involves the complex interaction of language, sensory perception, memory, and motivation. Fluency involves at the minimum, two activities: word identification or decoding and comprehension. In order for a reader to process text effectively, attention cannot be focused on both processes. The nonfluent reader alternates attention between the two processes. Laberge and Samuels (1974) suggested that when the reader’s attention was drained by decoding words, there was little available for the attention-demanding process of comprehending. Therefore, the automaticity of decoding, a component of fluency, is necessary for high levels of reading achievement.

Laberge and Samuels (1974) made a fundamental discovery. The ability to sound out a word did not guarantee that the word would be understood as the child reads. When children were first learning to sound out words, it required real mental effort. The more effort required, the less consciousness left over for other cognitive operations, including comprehension of the words being sounded out. Thus, Laberge and Samuels’ (1974) analyses made clear that it was critical for children to develop fluency in word recognition. Fluent or automatic word recognition consumed little
cognitive capacity, freeing up the child’s cognitive capacity for understanding what was read.

*Foundations of Fluency: An Exploration*

Eldredge’s (2005) study examined first-, second-, and third-grade students growth over time in fluent reading. The study focused on the potential precursors of fluency relationship of word recognition, phonics knowledge, and reading rate. Two tests, a pre and posttest, were administered to each of the students. The tests included reading of pseudo-words, word-recognition tests that borrowed from the Carroll, Davies, and Richman (as cited by Eldredge, 2005) word frequency book, and running records. This study concluded that there was a causal path going from phonics knowledge to increased word recognition and word recognition to better fluency.

Keehn’s (2003) study looked at the effectiveness of Readers’ Theater as an instructional intervention for oral reading fluency and whether or not there were any benefits of using readers’ theater for students at different levels of reading ability. A total of 66 second grade students were randomly selected to participate in this study. For nine weeks, students participated in Readers Theater repertory groups. Some of the 66 students also received instruction in the form of mini-lessons and daily coaching in strategies intended to increase oral reading fluency. Findings from this study suggested that Readers Theater was an effective strategy for increasing oral reading fluency. All students made significant gains in rate, phrasing, fluidity, and expressiveness, as well as in comprehension and word recognition. However, there was not any significant difference between students receiving explicit instruction in the form of mini-lessons
and daily coaching strategies and those students who only participated in Readers Theater. Researchers also noted that transfer of fluency from practiced text to unrehearsed text occurred during the sixth to seventh week of participation in Readers Theater.

**Neurological Impress Method Plus**

This study by Flood, Lapp, and Fisher (2005) revisited the Neurological Impress Method (NIM), which was “a staple of the research literature on fluency during the 1960s through 1980s” (p. 147). According to the researchers, Heckelman used NIM while working with a ninth-grade student with severe reading problems. NIM was a multisensory approach to reading instruction that called for the teacher and student to both hold the book with the student sitting slightly ahead of the teacher. The teacher sat on the side of the student’s dominant ear. As the teacher tracked the text with his or her finger, he or she spoke directly into the student’s ear, and they read the text together in a fluent manner pausing only at punctuation.

Researchers Flood, Lapp, and Douglas, wondered whether or not NIM would be effective with younger students. Their study was actually two studies combined into one. The first study looked at whether or not Heckelman’s work could be replicated with using tutors working with younger students, third through sixth grade, during an abbreviated time schedule. Student teachers were trained to work one-on-one with 20 randomly selected students identified as below grade level according to state achievement tests. Oral reading fluency was measured in words correct per minute (wcpm). One-minute probes were used to measure oral fluency. Silent reading fluency
was measured through the use of timed passages. Silent reading fluency was measured as total words per minute (wpm). Finally, in order to assess the PLUS of NIM Plus, an informal reading inventory was used to collect information for each student’s comprehension.

The results for study one found that on each of the three measures, oral reading fluency, silent reading fluency, and comprehension, students showed significant improvement after five weeks of NIM training. Oral reading fluency increased from 92.7 wcpm to 112 wcpm. Silent reading fluency increased from 132 wpm to 154 wpm. Comprehension scores increased from 3.2 questions correct to 4.5 questions correct.

The second study focused on fluency and traditionally underrepresented students. Twenty randomly selected students in third through sixth grade were culturally, linguistically, ethnically, and economically diverse students (P. Larke, personal communication, September 14, 2003). The students received the treatment provided in the first study. The findings suggested significant gains in oral reading fluency, silent reading fluency, and comprehension. Oral reading fluency increased from 62.4 wcpm to 87.3 wcpm. Silent reading fluency increased from 88.6 wpm to 114 wpm. Comprehension scores increased from 2.4 questions correct to 4.2 questions correct.

*Flashcards Revisited: Training Poor Readers to Words*  
*Faster Improves Their Comprehension of Text*

Tan and Nicholson (1997) carried out a study that emphasized the importance of word-recognition instruction to the point of fluency. In their study, struggling
primary-level readers were taught 10 new words, with instruction either emphasizing word recognition to the point of fluency (they practiced reading the individual words until they could recognize them automatically) or understanding of the words (instruction involving mostly student-teacher discussions about word meanings). Following the instruction, the students read a passage containing the words and answered comprehension questions about it. The students who had learned to recognize the words to the point of automaticity answered more comprehension questions than did students who experienced instruction emphasizing individual word meanings. Consistent with other analyses (Breznitz, 1997a, 1997b), Tan and Nicholson’s outcome made obvious that development of fluent word-recognition skills can make an important difference in students’ understanding of what they read.

Typically, however, when readers process text containing new factual information, they do not automatically relate that information to their prior knowledge, even if they have a wealth of knowledge that can be related. In many cases, more is needed for prior knowledge to be beneficial in reading comprehension. A large number of experiments conducted in the late 1980s and early 1990s demonstrated the power of “Why?” questions, or “elaborative interrogation,” to encourage readers to orient to their prior knowledge as they read. In these studies (Pressley et al., 1992), readers were encouraged to ask themselves why the facts being presented in text made sense. This encouragement consistently produced a huge effect on memory of the texts, with the most compelling explanation emerging from analytical experiments that showed the interrogation oriented readers could use prior knowledge to explain the facts being
encountered (Martin & Pressley, 1991). The lesson that emerged from these studies is that readers should be encouraged to relate what they know to information-rich texts they are reading.

**Efficacy**

The concept of efficacy has been discussed for almost half a century. Barfield and Burlingame (1974) defined efficacy as “a personality trait that enables one to deal effectively with the world” (p. 10). With his publication *Self-Efficacy: Toward a Unifying Theory of Behavioral Change*, Bandura (1977) brought the concept of self-efficacy to our attention. Later, he discussed self-efficacy within a social cognitive theory of human behavior. Bandura (1995, 1997) defined perceived self-efficacy as people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves, and behave. He pointed out that a strong sense of efficacy enhances human accomplishment, strengthens, and maintains one’s efforts in the face of failure and fosters a deep commitment and involvement in activities. Pajares (2002) continued that individuals with high self-efficacy attribute failure to insufficient effort or deficient knowledge and skills that were acquirable. Individuals with high self-efficacy do not attribute failure to external factors.

In contrast, individuals with a low sense of self-efficacy stay away from challenges and difficult tasks that they perceive as threats. They are not committed, have low motivation, and focus on perceived obstacles that prevent their success. Individuals with a low sense of efficacy give up quickly and do not recover very well
from failure. Since they view insufficient performance as deficient aptitude, it does not require much failure for them to lose faith in their capabilities.

Bandura (1997) posited that the beliefs people have about themselves are key pieces in the personal exercise of control and personal agency. Bandura (1995, 1997) explained human agency as the way that humans act upon their environment. Humans create, uphold, transform, and even destroy their environment. Humans are self-organizing, proactive, self-regulating, and self-reflecting. They “are contributors to, rather than the sole determinants of, what happens to them” (Bandura, 1997, p. 3). Humans are agents when they act upon their environment but objects when they act upon themselves resulting in a dualistic view of the self. Pajares (1996) suggested that because personal agency was socially rooted and operated within sociocultural influences, “individuals were viewed as both products and as producers of their own environments and of their social systems” (p. 544). Bandura (1997) wrote that a distinction must be made between the “personal production of action for an intended outcome and the effects that carrying out that course of action actually produce” (p. 3). In other words, actions were carried out in the hopes of accomplishing a certain outcome; however, they might actually have produced outcomes that were neither intended nor desired.

**Teacher Efficacy**

In the past 20 years, there has been increased interest in teachers’ beliefs about their own abilities and effectiveness and how these beliefs may relate to student achievement. McLaughlin and Marsh (1978) defined teacher efficacy as “the extent to
which the teacher believed he or she has the capacity to affect student performance” (p. 84). Guskey (1987) defined teacher efficacy as “a teacher’s belief or conviction that he or she can influence how well students learn, even those who may be difficult or unmotivated” (p. 41). Bandura (1995, 1997) defined teacher efficacy as a teacher’s belief in his/her instructional efficacy or capability to support students’ academic achievement. He continued the conceptualization of teacher efficacy by writing that while teachers may believe that certain teacher behaviors will affect student performances, they may not believe that they can execute those behaviors. Teacher efficacy measures the extent to which teachers believe their efforts have a positive effect on student achievement. The Rand studies (Armor et al., 1976; Berman, McLaughlin, Bass, Pauly, & Zellman, 1977) were the first to reveal the significant positive relationship between teacher efficacy and student achievement and posited that a teacher’s sense of efficacy was one of the best predictors of increases in student achievement.

Teachers with a low sense of teacher efficacy tend to create classroom cultures that “undermine students’ sense of efficacy and cognitive development” (Bandura 1995, p. 20). Teachers with a low sense of teacher efficacy rely on extrinsic motivation and negative sanctions to get students to study. Hoy (2000) supported Bandura’s findings and stated that preservice teachers with a low sense of teacher efficacy “tend to have an orientation toward control, taking a pessimistic view of students’ motivation, relying on strict classroom regulations, extrinsic rewards, and punishments to make students study” (p. 5). Teachers who lacked a secure sense of teacher efficacy “show
weak commitment to teaching, spend less time in subject matters in their areas of perceived inefficacy, and devote less overall time to academic matters” (Bandura, 1995, p. 20).

Bandura’s (1977) theory of self-efficacy, defined as individuals’ judgments of their ability to complete future actions, created the framework for much of the teacher efficacy research. These judgments were based on personal interpretations of past actions rather than on some extra-individual criterion of performance. These interpretations impacted performance expectations but can be modified by new sources of information. Bandura would argue that the most important knowledge source was how future performances were interpreted.

There were two components to the self-efficacy theory (Bandura, 1977). The components were outcome expectancy and efficacy expectations. Bandura explained outcome expectancy as “a person’s estimate that a given behavior will lead to certain outcomes” (p. 193). This is the person’s belief that the desired outcome will be the result of his or her behavior. Efficacy expectations, or personal efficacy, are individuals’ beliefs about their own capabilities to bring about the outcome. Efficacy expectation looks at an individual’s attitude and belief about what he/she can accomplish with the skills and knowledge they possessed.

Bandura (1977, 1986, 1997) identified four sources of efficacy expectations: (a) mastery experiences (the most powerful source), (b) physiological and emotional states, (c) vicarious experiences, and (d) social persuasion. The perception that teaching has been successful (mastery) raised expectations that teaching would be proficient in the
future, unless the success required such massive work that the individual felt unable to sustain this level of effort. The perception that one’s teaching had been a failure lowered efficacy beliefs, contributing to the expectation that future performances would also be inept, unless the failure was viewed as providing clues about more potentially successful strategies. Interpretations of emotions and physiological arousal added to the feeling of mastery or incompetence. For example, feelings of tension could be interpreted as anxiety and fear that failure was imminent or as excitement (i.e., being “psyched” for a good class).

Vicarious experiences are those in which someone else models a skill. The more closely the observer identifies with the model, the stronger the impact on efficacy (Bandura, 1977). When a credible model is taught well, the efficacy of the observer is enhanced. When the model performs poorly, the expectations of the observer decrease.

Social or verbal persuasion entails a “pep talk” or specific performance feedback from a supervisor, colleague, or students. Student evaluation of instructions can be a form of verbal persuasion, for better or worse. Social persuasion, though limited in its impact, may have provided a “boost” to counter occasional setbacks; the potency of persuasion depends on the credibility, trustworthiness, and expertise of the persuader (Bandura, 1986).

Applying Bandura’s premise to teaching, teacher efficacy then is made up of two independent dimensions: general teaching efficacy and personal teaching efficacy (Ashton & Webb, 1986; Gibson & Dembo, 1984). General teaching efficacy refers to teachers’ belief that teaching can have an influence on student performance, whereas
personal teaching efficacy refers to teachers’ belief in their own capacity to affect student performance (Ashton & Webb, 1986). A teacher with high general teaching efficacy believes that all students can learn regardless of cultural, language, ethnic, or economic diversity (P. Larke, personal communication, September 14, 2003). A teacher with high personal teaching efficacy believes that they themselves possess the needed teaching abilities and skills to impact student learning. Therefore, it is argued that a teacher who has high efficacy in both dimensions might have a positive impact on students’ academic achievement.

Teacher efficacy is highly context-specific, too. A teacher, for example, who feels highly efficacious about teaching math lessons may feel less efficacious about teaching beginning readers how to read. Therefore, in making an efficacy judgment, it is necessary to assess one’s strengths and weaknesses in relation to the requirements of the task at hand.

One of the things that makes teachers’ efficacy judgments so powerful is the cyclical nature of the process. Greater efficacy leads to greater effort and persistence, which leads to better performance (a new mastery experience), which in turn leads to greater efficacy. The reverse is also true. Lower efficacy leads to less effort and giving up easily, leading to poor teaching outcomes, which then produces decreased efficacy.

**Measures of Teacher Efficacy**

Meta-analyses of the various instruments used to measure teacher efficacy looks at its meaning and measure (Tschannen-Moran & Hoy, 2001; Tschannen-Moran, Hoy, & Hoy, 1998). Both meta-analyses began with Rotter’s (1966) social learning theory as
the theoretical base in which teacher efficacy was first conceived. Rotter’s (1966) article inspired the RAND researchers to add the two efficacy items to their questionnaire. The first item asks, “When it comes right down to it, a teacher really can’t do much because most of a student’s motivation and performance depends on his or her home environment” (p. 204). Teachers who agree with this statement tend to believe that external forces overwhelm the individual capabilities of the teacher. The second item asks, “If I really try hard, I can get through to even the most difficult or unmotivated students” (Rotter, 1966, p. 204). Teachers who agree with this statement exhibit a strong sense of teacher efficacy. They believe that they possess the necessary skills, training, or experience to overcome any obstacles to student learning. This two-item measure became known as Rotter’s I-E scale because it took the sum of the internal and external items and called it teacher efficacy. Researchers, using the RAND items as measures, were able to correlate efficacy range from “student achievement to teacher stress and the implementation of innovation” (Tschannen-Moran, Hoy, & Hoy, 1998, p. 205).

Teacher Locus of Control (TLC), designed by Rose and Medway (as cited by Tschannen-Moran, Hoy, & Hoy, 1998; Tschannen-Moran & Hoy, 2001) was a 28-item measure. This particular measure asked teachers to assign responsibility for student successes or failures by choosing between two competing explanations for the vignettes described. Half of the vignettes described student success and the other half described student failure. Each success vignette attributed the positive outcome internally to the teacher, while the other attributed responsibility external to the teacher. The same was
true for each failure vignette. Rose and Medway (1998) believed that the TLC was a better predictor of teacher behavior than Rotter’s I-E scale because the TLC was able to “predict teachers’ willingness to implement new instructional techniques” (Tschannen-Moran & Hoy, 2001, p. 787). They found that teachers with high internal responsibility for student learning with large populations of “disadvantaged students gave fewer disciplinary commands, while high-internal teachers who taught among more privileged students called on nonvolunteers more frequently and had students engaged in self-directed activities” (Tschannen-Moran & Hoy, 2001, p. 206).

The Responsibility for Student Achievement (RSA) was a 30-item measure developed by Guskey (1981). The RSA identified four types of causes that were derived from the attribution theory: (a) specific teaching abilities, (b) effort put into teaching, (c) the task difficulty, and (d) luck. This measure asked participants to distribute 100 percentage points that were later reduced to 10 points between two answer choices. One answer choice stated that the teacher caused the event and the other choice states that factors beyond the teachers’ control caused the event. Guskey (as cited by Tschannen-Moran, Hoy, & Hoy, 1998) found a positive correlation between teacher efficacy and responsibility for student success and student failure. He maintained that positive and negative performance outcomes were not separate ends of a continuum but rather were separate dimensions that influenced perceptions of efficacy.

The Webb scale was an attempt “to extend the measure of teacher efficacy while maintaining a narrow conceptualization of the construct” (Tschannen-Moran &
Hoy, 2001, p. 787). This particular measure was designed to reduce the problem of social desirability bias by utilizing a forced-choice format. Tschannen-Moran and Hoy (2001) stated that this particular measure was not met with wide acceptance, and they were unable to find any published studies other than the original study that used the Webb scale.

The Ashton vignettes (Ashton, Buhr, & Crocker, 1984) were a 50-item measure that attempted to address the assumption that teacher efficacy was context specific. The vignettes described possible situations that teachers may encounter and asked teachers to make judgments as to their abilities to effectively handle the situation. A second version of the Ashton vignettes asked teachers to compare their abilities in handling the situations to other teachers using a scale from “extremely ineffective” to “extremely effective” (Tschannen-Moran & Hoy, 2001). This scale, like the Webb scale, did not find wide acceptance, and its use had only been published in the original study.

A scale for determining teacher efficacy that had found wide acceptance and was used in many studies was the Gibson and Dembo’s teacher efficacy scale (TES) (Tschannen-Moran & Hoy, 2001). Gibson and Dembo (Tschannen-Moran & Hoy, 2001) designed a 30-item measure of teacher efficacy that yielded a two-factor structure: personal efficacy and teaching efficacy. Gibson and Dembo (1984) found that teachers with high individual efficacy persisted in helping students work to arrive at correct answers as opposed to teachers with lower efficacy who provided the answers to students. These authors found that teachers with high efficacy were more effective in their questioning skills than teachers with low efficacy. Researchers (Gibson & Dembo,
1984; Tschannen-Moran & Hoy, 2001) noted that teachers who were highly efficacious spent more time in planning lessons, preparing, and paperwork than did teachers with low efficacy. Other researchers (Hoy & Woolfolk, 1993; Podell & Soodak, 1993) have found the two factors to be only moderately related to outcome expectancy. As a result of this discrepancy, many researchers (as cited by Tschannen-Moran, Hoy, & Hoy, 1998) preferred to use the 16-item version of the Gibson and Dembo instrument. Tschannen-Moran and Hoy (2001) maintained that due to the “lack of clarity about the meaning of the two factors and the instability of the factor structure” (p. 789) a new measure was needed.

In response to their call for a new measure for teacher efficacy, Tschannen-Moran and Hoy (2001) developed the Ohio State Teacher Efficacy Scale (OSTES). The OSTES measured three factors of teacher efficacy: (a) efficacy for instructional strategies, (b) efficacy for classroom management, and (c) efficacy for student engagement. Two versions of the OSTES, a 24-item and 12-item form, were shown to be valid instruments to measure the construct of teacher efficacy.

**Summary**

The research reviewed in this chapter suggested that student mobility might have had a negative impact on the reading achievement of first and second grade students. The research also supported the belief that teachers with a high sense of efficacy can help highly mobile students overcome the limiting factor of mobility on reading achievement. However, a review of the literature revealed that the relationship between urban teachers’ sense of efficacy for literacy instruction and the reading
achievement of their highly mobile students has yet to be investigated. The objective for this study was to determine if there was a relationship between teachers’ sense of efficacy for literacy instruction and the reading achievement of their highly mobile students.
CHAPTER III

METHODOLOGY

The sample surveyed for this correlation study was selected from an urban school district located in the Southwestern region of the United States. The school district encompassed 68 square miles (*Brief facts, 2005*) and had a total student population of 39,000 students in pre-kindergarten through twelfth grade (TEA, 2003-2004). Five high schools, 12 middle schools, and four special campuses served 19,400 secondary students. Thirty-nine elementary campuses had a total of 19,600 students in grades prekindergarten through the fifth grade. Nine elementary campuses were selected in order to obtain “information rich data” (Gall et al., 2003, p. 165). The criterion for selecting schools borrowed from Kerbow’s (1996) research. Kerbow (1996) found that “clusters of schools may be linked together by students who enter, exit, and sometimes re-enter a school during a 9-month period” (p. 156). The schools selected to participate in this study shared the following characteristics:

(a) located within a three-mile radius, (b) high student mobility rate, (c) low socio-economic status, and (d) history of serving area homeless students (Kerbow, 1996).

**Demographics of the Study**

Teacher and student demographics for campuses selected to participate in this study were obtained through campus profiles provided in 2003-2004 Academic Excellence Indicator System (AEIS) (TEA, 2005). Student mobility rates, percentage of English Language Learners (ELL), and percentage of economically challenged students were provided for each campus. Teacher demographics, which included cultural/ethnic
identification and years of experience, were also provided for each campus but were not grade level specific.

**Teacher Demographics of Selected Campuses**

Nine campuses were asked to participate in this correlational study. Seven of the nine campuses agreed to participate. Table 3.1 identified the number of classroom teachers at each campus, number of first and second grade classroom teachers eligible to participate, and the number of first and second grade classroom teachers who participated. The number of classroom teachers per campus ranged from a low of 23 to a high of 40 per campus (Table 3.1). The number of first and second grade classroom teachers per campus ranged between two to six per grade level (Table 3.1).

Table 3.2 provided teachers’ cultural/ethnic identification according to AEIS reports (TEA, 2005). According to Table 3.2, the majority of classroom teachers were identified as Hispanic American, followed by European American, African American, and Asian American, respectively. The exception to teachers’ cultural/ethnic identification was at Campus 2 with 25.5% of the classroom teachers identified as African American.
Table 3.1. Teacher Participants for Selected Campuses

<table>
<thead>
<tr>
<th>Campus</th>
<th>N Teachers per campus</th>
<th>Grade Level</th>
<th>N Possible Teacher Participants</th>
<th>N Possible Teacher Participants at Participating Campuses</th>
<th>N Actual Teacher Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>31</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>26</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4*</td>
<td>27</td>
<td>1</td>
<td>4</td>
<td>*</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>4</td>
<td>*</td>
<td>0</td>
</tr>
<tr>
<td>5*</td>
<td>29</td>
<td>1</td>
<td>4</td>
<td>*</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>5</td>
<td>*</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>40</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>33</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>23</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>39</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>71</td>
<td>54</td>
<td>48</td>
</tr>
</tbody>
</table>

*Indicates nonparticipating campuses.

Table 3.2. Teachers’ Cultural/Ethnic Identification for Selected Campuses

<table>
<thead>
<tr>
<th>Campus</th>
<th>% African American</th>
<th>% Asian American</th>
<th>% European American</th>
<th>% Hispanic American</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.0</td>
<td>3.2</td>
<td>28.3</td>
<td>68.4</td>
</tr>
<tr>
<td>2</td>
<td>25.5</td>
<td>0.0</td>
<td>8.5</td>
<td>66.0</td>
</tr>
<tr>
<td>3</td>
<td>0.0</td>
<td>0.0</td>
<td>36</td>
<td>64.0</td>
</tr>
<tr>
<td>*4</td>
<td>0.0</td>
<td>3.7</td>
<td>36.4</td>
<td>59.9</td>
</tr>
<tr>
<td>*5</td>
<td>6.8</td>
<td>1.7</td>
<td>45.6</td>
<td>45.9</td>
</tr>
<tr>
<td>6</td>
<td>2.5</td>
<td>2.5</td>
<td>57.8</td>
<td>37.2</td>
</tr>
<tr>
<td>7</td>
<td>3.0</td>
<td>0.0</td>
<td>36</td>
<td>61.0</td>
</tr>
<tr>
<td>8</td>
<td>13.3</td>
<td>0.0</td>
<td>45.3</td>
<td>41.3</td>
</tr>
<tr>
<td>9</td>
<td>1.3</td>
<td>0.0</td>
<td>24.5</td>
<td>74.2</td>
</tr>
</tbody>
</table>

*Indicates nonparticipating campuses.
Table 3.3 provided teachers’ years of experience according to AEIS reports (TEA, 2005). According to Table 3.3, there were fewer beginning teachers and teachers with 6-10 years of experience. The majority of teachers at the nine selected campuses in this urban school district had 1-5 years of experience or 11 or more years of teaching experience (Table 3.3).

<table>
<thead>
<tr>
<th>Campus</th>
<th>% Beginning Teacher</th>
<th>% 1-5 years</th>
<th>% 6-10 years</th>
<th>% 11-20 years</th>
<th>% 20+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.0</td>
<td>25.1</td>
<td>19.3</td>
<td>20.1</td>
<td>35.4</td>
</tr>
<tr>
<td>2</td>
<td>4.3</td>
<td>10.6</td>
<td>12.8</td>
<td>44.7</td>
<td>27.7</td>
</tr>
<tr>
<td>3</td>
<td>0.0</td>
<td>35.6</td>
<td>24.6</td>
<td>15.1</td>
<td>24.6</td>
</tr>
<tr>
<td>*4</td>
<td>3.2</td>
<td>25.8</td>
<td>3.7</td>
<td>44.8</td>
<td>22.4</td>
</tr>
<tr>
<td>*5</td>
<td>0.0</td>
<td>23.8</td>
<td>27.2</td>
<td>21.8</td>
<td>27.2</td>
</tr>
<tr>
<td>6</td>
<td>7.4</td>
<td>24.6</td>
<td>0.0</td>
<td>42.3</td>
<td>25.7</td>
</tr>
<tr>
<td>7</td>
<td>4.9</td>
<td>22.5</td>
<td>9.0</td>
<td>27.7</td>
<td>36.0</td>
</tr>
<tr>
<td>8</td>
<td>2.2</td>
<td>32.4</td>
<td>0.0</td>
<td>33.3</td>
<td>32.0</td>
</tr>
<tr>
<td>9</td>
<td>7.7</td>
<td>20.5</td>
<td>7.7</td>
<td>27.0</td>
<td>37.1</td>
</tr>
</tbody>
</table>

*Indicates nonparticipating campuses.

Student Demographics

Table 3.4 provided student enrollment for the nine selected campuses. According to Table 3.4, student enrollment ranged from a low of 88 students enrolled in first and second grade to a high of 195 students enrolled in first and second grade. Selected campuses were fairly balanced in terms of the numbers of first and second grade students enrolled (Table 3.4).
Table 3.4. First and Second Grade Student Population of Selected Campuses

<table>
<thead>
<tr>
<th>Campus</th>
<th>Student Enrollment</th>
<th>% First Grade Students</th>
<th>% Second Grade Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>161</td>
<td>46</td>
<td>54</td>
</tr>
<tr>
<td>2</td>
<td>88</td>
<td>51</td>
<td>49</td>
</tr>
<tr>
<td>3</td>
<td>136</td>
<td>49</td>
<td>51</td>
</tr>
<tr>
<td>*4</td>
<td>138</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>*5</td>
<td>163</td>
<td>45</td>
<td>55</td>
</tr>
<tr>
<td>6</td>
<td>194</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>7</td>
<td>157</td>
<td>47</td>
<td>53</td>
</tr>
<tr>
<td>8</td>
<td>109</td>
<td>57</td>
<td>43</td>
</tr>
<tr>
<td>9</td>
<td>195</td>
<td>56</td>
<td>44</td>
</tr>
</tbody>
</table>

*Indicates nonparticipating campuses.

Student demographics of cultural/ethnic identification according to AEIS reports (TEA, 2005) can be found in Table 3.5. According to Table 3.5, the majority of students enrolled in the nine selected campuses were Hispanic Americans. The percentage of Hispanic Americans ranged between 51.6% and 95.4%. Campuses 4 and 5 had the largest percentage of European American students enrolled with 12.2 and 11.1% respectively (Table 3.5). Only campus 6 had a similar percentage of European Americans, 11.4%, enrolled. Campus 2 was the only participating campus to have a large African American student enrollment of 45.6% (Table 3.5).
Table 3.5. Student Demographics of Selected Campuses

<table>
<thead>
<tr>
<th>Campus</th>
<th>% African American</th>
<th>% Asian American</th>
<th>% European American</th>
<th>% Hispanic American</th>
<th>% Native American</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.7</td>
<td>0.4</td>
<td>2.4</td>
<td>95.4</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>45.6</td>
<td>0.0</td>
<td>2.8</td>
<td>51.6</td>
<td>0.0</td>
</tr>
<tr>
<td>3</td>
<td>5.9</td>
<td>0.2</td>
<td>5.9</td>
<td>87.9</td>
<td>0.0</td>
</tr>
<tr>
<td>*4</td>
<td>6.3</td>
<td>0.4</td>
<td>12.2</td>
<td>81.1</td>
<td>0.0</td>
</tr>
<tr>
<td>*5</td>
<td>5.5</td>
<td>0.7</td>
<td>11.1</td>
<td>82.7</td>
<td>0.0</td>
</tr>
<tr>
<td>6</td>
<td>10.9</td>
<td>1.8</td>
<td>11.4</td>
<td>75.1</td>
<td>0.7</td>
</tr>
<tr>
<td>7</td>
<td>5.4</td>
<td>0.4</td>
<td>3.8</td>
<td>89.9</td>
<td>0.5</td>
</tr>
<tr>
<td>8</td>
<td>4.6</td>
<td>0.3</td>
<td>2.4</td>
<td>92.4</td>
<td>0.3</td>
</tr>
<tr>
<td>9</td>
<td>2.1</td>
<td>0.2</td>
<td>2.6</td>
<td>94.6</td>
<td>0.5</td>
</tr>
</tbody>
</table>

*Indicates nonparticipating campuses.

Table 3.6 provided AEIS indicators (TEA, 2005) for the campuses selected to participate in this study. According to Table 3.6, student mobility ranged between 28.7 to 42.6%. AEIS (TEA, 2005) considered a student to be mobile “if he or she has been in membership at the school for less than 83% of the school year (i.e., has missed six or more weeks at a particular school)” (TEA, 2005, p. 15). The percentage of English language learners ranged between 7.1 to 44.0% (Table 3.6). The percentage of economically challenged students ranged between 78.9% and 98.2% (Table 3.6). The majority of campuses had more than 90% of their students identified as economically challenged.
Table 3.6. AEIS Indicators for Selected Campuses

<table>
<thead>
<tr>
<th>Campus</th>
<th>% Student Mobility</th>
<th>% English Language Learners</th>
<th>% Economically Challenged</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>30.9</td>
<td>37.9</td>
<td>93.5</td>
</tr>
<tr>
<td>2</td>
<td>35.7</td>
<td>12.6</td>
<td>98.2</td>
</tr>
<tr>
<td>3</td>
<td>42.6</td>
<td>17.0</td>
<td>97.0</td>
</tr>
<tr>
<td>*4</td>
<td>35.2</td>
<td>29.9</td>
<td>90.6</td>
</tr>
<tr>
<td>*5</td>
<td>34.0</td>
<td>12.4</td>
<td>78.9</td>
</tr>
<tr>
<td>6</td>
<td>28.7</td>
<td>7.1</td>
<td>79.2</td>
</tr>
<tr>
<td>7</td>
<td>28.9</td>
<td>19.2</td>
<td>91.1</td>
</tr>
<tr>
<td>8</td>
<td>32.1</td>
<td>12.4</td>
<td>91.9</td>
</tr>
<tr>
<td>9</td>
<td>38.0</td>
<td>44.0</td>
<td>94.6</td>
</tr>
</tbody>
</table>

*Indicates nonparticipating campuses.

Population

The target population for this study was first and second grade classroom teachers who taught at a campus with high student mobility. High mobility students included subgroups of homeless students and locally transient students. The teachers participating in this study were employed at an urban school district located in the southwestern region of the United States. Nine individual campuses with approximately 70 first and second grade classroom teachers were asked to participate in this study.

Sample

First and second grade classroom teachers from nine elementary campuses from this urban school district were invited to participate in this correlational study. They were referred to as Campus 1, Campus 2, Campus 3, Campus 4, Campus 5, Campus 6, Campus 7, Campus 8, and Campus 9. Schools were invited to participate in this study based upon criteria derived from Kerbow’s (1996) research on locally transient
students. These same criteria were applied to homeless students. The criteria for school involvement consisted of schools within a three-mile radius of each other, schools that were near homeless shelters, high student mobility rate, and percentage of economically challenged students. All schools invited to participate had a student mobility rate of at least 28% (Table 3.6). Kerbow (1996) found that students generally stayed within a three-mile radius when they reentered school. Selected schools were within three miles of each other. Schools that were in close proximity to homeless shelters were also asked to participate in this study. The selected schools had to have a high percentage of their student population identified as economically challenged. Only one participating campus, Campus 5, had less than 90% of its students identified as economically challenged (Table 3.6). This campus was selected due to its of proximity to other schools included in this study as well as proximity to area homeless shelters.

Of nine selected schools, seven campuses agreed to participate. Two campuses, Campus 4 and Campus 5, chose not to participate in this study. These schools declined to participate after the study began. Since the study had begun, the decision was made to identify the campuses as originally numbered rather than renumber the participating schools. Therefore, Campuses 4 and 5 were not included in this study.

It is important to note any significant difference in teacher and student demographics for Campus 4 and 5 that might have affected the data. Campus 4 and 5 had a significant number of teachers identified as European American (Table 3.2). Almost half of the teachers at Campus 4 had 11-20 years of teaching experience (Table 3.3). Campus 4 and 5 both had higher percentages of European American students
enrolled in comparison to the other campuses. Campus 4 and Campus 5 had a student enrollment that included 12.2% and 11.1% European American respectively (Table 3.5). Campus 5 had the lowest percentage of students identified as economically challenged (Table 3.6).

Of the 54 teachers eligible to participate, 48 teachers returned the surveys resulting in an 89% survey return rate. Twenty-five first grade and 23 second grade teachers participated in this study. Questions regarding teachers’ sense of efficacy for literacy instruction and demographic information regarding years of experience, level of education, and ethnic identity were added. Gender was omitted on the survey since a majority of first and second grade teachers were female. However, one male teacher was included within the sample.

The majority of the 25 first grade teacher participants, 64%, had between 1-10 years’ teaching experience (Table 3.7). There was a balanced distribution between teachers with 1-5 years and 6-10 years teaching’ experience. Fifty-six percent (n = 14) of the first grade teachers had earned a baccalaureate degree and 44% (n = 11) possessed a master’s degree (Table 3.8). The majority of first grade teachers identified themselves as Hispanic/Latino (Table 3.9).
There were 23 second grade teachers who participated in this study. The majority of second grade teachers fell into two categories for years of experience. Thirty percent of the second grade teacher participants had 6-10 years of teaching experience, and 39% had 20 years or more teaching experience (Table 3.3). The second
grade teacher participants were evenly divided in their level of education, while only one teacher had a doctoral degree (Table 3.8). The majority of second grade teacher participants identified themselves as Hispanic/Latino (Table 3.9).

**Research Questions**

The following research questions guided this study:

1. Is there a difference in urban first grade classroom teachers’ sense of efficacy and urban second grade classroom teachers’ sense of efficacy for literacy instruction for highly mobile students?
2. Is there a difference between the growth in the reading achievement of highly mobile students in first grade and the growth in the reading achievement of highly mobile students in second grade?
3. What is the relationship between urban teachers’ sense of efficacy and the reading achievement of highly mobile students?

**Instruments**

Two instruments were used to collect data. One instrument was a modified version of the Teachers’ Sense of Efficacy for Literacy Instruction or TSELS (Appendix A). The TSELS (Tschannen-Moran & Johnson, 2004) utilized a nine-point Likert scale. The responses ranged from one, “none at all,” to nine, “a great deal.” The TSELS asked 18 questions that dealt with teachers’ sense of efficacy for literacy instruction, two subscales of teacher efficacy (Appendix B), and 4 questions for demographic purposes. Both Dr. Johnson and Dr. Tschannen-Moran approved the modification of this instrument (Appendix C). A modification of the TSELS
(Tschannen-Moran & Johnson, 2004) was developed to specifically address first and second grade classroom teachers’ sense of efficacy for literacy instruction to meet the needs of high mobility students.

*Teachers’ Sense of Efficacy for Literacy Instruction Scale*

Tschannen-Moran and Johnson (2004) developed the Teachers’ Sense of Efficacy for Literacy Instruction Scale (TSELS). Factor analysis was used to identify two factors or subscales for this instrument: sense of efficacy for integrating instruction across the language arts and the sense of efficacy for differentiation of instruction (Appendix B).

*Texas Primary Reading Inventory*

The second instrument used for data collection was the Texas Primary Reading Inventory (TPRI) (1999). The TPRI was a teacher-administered assessment of reading skills for children in kindergarten, Grade 1, and Grade 2 (Center for Academic and Reading Skills (CARS), 1999). First grade students were assessed at the beginning and end of the year.

An optional middle-of-the-year assessment for first grade was also available. However, middle-of-the-year assessments were not included in this study. Second grade students were assessed at the beginning-of-the-year with the end-of-the-year assessment available as an option. The participating school district required the end-of-the-year assessment for all second grade students.

At the beginning of the year, TPRI in first grade had three screening tasks and 13 tasks administered. However, at the end of the year, TPRI had two screening tasks
and 13 tasks for first grade. In first grade, the beginning-of-the-year screening tasks included: letter-sound relationships, word reading task, and blending phonemes. The end-of-the-year screening tasks for first grade included: word reading and blending phonemes. First grade beginning- and end-of-the-year tasks included: book and print awareness, rhyming, blending word parts, blending phonemes, detecting initial sounds, detecting final sounds, initial consonant substitution, final consonant substitution, medial vowel substitution, initial blend substitution, and two comprehension tasks (CARS, 1999).

The beginning-of-the-year TPRI had one screening task and 11 tasks in second grade. Word reading was the screening task and the additional 11 tasks included: initial consonant substitution; final consonant substitution; medial vowel substitution; initial blend substitution; final blend substitution; spelling of CVC and CVCe words; spelling of long vowels; orthographic patterns, conventions, and past tense; orthographic patterns, conventions, and inflectional endings; and two comprehension tasks. No TPRI screening task for the end of the year was administered in second grade TPRI. In addition to the above, beginning-of-the-year second grade TPRI tasks, two expository tests were added to the end-of-the-year assessment.

This study used specific components of the TPRI for each grade level test as dependent variables to assess student achievement. The data selected for the purposes of this study were collected from the beginning- and end-of-the-year TPRI assessment for both first and second grade. To compare the reading achievement of highly mobile
first and second grade students to teachers’ sense of efficacy, the components of fluency and comprehension were selected from the TPRI.

Pilot Study

A pilot study was conducted under the supervision of Dr. Norvella Carter. The modified survey was shown to a jury of experts. This exercise resulted in changing the format of the survey. It was determined that a table format separating the question from the answer choices assisted in reading the survey. The survey was then administered to a small group of teachers to establish reliability and validity of the modified instrument.

Validity of the TSELS Instrument

Tschannen-Moran and Johnson (2004) used a panel of experts to review the instrument for content validity. The researchers then field-tested the instrument with 11 graduate students to ensure clarity of wording, response scale, and ease of administration. The directions and the nine-point response scale were retained based upon their findings.

Tschannen-Moran and Johnson (2004) first used factor analysis to refine the TSELS. The analysis resulted in reducing the number of survey questions from 33 to 18. The subscale of the sense of efficacy for integrating for the language arts correlated to the overall correlation matrix with an overall index of $r = .95$ and an internal consistency of .94. The second factor or subscale of the TSELS, sense of efficacy for differentiation of instruction, had an overall index of $r = .95$ and an internal consistency of .91. The TSELS along with the Teacher Sense of Efficacy Scale (TSES) was administered to 556 teachers across four states in order to establish reliability. A
comparison of the two instruments showed that the TSELS was moderately related to the TSES $r = .58$. The relationship between the first factor or subscale of the TSELS, sense of efficacy for integrating instruction across the language arts, was moderately related to the TSES $r = .49$. The relationship between the second subscale of the TSELS, sense of efficacy for differentiating instruction, was also moderate, $r = .60$.

**Reliability of the Modified TSELS Instrument**

A reliability analysis of the modified measurement instrument, TSELS, produced an overall alpha coefficient of 0.96. A reliability analysis of the subscale, sense of efficacy for integrating the language arts, produced an alpha coefficient of 0.93. The subscale for sense of efficacy for differentiating instruction resulted in an alpha coefficient of 0.91. According to Pallant (2005), Cronbach’s alpha coefficient with a value above .7 had good internal consistency and could be considered reliable with this particular sample.

**Validity of the Modified TSELS Instrument**

Validity of the instrument was established by having a panel of experts review the modified instrument and make comments regarding clarity of the revised instrument. During the pilot study, participants also provided feedback regarding clarity of the instrument and provided suggestions that led to the final design of the modified instrument. The modified instrument utilized a table format that would separate each question and facilitate respondents’ answering of the questions.
Reliability and Validity of the Texas Primary Reading Inventory

The Center for Academic and Reading Skills (1999) in their technical report computed the Cronbach alpha for each component of the TPRI. The Cronbach alphas for the comprehension section of TPRI were as follows. For first grade, TASK 11 had an alpha of 0.50; TASK 12 had an alpha of 0.69; TASK 13 had an alpha of 0.66; TASK 14 had an alpha of 0.64; and TASK 15 had an alpha of 0.73. End-of-the-year TPRI comprehension for second grade was assessed in TASKS 14-17. The Cronbach alpha coefficients were as follows: TASK 14 had an alpha of 0.62; TASK 15 had an alpha of 0.56; TASK 16 had an alpha of 0.51; and TASK 17 had an alpha of 0.63. The CARS failed to provide reliability for the fluency section of the TPRI; however, the test manual for the TPRI suggested that the reading rate goal for first grade is 60 wcpm and 90 wcpm for second grade. This was compatible with the Hasbrouck and Tindal (2005) oral reading fluency norms that suggested first grade students at the 50th percentile read 53 wcpm and second grade students at the 50th percentile read 89 wcpm.

Research Design

This study implemented a correlation design (Gall et al. 2003) utilizing survey methodology to analyze the relationship between first and second grade classroom teachers’ sense of efficacy for literacy instruction and the reading achievement of their highly mobile first and second grade students. A correlation research design was used to describe the strength and direction of the linear relationship between the two variables (Pallant, 2005) and to “provide information concerning the degree of the relationship between the variables being studied” (Gall et al., 2003, p. 324). Correlation
designs indicate whether a relationship existed between the two variables. However, this design is unable to indicate if one variable caused the other variable (Pallant, 2005). This study was reviewed and classified as exempt by the Institutional Review Board for Texas A&M University (Appendix D).

Data Collection

Permission to survey first and second grade classroom teachers of highly mobile students followed a prescribed procedure. First, a letter (Appendix E) requesting permission to conduct this study was sent to the district superintendent. After receiving district approval (Appendix F), the nine individual campus principals were then contacted about participating in this research study. Contact with each of the nine elementary principals was initiated via email, phone calls, and/or campus visits. Seven of the nine principals agreed to participate. Contact with first and second grade teachers, who taught during academic year 2004-2005 and taught students that were identified as highly mobile was initiated during faculty meetings and/or planning periods. Participating teachers were asked to complete the surveys. Each teacher was assigned a code in order to maintain confidentiality. The codes were then kept in a secure location by the researcher.

This researcher attended faculty meetings and/or planning periods at each campus to meet with the first and second grade teachers. The researcher explained the purpose of the study and acquired teacher consent. The researcher personally surveyed each of the grade level teachers in order to ensure test reliability. The researcher used The McKinney-Vento Act and Kerbow’s (1996) definition of locally transient students
to define highly mobile students for participating teachers. Participating teachers were
asked to only consider the highly mobile students who had been in their class a
minimum of three months when answering the survey.

The coding of individual surveys was explained to the participants to reassure
them that their responses would remain confidential. The code reflected the campus,
grade level, and teacher. An example of the code is as follows: 111. The first digit of
the number reflected the individual campus. The second digit reflected the grade level.
In this case it is first grade. The third digit reflected the specific teacher. This coding
assisted the researcher in determining which teachers had completed the surveys and
which teachers required a follow-up request to complete the surveys. Participants were
asked to sign an informed consent form (Appendix G) indicating their willingness to
participate in the study. Willing participants were asked to complete the TSELS survey.
Any participant who agreed to participate, but did not complete the survey received a
follow-up request by phone.

The second component of data collection for this study involved the beginning
and end-of-the-year TPRI results for high mobility students in first or second grade who
had been with the teacher participant a minimum of three months. District approval to
access the TPRI scores of high mobility students had been granted pending the
individual teacher’s approval. Teacher approval to access student scores was evidenced
in two ways. First, teachers signed a consent form agreeing to provide TPRI scores for
their high mobility students. Second, the teachers provided the researcher with copies
of the TPRI scores for their high mobility students.
The superintendent, campus principal, and individual teachers had given approval to access archival data. To maintain student confidentiality and to document the campus and teacher assignment for each student, TPRI scores were coded using teacher codes plus a, b, c, etc. Therefore, a code of 111c indicated a student was assigned to Campus 1, first grade, teacher one. The letter c attached to the code indicates that this was the third student on a list of highly mobile students for this teacher.

Data Analysis

Data collected from the returned surveys were coded and entered into the Statistical Package for the Social Sciences (SPSS) computer software.

Research Questions

Research Question One

Is there a difference in urban first grade classroom teachers’ sense of efficacy and urban second grade classroom teachers’ sense of efficacy for literacy instruction for highly mobile students?

The multivariate analysis of variance (MANOVA) was selected to test this question because it provided both the multivariate and the univariate results for the two variables. The two variables were the subscales of the TSELS. Use of the MANOVA “controls or adjusts for the increased risk of a Type 1 error” (Pallant, 2005, p. 247). The extent of the effect sizes was calculated using partial eta squared analysis.
Research Question Two

Is there a difference between the growth in the reading achievement of highly mobile students in first grade and the growth in the reading achievement of highly mobile students in second grade?

The data collected were analyzed by using both paired-samples and independent-samples t-tests (Pallant, 2005). Paired-samples t-tests were used to compare the means for beginning- and end-of-the-year fluency rates for highly mobile first and second grade students to determine if there was growth. The independent samples t-tests is used “when you want to compare the mean score on some continuous variable” (Pallant, 2005, p. 205). This test was used to determine if there was a difference in the gain scores for fluency rates between highly mobile first and second grade students.

The Wilcoxon signed ranks test, a non-parametric technique, was used to analyze comprehension scores for highly mobile students in second grade because the data are not normally distributed. The Mann-Whitney test was used to compare the gain scores mean in comprehension between first and second grade highly mobile students and determine if there was a significant difference. In order to eliminate a “ceiling” effect in the comprehension scores of first and second grade highly mobile students, students scoring five out of five comprehension questions answered correctly at the beginning of the year were not included in the analyses.
Research Question Three

What is the relationship between urban teachers’ sense of efficacy and the reading achievement of highly mobile students?

Standard multiple regression was used to analyze data for question three. The subscales of teachers’ sense of efficacy for integrating the language arts and teachers’ sense of efficacy for differentiating instruction were the independent variables. The dependent variables were end-of-the-year comprehension scores and gain score means for reading fluency. The analyses were conducted separately for first grade, second grade, and then both grades as a whole.

Summary

This chapter described the demographics of an urban school district in which the correlational study took place. The measurement instruments, TSELS and TPRI, were discussed along with the modifications, validity, and reliability of the TSELS measurement instrument. Further, the procedures used to collect data and the techniques used to analyze the data were specified.
CHAPTER IV
RESULTS

Results and Analysis

This correlational study investigated the relationship between urban first and second grade classroom teachers’ sense of efficacy and the reading achievement of their highly mobile students. Data were analyzed using Statistical Package for Social Sciences (SPSS) computer software. This chapter is divided into three sections. The first section presents data that focused on tests of normality. Tests of normality assessed whether or not “the distribution of scores on the dependent variable was normal” (Pallant, 2005, p. 53). The second section presents the results and analysis of data for each of the research questions. The third section provides a summary.

Tests of Normality

Tests of normality (Appendix H) were used in this correlational study to ensure a normal distribution of data for the dependent variables of total efficacy score, the subfactors of sense of efficacy for differentiating literacy instruction, and sense of efficacy for integrating language arts, beginning- and end-of-the-year fluency rates, and beginning- and end-of-the-year comprehension scores (Pallant, 2005). Multivariate analysis of variance (MANOVA) assumed a “distribution of scores on the dependent variable is normal” (Pallant, 2005, p. 53). The data for tests of normality were assessed using Kolmogorov-Smirnov statistic, histograms, and normal probability plots (Normal Q-Q Plots). Tests of normality indicated that all of the variables except comprehension were normally distributed (Appendix H).
Research Questions

Research Question One

Is there a difference in urban first grade classroom teachers’ sense of efficacy and urban second grade classroom teachers’ sense of efficacy for literacy instruction for their highly mobile students?

The multivariate analysis of variance (MANOVA) was selected to test this question because it provided both the multivariate and the univariate results for each of the subscales for the TSELS. Use of the MANOVA “controls or adjusts for the increased risk of a Type 1 error” (Pallant, 2005, p. 247). The two subscales, teachers’ sense of efficacy for integrating the language arts and teachers’ sense of efficacy for differentiating reading instruction, were the dependent variables. Grade level was the independent variable. Preliminary assumption testing was conducted to check for normality, linearity, univariate, and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity (Appendix H). Serious violations were not noted.

There was not a statistically significant difference in the scores between first and second grade classroom teachers’ overall sense of efficacy for literacy instruction for their highly mobile students: F(2, 45) = .93 , p = .40; Wilks Lambda = .96 at p < .05; partial eta squared = .04 (Table 4.1). The effect size of .04 was small (Gall et al., 2003; Pallant, 2005)
Table 4.1. Multivariate Tests

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>.97</td>
<td>739.86</td>
<td>2.00</td>
<td>45.00</td>
<td>.00</td>
<td>.97</td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wilk’s Lambda</td>
<td>.03</td>
<td>739.86</td>
<td>2.00</td>
<td>45.00</td>
<td>.00</td>
<td>.97</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>32.88</td>
<td>739.86</td>
<td>2.00</td>
<td>45.00</td>
<td>.00</td>
<td>.97</td>
</tr>
<tr>
<td>Roy’s Largest Root</td>
<td>32.88</td>
<td>739.86</td>
<td>2.00</td>
<td>45.00</td>
<td>.00</td>
<td>.97</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>.40</td>
<td>739.86</td>
<td>2.00</td>
<td>45.00</td>
<td>.40</td>
<td>.04</td>
</tr>
<tr>
<td>Wilk’s Lambda</td>
<td>.96</td>
<td>.93</td>
<td>2.00</td>
<td>45.00</td>
<td>.40</td>
<td>.04</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>.04</td>
<td>.93</td>
<td>2.00</td>
<td>45.00</td>
<td>.40</td>
<td>.04</td>
</tr>
<tr>
<td>Roy’s Largest Root</td>
<td>.04</td>
<td>.93</td>
<td>2.00</td>
<td>45.00</td>
<td>.40</td>
<td>.04</td>
</tr>
</tbody>
</table>

*Exact statistic.

*Design: Intercept + GRADE.

A second analysis indicated there was not a statistically significant difference between first and second grade classroom teachers’ sense of efficacy for literacy instruction when the results for the two subscales were considered separately. The effect size as indicated by the partial eta square was small and, therefore, not practically significant (Gall, 2001) (Table 4.2).

Visual inspection of Table 4.3, measures of central tendency for efficacy scores, showed that the mean scores for the total group of first and second grade classroom teachers’ sense of efficacy for literacy instruction was 6.70 when \( n = 48 \) with a standard deviation of 1.19. Teachers had a mean of 6.70 with a standard deviation of 1.21 on the subscale of sense of efficacy for integrating the language arts. Teachers had a mean of 6.69 with a standard deviation of 1.26 on the second subscale, sense of efficacy for differentiating instruction.
Table 4.2. Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Type II Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td>Sense of efficacy for integrating the language arts</td>
<td>.43</td>
<td>1</td>
<td>.43</td>
<td>.26</td>
<td>.61</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>Sense of efficacy for differentiating reading instruction</td>
<td>1.73</td>
<td>1</td>
<td>1.46</td>
<td>1.18</td>
<td>.28</td>
<td>.03</td>
</tr>
</tbody>
</table>

R Squared = .01 (Adjusted R Squared = .02).
R Squared = .03 (Adjusted R Squared = .00).

Table 4.3. Measures of Central Tendency for Efficacy Scores

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>N</th>
<th>M Total Efficacy</th>
<th>SD</th>
<th>M Efficacy for Integrate</th>
<th>SD</th>
<th>M Efficacy for Differentiate</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Grade</td>
<td>25</td>
<td>6.82</td>
<td>1.21</td>
<td>6.89</td>
<td>1.27</td>
<td>6.78</td>
<td>1.23</td>
</tr>
<tr>
<td>Second Grade</td>
<td>23</td>
<td>6.57</td>
<td>1.19</td>
<td>6.51</td>
<td>1.12</td>
<td>6.59</td>
<td>1.32</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>6.70</td>
<td>1.19</td>
<td>6.70</td>
<td>1.21</td>
<td>6.69</td>
<td>1.26</td>
</tr>
</tbody>
</table>

First grade teachers had a mean of 6.82 for total sense of efficacy for literacy instruction with a standard deviation of 1.21 when n = 25 (Table 4.3). The scores for first grade classroom teachers had a mean of 6.89 with a standard deviation of 1.27 on the subscale of sense of efficacy for integrating language arts (Table 4.3). The scores for first grade classroom teachers had a mean of 6.78 with a standard deviation of 1.23 on the second subscale, sense of efficacy for differentiating instruction (Table 4.3).

Second grade teachers had a mean of 6.57 for total sense of efficacy for literacy instruction with a standard deviation of 1.19 when n = 23 (Table 4.3). The scores for second grade classroom teachers had a mean of 6.51 with a standard deviation of 1.12
on the subscale of sense of efficacy for integrating language arts (Table 4.3). The scores for second grade classroom teachers had a mean of 6.59 with a standard deviation of 1.32 on the second subscale, sense of efficacy for differentiating instruction (Table 4.3).

The mean for sense of efficacy for literacy instruction for first grade teachers, second grade teachers, and combined grade level teachers varied between 6.57 to 6.82 (Table 4.3). According to the TSELS, this range fell between “some degree” and “quite a bit” on the nine-point Likert scale. The mean for the subscale, sense of efficacy for integrating language arts, ranged from 6.51 to 6.89 (Table 4.3). Again, this range indicated that teachers’ sense of efficacy for integrating language arts fell between “some degree” and “quite a bit.” The final subscale, sense of efficacy for differentiating instruction, ranged between 6.59 to 6.78 indicating that teachers had “some degree,” which was five on the nine-point Likert scale to “quite a bit” or seven on the nine-point Likert scale of efficacy (Table 4.3).

Research Question Two

Is there a difference between the growth in the reading achievement of highly mobile students in first grade and the growth in the reading achievement of highly mobile students in second grade?

The data collected for reading fluency were analyzed using paired-samples t-test and independent-samples t-test (Pallant, 2005). Student achievement means for student achievement scores are provided in Table 4.4. However, analyses used the mean scores by teacher (Table 4.5) so that results could be used to analyze reading achievement scores and their relationship to teachers’ sense of efficacy in question three. The t-tests
were conducted to determine if there were significant differences between the beginning- and end-of-the-year fluency rates of highly mobile students in first grade and beginning- and end-of-the-year fluency rates of highly mobile students in second grade (Table 4.4). Preliminary checks were conducted to ensure that data met at least two of the criteria to assume that there was no violation of the assumptions of normality that included Levene’s Test of Equality of Variances, linearity, homogeneity of variances, and regression slopes. Assumptions of normality were established and represented in Appendix H.

Table 4.4. Descriptive Statistics of the Reading Achievement of Highly Mobile Students

<table>
<thead>
<tr>
<th>Grade</th>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Beginning-of-the-year comprehension</td>
<td>53</td>
<td>0</td>
<td>5</td>
<td>2.02</td>
<td>1.60</td>
</tr>
<tr>
<td></td>
<td>Beginning-of-the-year fluency</td>
<td>53</td>
<td>0</td>
<td>75</td>
<td>22.47</td>
<td>19.83</td>
</tr>
<tr>
<td></td>
<td>End-of-the-year comprehension</td>
<td>53</td>
<td>0</td>
<td>5</td>
<td>3.42</td>
<td>1.59</td>
</tr>
<tr>
<td></td>
<td>End-of-the-year fluency</td>
<td>53</td>
<td>0</td>
<td>108</td>
<td>40.04</td>
<td>26.57</td>
</tr>
<tr>
<td>2nd</td>
<td>Beginning-of-the-year comprehension</td>
<td>30</td>
<td>0</td>
<td>5</td>
<td>3.83</td>
<td>1.42</td>
</tr>
<tr>
<td></td>
<td>Beginning-of-the-year fluency</td>
<td>30</td>
<td>0</td>
<td>145</td>
<td>57.33</td>
<td>30.55</td>
</tr>
<tr>
<td></td>
<td>End-of-the-year comprehension</td>
<td>30</td>
<td>0</td>
<td>5</td>
<td>4.10</td>
<td>1.35</td>
</tr>
<tr>
<td></td>
<td>End-of-the-year fluency</td>
<td>30</td>
<td>0</td>
<td>182</td>
<td>74.53</td>
<td>37.52</td>
</tr>
</tbody>
</table>

Table 4.5 Comprehension Means by Grade Level

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning-of-the-year</td>
<td>1</td>
<td>1.71</td>
<td>1.34</td>
</tr>
<tr>
<td>comprehension</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End-of-the-year comprehension</td>
<td>1</td>
<td>3.27</td>
<td>1.59</td>
</tr>
<tr>
<td>Beginning-of-the-year</td>
<td>2</td>
<td>3.06</td>
<td>1.35</td>
</tr>
<tr>
<td>comprehension</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End-of-the-year comprehension</td>
<td>2</td>
<td>3.78</td>
<td>1.63</td>
</tr>
</tbody>
</table>
Scores for highly mobile first and second grade students answering five out of five comprehension questions correctly on the beginning-of-the-year TPRI were eliminated from this analysis in order to prevent a “ceiling effect.” According to Table 4.6, the beginning- and end-of-the-year comprehension scores for highly mobile first grade students had a Z value = -5.55 and p = .00. The negative Z value indicated that the sum of the ranks for beginning-of-the-year comprehension scores for highly mobile first grade students was smaller than the end-of-the-year comprehension scores (Field, 2005). Therefore, the findings indicated that the growth between the number of comprehension questions answered correctly on the beginning-of-the-year TPRI and the number of comprehension questions answered correctly on the end-of-the-year TPRI was statistically significant.

Highly mobile second grade students had a Z value = -3.13 and p = .00 for beginning- and end-of-the-year comprehension scores (Table 4.6). The negative Z value indicated that the sum of the ranks for beginning-of-the-year comprehension scores of highly mobile second grade students was smaller than the end-of-the-year comprehension scores (Field, 2005). The findings indicated that the growth between the number of comprehension questions answered correctly on the beginning-of-the-year TPRI and the number of questions answered correctly on the end-of-the-year TPRI was statistically significant.

Finally, the Mann-Whitney test was used to analyze whether or not there was a difference in the number of comprehension questions answered correctly between highly mobile first and second grade students. According to Table 4.7, there was no
difference in the number of comprehension questions answered correctly (p = .36) between the two grade levels.

Table 4.6. Wilcoxon Test Statistics\(^b\)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Z</th>
<th>Asymp. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(^{st}) Grade</td>
<td>-5.55</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Asymp. Sig. (2-tailed)</td>
<td>.00</td>
</tr>
<tr>
<td>2(^{nd}) Grade</td>
<td>-3.13</td>
<td>.02</td>
</tr>
</tbody>
</table>

\(^a\)Based on positive ranks.  
\(^b\)Wilcoxon Signed Ranks Test.

Table 4.7. Mann Whitney Test\(^a\)

<table>
<thead>
<tr>
<th>Comprehension</th>
<th>Mann-Whitney U</th>
<th>Wilcoxon W</th>
<th>Z</th>
<th>Asymp. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>243.50</td>
<td>568.50</td>
<td>-.91</td>
<td>.36</td>
</tr>
</tbody>
</table>

\(^a\)Grouping variable: What grade level do you teach?

A paired-samples t-test was conducted to evaluate growth in the fluency rates for highly mobile first and second grade students. There was a statistically significant increase, p = .00 (Table 4.6), in fluency rates from beginning of the year (M = 22.47, SD = 19.83) to end of the year (M = 40.04, SD = 26.57) for highly mobile first grade students (Table 4.4). There was a statistically significant increase, p = .00, in fluency rates from beginning of the year (M = 57.33, SD = 30.55) to end of the year (M = 74.53, SD = 37.52) for highly mobile second grade students (Table 4.4).
Independent-samples t-tests were conducted to compare the gain scores in reading fluency rates for highly mobile first and second grade students. According to Table 4.8, there was no significant difference between the gains score in reading fluency rates for highly mobile first grade students ($M = 19.34, SD = 5.97$) and highly mobile second grade students ($M = 19.60, SD = 9.16; t[31] = -0.10, p = .92$).

<table>
<thead>
<tr>
<th>Table 4.8. Paired-Samples t-Test for Fluency Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std. Error</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>M</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>1st Grade</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>2nd Grade</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

An independent-samples t-test was conducted to compare the growth in gain scores for fluency for highly mobile first grade students and highly mobile second grade students. There was no significant difference in the growth for highly mobile first grade students ($M = 19.34, SD = 5.97$) and highly mobile second grade students ($M = 19.60, SD = 9.16; t[31] = -0.10, p = .92$) (Tables 4.9 and 4.10). The magnitude of the differences in the means was very small (eta squared = .00).
Table 4.9. Independent Samples Test of Reading Fluency Gain Scores

<table>
<thead>
<tr>
<th>What grade level do you teach?</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Std. Error of Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain score 1st Grade</td>
<td>19</td>
<td>19.34</td>
<td>5.97</td>
<td>1.37</td>
</tr>
<tr>
<td>Gain score 2nd Grade</td>
<td>14</td>
<td>19.60</td>
<td>9.16</td>
<td>2.44</td>
</tr>
</tbody>
</table>

Table 4.10. Independent Samples t-Test for Fluency Gain Scores

<table>
<thead>
<tr>
<th>Levene’s Test for Equality of Variances</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Mean gain scores</td>
<td>1.21</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td></td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-.09</td>
</tr>
</tbody>
</table>

Research Question Three

What is the relationship between urban teachers’ sense of efficacy and the reading achievement of highly mobile students?

A standard multiple regression analysis was conducted using teachers’ means for the reading achievement scores of highly mobile first and second grade students as the dependent variables and teachers’ sense of efficacy for integrating the language arts and differentiating reading instruction as the independent variables. Results for evaluation of assumption concluded no serious violations. With the use of a p < .001 criterion for Mahalanobis distance, no outliers among the cases were found. No cases had missing data and no suppressor variables were found.


Teachers’ Sense of Efficacy and Comprehension Scores

According to Analysis A in Tables 4.11 and 4.12, R for regression for first and second grade classroom teachers’ combined overall sense of efficacy for literacy instruction and the comprehension scores of their highly mobile students was not significantly different from zero. The predictor model was able to account for 4% of the variance in the comprehension scores of highly mobile students, F(1, 31) = 2.16, p = .15. For zero, 95% confidence levels were calculated. The confidence limits for teachers’ sense of efficacy for literacy instruction were 3.35 to 6.26.

Table 4.11. ANOVA A, B, and C Sense of Efficacy and Comprehension Scores

<table>
<thead>
<tr>
<th>Analyses</th>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Sense of Efficacy</td>
<td>Regression</td>
<td>1.34</td>
<td>1</td>
<td>1.34</td>
<td>2.16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>19.23</td>
<td>31</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>20.56</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Sense of Efficacy for</td>
<td>Regression</td>
<td>1.06</td>
<td>1</td>
<td>1.06</td>
<td>1.69</td>
</tr>
<tr>
<td></td>
<td>Integrating Instruction</td>
<td>Residual</td>
<td>19.50</td>
<td>31</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>20.56</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Sense of Efficacy for</td>
<td>Regression</td>
<td>1.38</td>
<td>1</td>
<td>1.38</td>
<td>2.22</td>
</tr>
<tr>
<td></td>
<td>Differentiating Instruction</td>
<td>Residual</td>
<td>19.19</td>
<td>31</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>20.56</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Dependent variable: Mean for comprehension scores by teacher.

Multiple linear regression analysis was used to develop a model for predicting the reading achievement of highly mobile first and second grade students from the overall teachers’ sense of efficacy for literacy instruction and the subscales of integrating the language arts and differentiating instruction. Table 4.12 (Analyses A, B, and C) displayed the correlations between combined first and second grade classroom
teachers’ scores on overall sense of efficacy for literacy instruction and the subscales of sense of efficacy for integrating the language arts and sense of efficacy for differentiating instruction, the unstandardized regression coefficients (B) and intercept, the standardized regression coefficients (β), the partial correlations (sr_i^2) and R^2, and adjusted R^2 for first grade teachers.

Table 4.12. A, B, and C Standard Multiple Regression of Comprehension Scores for Highly Mobile Students and Teachers’ Sense of Efficacy

<table>
<thead>
<tr>
<th>Variables</th>
<th>End-of-Year Comp. (DV)</th>
<th>Mean</th>
<th>SD</th>
<th>B</th>
<th>β</th>
<th>sr_i^2</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Sense of Efficacy for Literacy Instruction</td>
<td>.26</td>
<td>6.74</td>
<td>1.12</td>
<td>.18</td>
<td>.26</td>
<td>.26</td>
<td>.15</td>
</tr>
<tr>
<td>R^2 = .07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R^2 = .04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R = .26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(B) Sense of Efficacy for Integrating Lang. Arts</td>
<td>.23</td>
<td>6.74</td>
<td>1.14</td>
<td>-.16</td>
<td>-.23</td>
<td>.23</td>
<td>.20</td>
</tr>
<tr>
<td>R^2 = .05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R^2 = .02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R = .23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(C) Sense of Efficacy for Differentiating Instruction</td>
<td>.26</td>
<td>6.71</td>
<td>1.20</td>
<td>.00</td>
<td>.01</td>
<td>.00</td>
<td>.15</td>
</tr>
<tr>
<td>R^2 = .07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R^2 = .04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R = .26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Analysis B in Tables 4.11 and 4.12, R for regression for first and second grade classroom teachers’ combined sense of efficacy on the subscale of integrating the language arts and the comprehension scores of their highly mobile students was not significantly different from zero. The predictor model was able to account for 2% of the variance in the comprehension scores of highly mobile students,
F(1, 31) = 1.69, p = .20. For zero, 95% confidence levels were calculated. The confidence limits for teachers’ sense of efficacy were calculated to be 3.22 to 6.64.

According to Analysis C in Tables 4.11 and 4.12, R for regression for first and second grade classroom teachers’ combined sense of efficacy for differentiating reading instruction and the comprehension scores of their highly mobile students was not significantly different from zero. The predictor model was able to account for 4% of the variance, F(1, 31) = 2.22, p = .15. For zero, 95% confidence levels were calculated. The confidence limits for teachers’ sense of efficacy for differentiating instruction were 3.40 to 6.63.

The results indicated that there was not a statistical relationship between first and second grade classroom teachers’ sense of efficacy for literacy instruction and the comprehension scores of their highly mobile students (Analysis A in Tables 4.11 and 4.12). A second test found there was not a statistical relationship between the subscale of first and second grade classroom teachers’ sense of efficacy for integrating the language arts and comprehension scores of their highly mobile students (Analysis B in Tables 4.11 and 4.12). Finally, tests concluded that there was not a statistical relationship between the subscale of first and second grade classroom teachers’ sense of efficacy for differentiating instruction and the comprehension scores of their highly mobile students (Analysis C in Tables 4.11 and 4.12).

**Teachers’ Sense of Efficacy and Fluency Rates**

Multiple linear regression analysis was also used to develop a model for predicting growth in fluency rates from the scores of teachers’ overall sense of efficacy
and the subscales of sense of efficacy for integrating the language arts and sense of efficacy for differentiating instruction (Analyses A, B, and C in Tables 4.13 and 4.14).

Table 4.14 (Analyses A, B, and C) displays the unstandardized regression coefficients (B) and intercept, the standardized regression coefficients (β), the partial correlations (sr²) and R², and adjusted R² for first grade teachers and the gain score means for their highly mobile students.

<table>
<thead>
<tr>
<th>Analyses</th>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Sense of Efficacy</td>
<td>Regression</td>
<td>47.23</td>
<td>1</td>
<td>47.23</td>
<td>.87</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>1684.71</td>
<td>31</td>
<td>54.35</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>1731.94</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Sense of Efficacy</td>
<td>for Integrating</td>
<td></td>
<td>14.09</td>
<td>1</td>
<td>14.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instruction</td>
<td>Regress</td>
<td>1717.85</td>
<td>31</td>
<td>55.41</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Residual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total</td>
<td>1731.94</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Sense of Efficacy</td>
<td>for Differentiating</td>
<td>80.83</td>
<td>1</td>
<td>80.83</td>
<td>1.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instruction</td>
<td>Regression</td>
<td>1651.11</td>
<td>31</td>
<td>53.26</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Residual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total</td>
<td>1731.94</td>
<td>32</td>
<td></td>
</tr>
</tbody>
</table>

Note. Dependent variable: Mean for fluency gain scores by teacher.

According to Analysis A in Tables 4.13 and 4.14, R for regression for first and second grade classroom teachers’ combined overall sense of efficacy for literacy instruction and the gain scores in fluency was not significantly different from zero. The predictor model was able to account for .40% of the variance in the fluency gain scores of highly mobile first and second grade students, F(1, 31) = 2.16, p = .87, p = .36. For zero, 95% confidence levels were calculated. The confidence limits for teachers’ sense of efficacy for literacy instruction were -1.29 to 3.47.
Table 4.14. A, B, and C Standard Multiple Regression of Gain Scores in Fluency and Teachers’ Sense of Efficacy

<table>
<thead>
<tr>
<th>Variables</th>
<th>Gain Scores for Fluency (DV)</th>
<th>Mean</th>
<th>SD</th>
<th>B</th>
<th>B</th>
<th>sr²</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Sense of Efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² = .03</td>
<td></td>
<td>.17</td>
<td>6.74</td>
<td>1.12</td>
<td>1.09</td>
<td>.17</td>
<td>36</td>
</tr>
<tr>
<td>Adjusted R² = .04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R = .17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(B) Sense of Efficacy for Integrating Language Arts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² = .01</td>
<td></td>
<td>.09</td>
<td>6.74</td>
<td>1.14</td>
<td>.58</td>
<td>.09</td>
<td>.62</td>
</tr>
<tr>
<td>Adjusted R² = .02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R = .09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(C) Sense of Efficacy for Differentiating Instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R² = .05</td>
<td></td>
<td>.22</td>
<td>6.74</td>
<td>1.20</td>
<td>1.3</td>
<td>.22</td>
<td>.23</td>
</tr>
<tr>
<td>Adjusted R² = .02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R = .22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Dependent variable: Mean gain scores.

According to Analysis B in Tables 4.13 and 4.14, R for regression for first and second grade classroom teachers’ combined sense of efficacy on the subscale of integrating the language arts and the fluency gain scores was not significantly different from zero. The predictor model was able to account for 2.4% of the variance in the fluency gain scores of highly mobile first and second grade students, F(1, 31) = .25, p = .62. For zero, 95% confidence levels were calculated. The confidence limits for teachers’ sense of efficacy for integrating the language arts were -1.77 to 2.94.

The final analysis (C in Tables 4.13 and 4.14) found R for regression for first and second grade classroom teachers’ combined sense of efficacy for differentiating reading instruction and the fluency gain scores of their highly mobile students was not significantly different from zero. The predictor model was able to account for 1.6% of
the variance in the fluency gain scores of highly mobile first and second grade students, F(1,31) = 1.52, p = .23. For zero, 95% confidence levels were calculated. The confidence limits for teachers’ sense of efficacy for differentiating instruction were -.87 to 3.51.

The results from the multiple regression analyses indicated that there was not a statistical relationship between teachers’ sense of efficacy for literacy instruction and the mean gain scores in fluency for their highly mobile students (Analysis A in Tables 4.13 and 4.14). A second test found that there was not a statistical relationship between the subscale, teachers’ sense of efficacy for integrating the language arts and the mean gain scores in fluency for their highly mobile students (Analysis B in Tables 4.13 and 4.14). Further testing concluded that there was not a statistical relationship between the subscale, differentiating instruction and the mean gain scores in fluency for their highly mobile students (Analysis C in Tables 4.13 and 4.14).

Summary

This chapter reported the results of a correlational study (Gall et al., 2003) using survey methodology and archival data. Tests of normality were conducted to determine normal distribution of first and second grade classroom teachers’ scores of efficacy and the reading fluency rates and comprehension scores of highly mobile first and second grade students. Significant differences were calculated for first and second grade classroom teachers’ sense of efficacy and the reading achievement of highly mobile students in first and second grade. Further, the statistical growth in the reading achievement scores for highly mobile first and second grade students was calculated.
Finally, the relationship between teachers’ sense of efficacy and the reading achievement of highly mobile students was analyzed.
CHAPTER V

SUMMARY AND CONCLUSIONS

American families have the highest rates of residential and school mobility in the industrialized world (Mehana & Reynolds, 2004). Every day, highly mobile students withdraw and reenroll in new schools for a variety of reasons (Kerbow, 1996). Many families move because of new opportunities in employment or better homes. Yet, other families find themselves homeless or forced to move because of employment, income, avoidance of problems associated with the school, and natural catastrophes (Kerbow, 1996; Mehana & Reynolds, 2004). Families are the fastest growing segment of the homeless population (Pawlas, 1994; Shinn, 1996) with estimates as high as one million children who do not have a place to call home (Biggar, 2001).

Without stable housing, highly mobile students are forced to move from school-to-school. More than 40% of third-graders have changed schools at least once and as many as 17% have changed schools more than twice (U.S. General Accounting Office, 1994b). Schools are facing growing numbers of homeless students and locally transient students (Lash & Kirkpatrick, 1990; Masten et al., 1997), and educators find themselves with serious challenges in addressing the literacy needs of high mobility students.

As explained in Chapter I, there were several purposes for this correlational study. The first purpose was to determine if there was a difference in urban first grade classroom teachers’ and urban second grade classroom teachers’ sense of efficacy for literacy instruction for highly mobile students. The second purpose was to determine if
there was a difference between the growth in the reading achievement of highly mobile students in first grade and the growth in the reading achievement of highly mobile students in second grade. The final purpose was to examine the relationship between urban teachers’ sense of efficacy and the reading achievement of their highly mobile students.

The study relied on survey methodology to assess urban first grade classroom teachers’ and second grade classroom teachers’ sense of efficacy for literacy instruction. A modified version of Tschannen-Moran and Johnson’s (2004) instrument, Teachers’ Sense of Efficacy for Literacy Instruction, was used to measure first and second grade classroom teachers’ efficacy. The second instrument used for this study was the Texas Primary Reading Inventory. The only components of the TPRI used for this study were reading fluency rates and comprehension scores.

According to the literature (Ashton & Webb, 1984, 1986; Bandura, 1995, 1997; Gibson & Dembo, 1984; Howard, 1995, 2003; Tschannen-Moran, Hoy, & Hoy, 1998; Tschannen-Moran & Hoy, 2001), one way to prepare educators to meet the challenges associated with the academic needs of highly mobile students was to enhance teachers’ sense of efficacy. Teachers with a high sense of teacher efficacy took control of the situation, had optimistic views of students, were committed to teaching, and devoted more time to academic matters (Bandura, 1995). Efficacious teachers believed they possessed the capabilities necessary to bring about student learning (Haberman, 1995). A review of the literature established that there was a relationship between teacher efficacy and student achievement (Ashton & Webb, 1984, 1986; Bandura, 1995, 1997;

**Research Questions**

*Research Question One*

Is there a difference in urban first grade classroom teachers’ sense of efficacy and urban second grade classroom teachers’ sense of efficacy for literacy instruction for highly mobile students?

This correlational study examined the relationship between urban first grade classroom teachers’ sense of efficacy and urban second grade classroom teachers’ sense of efficacy for literacy instruction for highly mobile students. Sense of efficacy for literacy instruction was ascertained for both first and second grade classroom teachers through the use of a modified form of the TSELS survey. The results indicated that there was not a statistically significant difference between urban first grade classroom teachers’ sense of efficacy for the literacy instruction of their highly mobile students and urban second grade classroom teachers’ sense of efficacy for the literacy instruction of their highly mobile students. The two subscales of teachers’ sense of efficacy were also analyzed. According to Table 4.2, there was not a significant difference in first grade classroom teachers’ and second grade classroom teachers’ sense of efficacy for integrating the language arts or for differentiating reading instruction. Based upon the findings, grade level did not impact urban classroom teachers’ sense of efficacy for the literacy instruction for their highly mobile students.
The small sample size is one possible explanation for the finding that in this group of teachers, grade level did not have an effect on urban classroom teachers’ sense of efficacy for the literacy instruction for their highly mobile students. There were only 48 teacher participants in this study. A larger sample size may have led to statistically significant or practical differences. Another possible answer for this finding may be found in Bandura’s (1995) sources of influences for efficacy. Teachers working within this urban school district attended and received the same staff development. Information and training received from the same professional development may have had some of the influences on efficacy as described by Bandura (1995). Teachers who feel efficacious in their ability to provide literacy instruction for highly mobile students may have identified with the person providing the training, thus increasing their own sense of efficacy (Bandura, 1995). Vicarious experiences may be another explanation for the practical significance (Bandura, 1995). Witnessing another classroom teacher’s success with highly mobile students could have empowered teachers and, therefore, having similar levels of teacher efficacy. Teachers who reported feeling less efficacious regarding their abilities to provide literacy instruction for their highly mobile students may not have identified with the persons providing the training and/or their colleagues and thus would not have benefited from vicarious experiences.

**Research Question Two**

Is there a difference between the growth in the reading achievement of highly mobile students in first grade and the growth in the reading achievement of highly mobile students in second grade?
The student data were collected and analyzed using paired-samples t-tests, independent-samples t-tests, Wilcoxon signed ranks tests, and Mann-Whitney tests (Pallant, 2005). There were t-tests conducted to compare whether or not there were significant differences between the growth in the reading achievement of highly mobile students in first grade and the growth in the reading achievement of highly mobile students in second grade. Results from the nonparametric technique analyses indicated that there was significant growth between the numbers of comprehension questions answered correctly between the beginning and ending of the year for highly mobile first grade students. The growth in comprehension scores for first grade students was $M = 2.02$, $SD = 1.60$ for the beginning of the year to $M = 3.42$, $SD = 1.59$ for the end of the year (Table 4.4).

Results from this study showed significant growth in the number of comprehension questions answered correctly between the beginning and ending of the year for highly mobile second grade students as well (Table 4.4). Highly mobile second grade students had gains in comprehension scores from $M = 3.83$, $SD = .21$ for the beginning of the year to $M = 4.10$, $SD = 1.35$ for end of the year (Table 4.4). Most highly mobile students were able to demonstrate proficiency in comprehension on the TPRI by the end of the second grade.

There was growth between beginning- and ending-of-the-year fluency rates for both highly mobile first and second grade students. The mean gain scores in reading fluency were 15.66 for highly mobile first grade students and 19.73 for highly mobile second grade students. While the end-of-the-year reading fluency rates for highly
mobile first and second grade students (Table 4.4) did not show proficiency or “developed,” the gains were significant.

Despite frequent mobility and lack of regular school attendance for highly mobile students (National Coalition for the Homeless, 1999), the results from this study showed that highly mobile students did make significant gains in reading achievement. This growth indicated that most highly mobile students were able to demonstrate proficiency with comprehension based upon the TPRI’s criteria of four out of five comprehension questions answered correctly by the end of the second grade. This contradicted findings (Homes for the Homeless, 1999; National Coalition for the Homeless, 1999) that suggested the majority of highly mobile students were reading below grade level and had educational gaps in reading acquisition due to a discontinuity in instruction (Sanderson, 2003). One possible explanation for the growth in the reading achievement of highly mobile students is that most of the students in the sample were intra-district transfers. Student mobility within the school district may have allowed students to continue the same reading program thereby minimizing instructional gaps.

The significant increase in reading achievement for highly mobile first and second grade students had several implications. First, despite instability in the students’ housing situation, highly mobile students in first and second grade had significant gains in their reading achievement. Second, the gains in the cyclical nature of efficacy (Bandura, 1995; Pajares, 2002) could provide a possible explanation for why a majority of the teacher participants did not report a higher sense of efficacy for literacy.
instruction. Teachers may have been focused on students’ mastery of tested reading skills rather than on growth. Perhaps, if the assessments allowed teachers to measure student growth rather than “still developing” or “developed,” teachers would feel more efficacious about their ability to provide literacy instruction to highly mobile students.

*Research Question Three*

What is the relationship between urban teachers’ sense of efficacy and the reading achievement of highly mobile students?

Multiple regression was used to analyze the statistical relationship between urban first grade classroom teachers’ and second grade classroom teachers’ sense of efficacy and the reading achievement of their highly mobile students. According to the statistical analyses, there was not a statistical relationship between urban first and second grade classroom teachers’ sense of efficacy for literacy instruction and the reading comprehension scores or reading fluency rates of their highly mobile students (Tables 4.10 and 4.14). The findings of this correlational study were contrary to the research associated with teacher efficacy and student achievement (Ashton & Webb, 1986; Bandura, 1995; Gibson & Dembo, 1984; Pajares, 2002).

The growth in reading achievement might have been influenced by other factors. First, most of the students identified as highly mobile changed schools within the district. A second factor that may have affected the findings is the reading achievement scores. The reading achievement scores of highly mobile students showed similar growth that may have made it difficult to find a relationship between the reading achievement of highly mobile students and teachers’ sense of efficacy for
literacy instruction. Another factor that should be taken into consideration regarding the reading achievement scores of highly mobile students is the influence of school leadership. Each of the participating campuses had instructional advisors responsible for providing teachers assistance with curriculum and struggling students. The role and influence of an instructional advisor could have affected the relationship between teachers’ sense of efficacy for literacy instruction and the reading achievement of their highly mobile students.

Discussion

First of all, teachers’ sense of efficacy for literacy instruction and the two subscales associated with it had means within the 6.0 range for urban first and second grade teachers both separately and collectively. According to the TSELS, the participating teachers reported a sense of efficacy for literacy instruction that ranged between “some degree” to “quite a bit” (Appendix A).

Teachers may have responded to the survey in terms of teacher efficacy (Bandura, 1995; Tschannen-Moran & Hoy, 2001) rather than in terms of personal teacher efficacy, an evaluation of their own capabilities to bring about desired student outcomes (Bandura, 1995; Deemer & Minke, 1999). There are two components to the self-efficacy theory (Bandura, 1977). The components are outcome expectancy and efficacy expectations. Bandura (1995) explained outcome expectancy as “a person’s estimate that a given behavior will lead to certain outcomes” (p. 193). By definition, teacher efficacy is, to a considerable degree, an outcome expectancy for students; and it is also a teacher’s belief in the efficacy for teaching across the profession (Gibson &
Personal teaching efficacy is the teacher’s belief in personal competence and capacity to affect outcomes (Bandura, 1995). It involves the individual’s beliefs about his or her own capabilities to bring about the outcome.

Efficacy expectation looks at an individual’s attitude and belief about what they can accomplish with the skills and knowledge they possess (Bandura, 1995; 1997). Bandura suggested that while teachers may believe that certain teacher behaviors will affect student performances, they might not believe that they can execute those behaviors. Applying this premise to teacher efficacy, one can identify two independent dimensions: general teaching efficacy and personal teaching efficacy (Ashton & Webb, 1986; Gibson & Dembo, 1984). General teaching efficacy refers to teachers’ belief that teaching can have an influence on student performance, whereas personal teaching efficacy refers to teachers’ belief in their own capacity to affect student performance (Ashton & Webb, 1986).

Another possible reason that there was not a relationship between teachers’ sense of efficacy for literacy instruction and the reading achievement of their highly mobile students may have been that the teacher participants worked directly with students who were faced with educational and personal challenges (Brown et al., 1993; Klein et al., 1993; National Coalition for the Homeless, 1999). According to Ashton and Webb (1986), the lower the achievement level of students in class, the less likely teachers were to believe that they can influence student learning despite their confidence in the knowledge and skills they have for teaching.
Time is a factor that may have affected urban first and second grade classroom teachers’ sense of efficacy for literacy instruction. According to Sanderson (2003), teachers feel challenged to quickly assimilate highly mobile students into “established classrooms so instructional time is not lost and gaps in learning are kept to a minimum” (p. 603). Teachers expressed concerns that highly mobile students had educational gaps in their learning due to a discontinuity in instruction that may have been compounded by the issue of time, or rather the lack of time (Sanderson, 2003). Many highly mobile students transferred to their new school without prior school records. This resulted in the need for classroom teachers to screen students in order to establish a baseline for students in order to provide effective academic instruction.

Another factor that may have impacted the data was the TPRI. The use of authentic assessments of highly mobile first and second grade students like those suggested by Noll and Watkins (2003/2004) may have produced different results. An alternative to teaching reading comprehension to underserved students was to utilize students’ prior knowledge to interpret new information (Mean & Knapp, 1991). In order for students to be successful in the classroom, the assignments must be relevant to the student and the assessments authentic (Brown et al., 1993). Students would be better motivated to learn thereby increasing their chance of academic achievement when teachers use literacy strategies and assessment that build upon the students’ culture or experiences (Brown et al., 1993; Carter & Larke, 2003; Moll & Greenberg, 1990; Moll et al., 1992).
**Recommendations**

Based on the literature review and the results from this study, the following recommendations are made. Recommendation one: students will continue to withdraw and re-enroll in new schools for different reasons; therefore, educators should prepare for student mobility through awareness and an understanding of why and how mobility occurs (Kerbow, 1996). This should begin by ensuring that all educators are aware of the McKinney-Vento Act. If local education agencies do not have liaisons, one should be appointed immediately. The liaison should work closely with the school and families to ensure that federal guidelines are followed so that the academic needs of highly mobile students are met.

Kerbow (1996) suggested that educators monitor the patterns of movement within their school in order to identify when students are withdrawing and enrolling. Highly mobile students tend to follow distinct patterns of movement and transfer in and out of schools that are within three miles of each other (Kerbow, 1996). This would allow schools to be better prepared for student mobility. Schools should identify where their highly mobile students are transferring from in order to establish communication with the other school. This will facilitate the exchange of school records and ease the transition of students from one school to the next.

Recommendation two: educators establish a course of action for working with highly mobile students (Wright, 1999). Waiting for records from the student’s previous school to arrive and waiting for families to provide school supplies waste limited instructional time. Schools need to have a plan prior to the arrival of highly mobile
students (Sanderson, 2003). Teachers should decide which assessments they can utilize to determine the students’ academic strengths and weaknesses rather than waiting for records to arrive from the child’s previous school. The liaison can assist with providing school supplies and clothing that comply with dress codes so that students are ready from the very moment they arrive.

The fact that correlations did not support variables of first and second grade classroom teachers’ sense of efficacy and the reading achievement of their highly mobile students should not be an indication that the variables had no meaningful relationship. Therefore, recommendation three is to identify classroom teachers, schools, and districts who are successful in providing literacy instruction to highly mobile students. These teachers, schools, and districts should be observed to identify specific teaching behaviors that contribute to both their personal sense of teacher efficacy and the increased reading achievement of their highly mobile students. Efficacious teachers are intrinsically motivated and provide students with meaningful and relevant assignments that encourage students to study (Bandura, 1995; Hoy, 2000). Hoy (2000) found that teachers with a high sense of teacher efficacy were optimistic about students’ motivation, helped students develop intrinsic rewards for studying, and demonstrated their commitment to teaching by devoting more time to academic matters (Bandura, 1995).

Recommendation four: provide professional development that focuses on the impact of socioeconomic status on academics. Teachers should be able to provide varied educational opportunities in reading instruction (Brown et al., 1993) to ensure
the academic success of highly mobile students. It is important to identify and start at the student’s current reading level (Noll & Watkins, 2003/2004). This allows teachers to build upon student strengths rather than weaknesses. Additionally, alternative assessments that were meaningful and culturally relevant might have yielded greater academic gains for highly mobile students and thereby increased their chance of academic achievement.

**Further Research**

The findings from this study have implications that may prove interesting for further research. The suggestions for further research include:

1. Replicate this study with a larger sample population. A larger sample population may have yielded different results for this study. A larger sample population would have allowed for random sampling of the population as well as comparative analyses by demographic variables. Further research is needed to ascertain if the findings were reflective of urban first and second grade classroom teachers of highly mobile students in general or were true for only this particular sample.

2. Conduct a comparison of teachers’ sense of efficacy for teaching students using the original version of the TSELS with their sense of efficacy for teaching highly mobile students using the modified version to determine if there is a relationship between teachers’ scores on the two versions.

3. Expand this study to include elementary teachers in grades kindergarten through fifth grade. Including elementary classroom teachers from
kindergarten through fifth grade might have resulted in different findings for this study.

4. Expand the geographical region of the study to include other school districts. This particular study focused on schools within one school district. Future studies should include teachers from several school districts.

5. Conduct this same study but include collective efficacy. Collective efficacy might provide answers as to why there was not a statistically significant difference between teachers’ sense of efficacy for literacy instruction and the reading achievement of their highly mobile students.

6. This research study used the Texas Primary Reading Inventory to measure reading achievement. An alternative measure for reading achievement might yield different results. Noll and Watkins (2003/2004) recommended that teachers use students’ strengths rather than weaknesses to teach reading. While highly mobile students had gaps in their knowledge of literacy skills their interpretive skills were often very sophisticated (Noll & Watkins, 2003/2004).

7. Change the research design to include both quantitative and qualitative methods. Future research should include data provided by interviews, case studies, and/or observation. Qualitative data would generate both visual and pictorial data to represent teacher efficacy and the measurement of reading achievement of highly mobile students.
Summary

Educators are facing serious challenges in addressing the literacy needs of high mobility students (Lash & Kirkpatrick, 1990; Masten et al., 1997) According to the literature (Ashton & Webb, 1984, 1986; Bandura, 1995, 1997; Gibson & Dembo, 1984; Howard, 1995, 2003; Tschannen-Moran, Hoy, & Hoy, 1998; Tschannen-Moran & Hoy, 2001), one way to prepare educators to meet the challenges associated with the literacy needs of highly mobile students was to enhance teachers’ sense of efficacy. The purpose of this correlational study was to investigate the relationship between urban first and second grade teachers’ sense of efficacy for literacy instruction for highly mobile students. This chapter summarized the results of the study, made recommendations for addressing the literacy needs of highly mobile students, and discussed implications for further research.
REFERENCES


Retrieved March 24, 2003, from 

http://www.ncrel.org/sdrs/areas/issues/educatrs.leadrshp/le0win.htm


APPENDIX A

TEACHERS’ SENSE OF EFFICACY FOR LITERACY

INSTRUCTION (MODIFIED)
Teacher Beliefs – TSELS: This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for teachers. Your answers are confidential.

**Directions:** Please indicate your opinion about each of the questions below by marking any one of the five responses in the columns on the right side, ranging from (1) “None at all” to 9 “A Great Deal” as each represents a degree on the continuum.

<table>
<thead>
<tr>
<th>Question</th>
<th>None at all</th>
<th>Very Little</th>
<th>Some degree</th>
<th>Quite a bit</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How much can you motivate highly mobile students who show low interest in reading?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. How much can you do to adjust your reading materials to the proper level for individual highly mobile students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. To what extent can you get highly mobile students to talk with each other in class about books they are reading?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. To what extent can you model effective reading strategies for highly mobile students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. To what extent can you help your highly mobile students figure out unknown words when they are reading?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. How much can you do to provide appropriate challenges for highly mobile students who are also high ability readers?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. To what extent can you use a variety of informal and formal reading assessment strategies for highly mobile students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. How much can you do to meet the needs of highly mobile students who are also struggling readers?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. To what extent can you use flexible grouping to meet individual needs of highly mobile students for reading instruction?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. To what extent can you adjust reading strategies based on ongoing informal assessments of your highly mobile students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. To what extent can you get highly mobile students to read fluently during oral reading?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. To what extent can you model effective writing strategies for highly mobile students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. To what extent can you integrate the components of language arts for highly mobile students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Question</td>
<td>None at all</td>
<td>Very little</td>
<td>Some degree</td>
<td>Quite a bit</td>
<td>A great deal</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>14. To what extent can you implement word study strategies to teach spelling for highly mobile students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. To what extent can you adjust writing strategies based on ongoing informal assessments of your students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. To what extent can you use a highly mobile student’s oral reading mistakes as an opportunity to teach effective reading strategies?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. To what extent can you provide specific, targeted feedback to highly mobile students during oral reading?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. To what extent can you use highly mobile students’ writing to teach grammar and spelling strategies?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**For office use only. Please circle the appropriate response.**

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. What grade level(s) do you teach?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. How many years have you taught?</td>
<td>1-5</td>
<td>6-10</td>
<td>11-15</td>
<td>16-20</td>
<td>20+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. What is your level of education?</td>
<td>Baccalaureate Degree</td>
<td>Masters Degree</td>
<td>Doctorate Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>European American</td>
<td>Hispanic American</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other: Please specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B

SUBSCALES OF THE TEACHER SENSE OF EFFICACY SCALE INSTRUMENT
1. To what extent can you use highly mobile students’ writing to teach grammar and spelling strategies?

2. To what extent can you adjust writing strategies based on ongoing informal assessments of your highly mobile students?

3. To what extent can you model effective writing strategies for highly mobile students?

4. To what extent can you integrate the components of language arts for highly mobile students?

5. To what extent can you use a highly mobile student’s oral reading mistakes as an opportunity to teach effective reading strategies?

6. To what extent can you implement word study strategies to teach spelling for highly mobile students?

7. To what extent can you provide specific, targeted feedback to highly mobile students during oral reading?

8. To what extent can you adjust reading strategies based on ongoing informal assessments of your highly mobile students?

9. To what extent can you get highly mobile students to read fluently during oral reading?
The questions that addressed teachers’ sense of efficacy for differentiating instruction included:

1. How much can you do to adjust your reading materials to the proper level for individual highly mobile students?

2. How much can you do to meet the needs of struggling highly mobile students?

3. To what extent can you use a variety of informal and formal reading assessment strategies for highly mobile students?

4. To what extent can you get highly mobile children to talk with each other in class about books they are reading?

5. How much can you motivate highly mobile students who show low interest in reading?

6. To what extent can you model effective reading strategies for the highly mobile?

7. To what extent can you help your highly mobile students figure out unknown words when they are reading?

8. To what extent can you use flexible grouping to meet individual highly mobile student needs for reading instruction?

9. How much can you do to provide appropriate challenges for highly mobile students who are also high ability readers?
APPENDIX C

PERMISSION TO MODIFY THE INSTRUMENT
Hi Corinna,

I am glad to learn that your committee is pleased with the TSELS! You have my permission to add questions to the bottom of the TSELS, as long as it is noted in your study that the questions are not part of the TSELS. I would also like to ask you for a summary of your results. I plan to add a section on my website of research that has been done using the TSELS that includes a very brief abstract of each study.

Good luck, Denise
APPENDIX D

IRB APPROVAL
March 8, 2005

MEMORANDUM

TO:        Ms. Corinna Valdez
            Department of Teaching, Learning and Culture
            MS 4232

FROM:  Dr. Alvin Lark Jr., Chair
            Institutional Review Board
            MS 1180

SUBJECT: IRB Protocol Review

Title: Investigating the Relationship between First and Second Grade Classroom Teachers' Sense of Efficacy for Literacy Instruction and the Reading Achievement of their Highly Mobile Students

Protocol Number: 2005-66078
Review Category: Exempt from Full Review
Approval Date: March 8, 2005 to March 7, 2006

The approval determination was based on the following Code of Federal Regulations:
http://ohrp.osophs.dhhs.gov/humansubjects/guidance/45CFR46.htm

\[ \sqrt{46.101(b)(1)} \quad 46.101(b)(4) \]
\[ 46.101(b)(2) \quad 46.101(b)(5) \]
\[ 46.101(b)(3) \quad 46.101(b)(6) \]

Remarks:

Please provide documentation of school approval before collecting data.

This study has been approved for one (1) year. As principal investigator, you assume the following responsibilities:

1) Renewal/Completion - This protocol must be renewed each year in order to continue after the initial approval period. The proper paperwork must be submitted 30 days before the end of the approval period. Failure to do so may result in processing delays and/or non-renewal. When the protocol has been completed, the proper paperwork must be submitted to the IRB to close out the file.

2) Adverse events - Any adverse events must be reported to the IRB officer immediately.

3) Amendments - Any changes to the protocol must be reported to the IRB and approved before being implemented.

4) Informed consent - Information must be presented to enable persons to voluntarily decide whether or not to participate as a research subject.
APPENDIX E

LETTER REQUESTING PERMISSION TO CONDUCT STUDY
July 13, 2004

P. O. Box 110
801 Leopard
[redacted]-0110

Dear Dr. [redacted]:

My name is Corinne Valadez and I am a doctoral candidate at Texas A&M University. My dissertation is a study that will attempt to identify perceptions of elementary teachers about teacher efficacy as related to differentiated reading instruction for homeless children. The reason I am writing you is to ask if I could include Corpus Christi elementary teachers in my study? Due to the size of Corpus Christi ISD, I would only be interested in surveying those campuses that are included in phase one for the implementation of balanced literacy. Please be assured that all information, including the district, will remain anonymous. Please feel free to contact me at 361 – 993 – 7118 if you should have any questions.

Sincerely,

Corinne Valadez
Doctoral Candidate
Texas A&M University
APPENDIX F

DISTRICT APPROVAL
November 1, 2004

Dear Ms. Valadez,

Formal permission is granted to you to conduct your research “Teacher Efficacy and Differentiated Reading Instruction for Homeless Children in Grades K-2: A Descriptive Study” in the Corpus Christi Independent School District (District).

It is a pleasure to welcome you to the District as you begin this significant research initiative. At the conclusion of your work, please provide my office with a copy of the results.

Should you need additional assistance during your study, please feel free to contact Dr. Michelle Moore, Senior Research and Evaluation Analyst, Office of Research, Testing, and Evaluation, 3130 Highland Avenue, Corpus Christi, Texas 78405. Dr. Moore can be reached at (361) 844-0396 and by e-mail at MDMoore@ccisd.us.

Sincerely,

James H. Gold
Director

JG/ml

Enclosure

cc: Dr. Arturo Almendarez
    Dr. Karen Soehnge
    Dr. Michelle Moore
    School Directors
    School Principals
APPENDIX G

INFORMED CONSENT FORM
INFORMED CONSENT FORM

Investigating The Relationship Between First And Second Grade Classroom Teachers’ Sense of Efficacy for Literacy Instruction and the Reading Achievement of Their Highly Mobile Students

I have been asked to participate in a research study investigating the relationship between teacher beliefs about literacy instruction and the reading achievement of high mobility students in first and second grade. Approximately 100 first and second grade teachers have been asked to participate in this study. The purpose of this study is to see if there is a relationship between teachers’ sense of efficacy for literacy instruction and the reading achievement of their highly mobile students.

If I agree to be in this study, I will be asked to complete the Teachers’ sense of efficacy for literacy instruction scale (TSELS) and agree to share results of TPRI scores for high mobility students during 2004-2005 academic year. This study will only take about 30 minutes to complete the survey. There are minimal to no risks associated with this study. There are no benefits of participation for this study.

This study is confidential. Confidentiality will be accomplished through the coding of survey forms that only the researcher will understand. The records of this study will be kept private. No identifiers linking me to this study will be included in any sort of report that might be published. Research records will be stored securely and only Corinne Valadez, primary investigator and Dr. Norvella Carter, committee chair, will have access to the records. My decision whether or not to participate will not affect my current or future relations with Texas A&M University, Corpus Christi ISD, or West Oso ISD. If I decide to participate, I am free to refuse to answer any of the questions that may make me uncomfortable. I can withdraw at any time with out my relations with the university, school district, job benefits, etc., being affected.

If you have any questions about this study, you may contact Corinne Valadez, primary investigator at 361-825-3336 or 361-993-7118 (ccvaladez@sbcglobal.net) or Dr. Norvella Carter (norvella@houston.rr.com), committee chair at (979) 862-3802.

This research study has been reviewed by the Institutional Review Board-Human Subjects in Research, Texas A&M University. For research-related problems or questions regarding subjects’ rights, I can contact the institutional Review Board through D. Michael W. Buckley, Director of Research Compliance, Office of Vice President for Research at (979) 845-8585 (mwbuckley@tamu.edu).

I have read the above information. I have asked questions and have received answers to my satisfaction. I have been given a copy of this consent document for my records. By signing this document, I consent to participate in the study.

Signature: ____________________________ Date: _____________

Signature of Investigator: __________________________ Date: _____________
APPENDIX H

TESTS OF NORMALITY
In order for data to be considered normally distributed, data had to indicate normality on at least two of the tests. The Five Percent Trimmed Mean was then compared to the original mean of each dependent variable to determine if outliers had impacted the data.

Normality of the distribution of modified instrument as well as the reading fluency and comprehension scores of highly mobile students were assessed using the Kolmogorov-Smirnov statistic (Table H1). According to Pallant (2005), a “non-significant result (significant value of more than .05) indicates normality” (p. 57). The following variables had statistically nonsignificant values of more than .05 indicating a normal distribution: total efficacy score, the subscales of efficacy, sense of efficacy for differentiating instruction, and sense of efficacy for integrating language arts, beginning-of-the-year fluency for both first and second grade, and end-of-the-year fluency for both first and second grade (Table H.1). Beginning-of-the-year and end-of-the-year comprehension scores for first grade were normally distributed; however, comprehension scores for second grade were not normally distributed.
Table H.1. Tests of Normality for Variables

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficacy score</td>
<td>.10</td>
<td>48</td>
<td>.20</td>
</tr>
<tr>
<td>Sense of efficacy for integrating language arts</td>
<td>.06</td>
<td>48</td>
<td>.20</td>
</tr>
<tr>
<td>Sense of efficacy for differentiating instruction</td>
<td>.08</td>
<td>48</td>
<td>.20</td>
</tr>
<tr>
<td>Comprehension beginning of the year 1st Grade</td>
<td>.24</td>
<td>53</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>.24</td>
<td>30</td>
<td>.00</td>
</tr>
<tr>
<td>Comprehension end of the year 1st Grade</td>
<td>.29</td>
<td>53</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>.30</td>
<td>30</td>
<td>.00</td>
</tr>
<tr>
<td>Fluency beginning of the year 1st Grade</td>
<td>.19</td>
<td>53</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>.13</td>
<td>30</td>
<td>.20*</td>
</tr>
<tr>
<td>Fluency end of the year</td>
<td>.07</td>
<td>53</td>
<td>.20*</td>
</tr>
<tr>
<td></td>
<td>.10</td>
<td>30</td>
<td>.20*</td>
</tr>
</tbody>
</table>

*This is a lower bound of the true significance.

Lilliefors Significance Correction.

While Kolomogorov-Smirnov statistics showed that all variables except for comprehension were normally distributed, the Five Percent Trimmed Mean comparisons indicated that the scores for all of the variables were normally distributed (Table H.2). The original mean for efficacy was 6.70, and the 5% trimmed mean was
6.78. The original mean for the subscale of sense of efficacy for differentiating instruction was 6.69, and the 5% trimmed mean was 6.69. The original mean for the subscale of sense of efficacy for integrating the language arts was 6.70 and the 5% trimmed mean was 6.73. The original mean for first grade reading fluency was 37.77, and the 5% trimmed mean was 36.55. The original mean for first grade comprehension was 3.77, and the 5% trimmed mean was 3.86. The original mean for second grade reading fluency was 62.07, and the 5% trimmed mean was 60.77. Finally, the original mean for second grade comprehension was 3.88, and the 5% trimmed mean was 4.03.

Table H.2. Five Percent (5%) Trimmed Mean of Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>5% Trimmed Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficacy score</td>
<td>6.67</td>
<td>6.78</td>
</tr>
<tr>
<td>Sense of efficacy for differentiating instruction</td>
<td>6.69</td>
<td>6.69</td>
</tr>
<tr>
<td>Sense of efficacy for integrating language arts</td>
<td>6.70</td>
<td>6.73</td>
</tr>
<tr>
<td>1st Grade comprehension</td>
<td>3.77</td>
<td>3.85</td>
</tr>
<tr>
<td>1st Grade reading fluency</td>
<td>37.77</td>
<td>36.55</td>
</tr>
<tr>
<td>2nd Grade Comprehension</td>
<td>3.88</td>
<td>4.03</td>
</tr>
<tr>
<td>2nd Grade reading fluency</td>
<td>62.07</td>
<td>60.77</td>
</tr>
</tbody>
</table>

Histograms and Normal Q-Q Plots were created as part of the tests of normality. The histogram for sense of efficacy can be seen in Figure H.1. The mean for overall sense of efficacy scores was 6.70 with a standard deviation of 1.19 when n = 48 and a
5% trimmed mean of 6.78 (Table H.2). The shape of the histogram (Figure H.1) showed a normal curve and the straight line on the Normal Q-Q Plot of efficacy scores (Figure H.2). The data were assumed to be normally distributed based upon normal distribution on the histogram, straight line on the Normal Q-Q Plot, and 5% trimmed means (Pallant, 2005, p. 58).

![Histogram of Efficacy Scores for Urban 1st and 2nd Grade Teachers.](image)

*Figure H.1. Histogram of Efficacy Scores for Urban 1st and 2nd Grade Teachers.*
Figure H.2. Normal Q-Q Plot of Efficacy Scores for Urban 1st and 2nd Grade Teachers.

Figure H.3. Histogram for Sense of Efficacy for Integrating Language Arts for Urban 1st and 2nd Grade Teachers.

A histogram (Figure H.3) and Normal Q-Q Plot (Figure H.4) showed the distribution of scores for the subscale of sense of efficacy for integrating the language arts. The mean for the subscale, sense of efficacy for integrating the language arts, was
6.70 with a standard deviation of 1.21 when n = 48 with a 5% trimmed mean of 6.73 (Table 4.2). The histogram (Figure H.3) showed a reasonable distribution of scores. There was a gap at 4.00 and a peak at 9.00 that suggested outliers; however, a straight line was represented on the Normal Q-Q Plot (Figure H.4). The normal distribution of data on the histogram, straight line on the Normal Q-Q plot, and 5% trimmed mean supported the assumption of normal distribution of scores for the subscale, sense of efficacy for integrating the language arts (Pallant, 2005).

![Normal Q-Q Plot of Sense of Efficacy for Integrating Language Arts for Urban 1st and 2nd Grade Teachers.](image)

*Figure H.4.* Normal Q-Q Plot of Sense of Efficacy for Integrating Language Arts for Urban 1<sup>st</sup> and 2<sup>nd</sup> Grade Teachers.

The histogram (Figure H.5) for the subscale of sense of efficacy for differentiating instruction showed several peaks. The subscale, sense of efficacy for differentiating instruction had a mean of 6.69 with a standard deviation of 1.26 when n = 48 (Figure H.5) and a 5% trimmed mean of 6.69 (Table H.2). At first glance, it
appeared that there was not a normal distribution of scores for the subscale, sense of efficacy for differentiating instruction. Yet, the Normal Q-Q Plot (Figure H.6) had a reasonably straight line. The reasonably straight line indicated a normal distribution of scores and the 5% trimmed mean supported the assumption that data for the subscale, sense of efficacy for differentiating instruction, had a normal distribution (Pallant, 2005).

Figure H.5. Histogram of Sense of Efficacy Differentiating Instruction for Urban 1st and 2nd Grade Teachers.
**Figure H.6.** Normal Q-Q Plot of Sense of Efficacy for Differentiating Instruction for Urban 1st and 2nd Grade Teachers.

**Figure H.7.** Histogram of Beginning-of-the-Year Comprehension for Highly Mobile 1st Grade Students.
The mean for beginning-of-the-year comprehension scores for highly mobile first grade students was 1.51 with a standard deviation of 1.63 when \( n = 53 \) (Figure H.7). The Kolmogorov-Smirnov analysis yielded a significant value of .00 (Table H.1) suggesting a violation of the assumption of normality. At first glance, the histogram for beginning-of-the-year first grade comprehension appeared positively skewed (Figure H.7); however, upon closer inspection the data revealed an initial peak and then the rest of the data had a normal curve. The Normal Q-Q Plot (Figure H.8) had a straight line. The normal distribution of data on the histogram and the straight line on the Normal Q-Q Plot supported the assumption that beginning-of-the-year comprehension scores for highly mobile first grade had a normal distribution.

*Figure H.8. Normal Q-Q Plot of Beginning-of-the-Year Comprehension Scores for Highly Mobile 1st Grade Students.*
The mean for end-of-the-year comprehension scores for highly mobile first grade students was 3.42 with a standard deviation of 1.59 when n = 53 (Figure H.9). The Kolmogorov-Smirnov analysis had a significant value of .00 (Table H.1), suggesting a violation of the assumption of normality. The histogram for the end-of-the-year first grade comprehension had two peaks (Figure H.9); however, the data had an initial peak that suggested the data had outliers, while the rest of the data appeared to have a fairly a normal curve. The Normal Q-Q Plot (Figure H.10) had a straight line and supported the assumption that end-of-the-year comprehension scores for highly mobile first grade students had a normal distribution.

Figure H.9. Histogram of End-of-the-Year Comprehension Scores for Highly Mobile 1st Grade Students.
The mean for beginning-of-the-year comprehension scores for highly mobile second grade students was 3.73 with a standard deviation of 1.48 when \( n = 30 \) (Figure H.11). The Kolmogorov-Smirnov analysis had a significant value of .00 (Table H.11) suggesting a violation of the assumption of normality. The histogram for beginning-of-the-year first grade comprehension was negatively skewed (Figure H.11). The Normal Q-Q Plot (Figure H.12) had a straight line. This suggested that the data for beginning-of-the-year comprehension scores was not normally distributed (Pallant, 2005).
Figure H.11. Histogram of Beginning-of-the-Year Comprehension Scores for Highly Mobile 2nd Grade Students.

Figure H.12. Normal Q-Q Plot of Beginning-of-the-Year Comprehension Scores for Highly Mobile 2nd Grade Students.
The mean for the end-of-the-year comprehension scores for highly mobile second grade students was 4.1 with a standard deviation of 1.35 when \( n = 30 \) (Figure H.13). The Kolmogorov-Smirnov analysis had a significant value of .00 (Table H.1), suggesting a violation of the assumption of normality. The histogram for end-of-the-year comprehension scores for highly mobile second grade students appeared negatively skewed (Figure H.13). The Normal Q-Q Plot (Figure H.14) had a straight line. This suggested that the end-of-the-year comprehension scores for highly mobile second grade students was not normally distributed (Pallant, 2005).

![Figure H.13. Histogram of End-of-the-Year Comprehension Scores for Highly Mobile 2\textsuperscript{nd} Grade Students.](image-url)
Figure H.14. Normal Q-Q Plot of End-of-the-Year Comprehension Scores for Highly Mobile 2nd Grade Students.

The beginning-of-the-year fluency rate for highly mobile first grade students had a mean of 19.49 and a standard deviation of 16.47 when n = 53 (Figure H.15). The Kolmogorov-Smirnov analysis had a significant value of .06 (Table H.1). The histogram for beginning-of-the-year reading fluency rates was negatively skewed (Figure 4.15). The Normal Q-Q Plot (Figure H.16) had a straight line. The Kolmogorov-Smirnov value and straight line on the Normal Q-Q Plot indicated that the data for beginning-of-the-year fluency was normally distributed.
Figure H.15. Histogram of Beginning-of-the-Year Reading Fluency Rates for Highly Mobile 1st Grade Students.

Figure H.16. Normal Q-Q Plot of Beginning-of-the-Year Reading Fluency Rates for Highly Mobile 1st Grade Students.
The end-of-the-year fluency rate for highly mobile first grade students had a mean of 40.04 and a standard deviation of 26.57 when n = 53 (Figure H.17). The Kolmogorov-Smirnov analysis had a significant value of .20 (Table H.1). The histogram for end-of-the-year reading fluency rates had a normal curve (Figure H.17). The Normal Q-Q Plot (Figure H.18) had a straight line. All of the tests indicated that the data for end-of-the-year fluency rate of highly mobile first grade students was normally distributed (Pallant, 2005).

*Figure H.17. Histogram of End-of-the-Year Reading Fluency Rates for Highly Mobile 1st Grade Students.*
The beginning-of-the-year fluency rate for highly mobile second grade students had a mean of 58.33 and a standard deviation of 30.24 when n = 30 (Figure H.19). The Kolmogorov-Smirnov analysis had a significant value of .20 (Table H.1). The histogram for beginning-of-the-year reading fluency rates was normally distributed (Figure H.19). The Normal Q-Q Plot (Figure H.20) had a straight line. All of the tests indicated that the data for beginning-of-the-year fluency rates of highly mobile second grade students was normally distributed (Pallant, 2005).
Figure H.19. Histogram of Beginning-of-the-Year Fluency Rates for Highly Mobile 2\textsuperscript{nd}
Grade Students.

Figure H.20. Normal Q-Q Plot of Beginning-of-the-Year Reading Fluency for Highly Mobile 2\textsuperscript{nd}
Grade Students.
The end-of-the-year fluency rate for highly mobile second grade students had a mean of 74.53 and a standard deviation of 37.52 when n = 30 (Figure H.21). The Kolmogorov-Smirnov analysis had a significant value of .20 (Table H.1). The histogram for end-of-the-year reading fluency rates was normally distributed; however, the isolated peak indicated possible outliers (Figure H.21). The Normal Q-Q Plot (Figure H.22) had a straight line. The tests indicated that the data for end-of-the-year fluency rates for highly mobile second grade students was normally distributed (Pallant, 2005).

*Figure H.21. Histogram for End-of-the-Year Fluency Rates for Highly Mobile 2nd Grade Students.*
Figure H.22. Normal Q-Q Plot of End-of-the-Year Reading Fluency for Highly Mobile 2\textsuperscript{nd} Grade Students.
VITA

CORINNE MONTALVO VALADEZ
6206 Queen Jane St.
Corpus Christi, Texas 78414

EDUCATION

2006
Doctor of Philosophy, Curriculum and Instruction
Texas A&M University, College Station

1995
Master of Science, Curriculum and Instruction
Texas A&M University – Corpus Christi

1993
Bachelor of Science, Interdisciplinary Studies
Texas A&M University – Corpus Christi

CERTIFICATIONS

Provisional Elementary Self-Contained Grades 1-8
Provisional Reading Grades 1-8
Reading Specialist K-12
Master Reading Teacher EC-12

EXPERIENCE

2004 – Present
Visiting Assistant Professor, Texas A&M University – Corpus Christi

2000 – 2004
1st and 3rd Grade Classroom Teacher, Carroll Lane Elementary
Corpus Christi Independent School District

1998 –2000
4th Grade Classroom Teacher, Menger Elementary
Corpus Christi Independent School District

1996 – 1998
Lecturer, Texas A&M University – Corpus Christi

1993 – 1996
2nd and 4th Grade Classroom Teacher, Weldon Smith Elementary
Corpus Christi Independent School District

This dissertation was typed by Marilyn M. Oliva at Action Ink, Inc.