PARENT INVOLVEMENT AND THE IMPACT ON STUDENT ACHIEVEMENT

IN GRADES 2 – 5

A Dissertation

Presented in Partial Fulfillment of the Requirements for the

Degree of Doctor of Education

with a

Major in Educational Leadership

in the

Department of Graduate Education

Northwest Nazarene University

by

Yvonne Marie Thurber

April 2013

Major Professor: Loredana Werth, PhD, MS

AUTHORIZATION TO SUBMIT DISSERTATION

This dissertation of Yvonne Thurber, submitted for the degree of Doctor of Education with a major in Educational Leadership and titled "Parent Involvement and the Impact on Student Achievement in Grades 2-5," has been reviewed in final form. Permission, as indicated by the signatures and dates given below, is now granted to submit final copies.
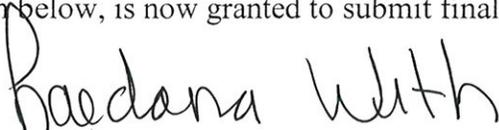
Major Professor _____ Date 4/12/13
Dr. Loredana Werth

Committee
Member _____ Date 4/12/13
Dr. Ron Tolman

Committee
Member _____ Date 4/12/13
Dr. Gale Zickefoose

Department
Administrator _____ Date 5/1/13
Dr. Paula Kellerer

Discipline's
College Dean _____ Date 5/1/13
Dr. Paula Kellerer

ACKNOWLEDGEMENTS

DEDICATION

This dissertation is dedicated to my mother, Marie for being such a good friend, my father, Tom, for encouraging me to continue in my educational endeavors and to my husband, who has loved me through all the weekends of writing.

ABSTRACT

This quantitative research study examined the relationship between student achievement in reading and mathematics on the STAR (Standardized Test for the Assessment of Reading and Mathematics) and parent involvement in specific character development activities. The research design was quantitative in nature and conducted in two similar elementary schools, within a four month time frame. School 1(Experimental) served 719 students, while the School 2 (Control) served 807 students. Of the 839 participants included in the study, 410 attended School 1 (Experimental) and 429 attended School 2 (Control). The results of this study indicated students who engaged in specific parent involvement activities with their parents did not score significantly higher on the STAR Reading and Mathematics assessments. However, results indicted statistically significant differences in how third and fifth grade students at School 1 (Experimental) performed academically, when compared to second and fourth grade students at the same school. In addition, interesting data emerged regarding behavior and attendance when School 1 (Experimental) and School 2 (Control) were compared.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter I

Introduction

The old African proverb stating, "It takes a whole village to raise a child," has never been more relevant than it is today (Gould, 2011; Ferrara, 2009; Hill & Tyson, 2009). Families are the bedrock on which our nation was built. Families are what make up our larger communities, and communities are what influence our children positively or negatively.

Present-day families are far more diverse than those of the past. There are single parents, families with two working parents, families with joint-custody of the child/children, and step-families. Children spend less time with their parents and families and more time in child-care situations or alone. (Aina, Grace, & Jethro, 2012; Epstein & Mavis, 2006; Gould, 2011; Larocque, Kleiman, & Darling, 2011). How parents buy school clothes, how they provide child care while they are at work, and what his/her children will be exposed to from overwhelming media influence are concerns that every parent has for their child/children. (Baharudin, Hong, Lim, & Zulkefly, 2010; Brickman, Rhodes, & Oyserman, 2007).

Although a great deal about parenting has changed, there are those traditions that will never change. Parenting is a remarkable responsibility and encompasses the role of teacher as only one of its aspects. Parents are still the first educators of their children and the most integral influences in their child's life (Larocque, Kleiman, & Darling, 2011; Mo & Singh, 2008). Parents have great power over a child's motivation in regards to school. Even if parents are unable to assist their children in specific subject areas of academics, their encouragement in the area of academics is essential (Center on Educational Policy, 2012). If a child believes achievement in school is of high importance to their parents, they will strive to achieve at higher levels (Aina,

Grace, & Jethro, 2012; Dixon et al., 2010). Parental involvement in a child's education has a profound effect on a child's educational outcomes. The key is finding a way to make parent involvement work for all parents, even the parents that cannot come into the school and volunteer, attend daytime programs put on by children, attend parent teacher conferences or assist with school fundraisers. Parental involvement, if it is going to truly be effective, has to work for all parents (Bigelow & Zhou, 2001; Cripps & Zyromski, 2009; Fabricant, 2011).

Statement of the Problem

Parental involvement has broad and varying definitions. With this variety, it becomes unclear what specific types of parental involvement in a child's education have the greatest positive impact on his/her academic achievement. Some research suggests parents who help with homework have the greatest impact on achievement; others claim that the key to high achievement is communication between parents and teachers (Dumont et al., 2012; Larocque, Kleiman, & Darling, 2011). There is research to support the idea of parents attending school functions on a regular basis as a way to positively impact student achievement (Beebe-Frankenberger, Bocian, Grasham, Lane, & MacMillan, 2005). Parent and teacher collaboration as it pertains to student learning is often cited as an effective practice to improve a child's academic performance (Coleman & McNeese, 2009).

Research indicates all of these theories are true to some extent, and may all impact student achievement positively (Aina, Grace, & Jethro, 2012; Bigelow & Zhou, 2001; Howard & Reynolds, 2008). Other researchers maintain it is a parent's beliefs and expectations of how well his/her child is able to do in school which has the greatest impact on student achievement (Orozco, 2008; Patel & Stevens, 2010; Wiseman, 2010).

Although definitions of parental involvement vary, most researchers agree, parental involvement does have an impact on student achievement. The problem remains that lack of consensus on what specific parental involvement strategies have the highest impact on student achievement leave schools and parents left to guess at which strategies to employ. Schools and parents need to know on which parental involvement strategies to focus limited time and resources, in order to have the greatest possible positive impact on every student's academic outcomes (Bergeson & Davidson, 2007; Fabricant, 2011; Zellman & Waterman, 1998).

Background

An abundance of research has been done in the area of student achievement and its relationship to family socioeconomic status, family background and structure, ethnicity, gender and even homework help (Baker & Soden, 2001). Researchers have attempted to illustrate correlations between student achievement and family structure, socioeconomic issues, homework help received from parents and even parental educational levels and achievements (Kim & Hocevar, 1998; Bronfenbrenner, 1993). Family structure and the extent to which parents discuss educational topics and attend school functions have been associated with higher levels of academic achievement by students (Jeynes, 2010). Variables including ethnicity and family structure have been compared to students' achievement in an attempt to find what impacts student achievement positively (Larocque, Kleiman, & Darling, 2011; Patel & Stevens, 2010).

Another study concluded that parents who engage in conversations with their child/children about their education by asking them what they have learned or are learning, thereby having the child recount their daily experiences at school have children that perform at higher academic levels (Jeynes, 2010).

Epstein (2002) was a pioneer in the area of researching parental involvement and its impact on student achievement. Epstein engineered a framework that included six types of parental involvement. The themes from Epstein's research can be found in numerous research studies that have been conducted over the years (Bigelow & Zhou, 2001; Epstein & Mavis, 2006; Ferrara, 2009; Jeynes, 2010; Keith & Keith, 1993; Swick et al., 1997).

One area in which parents can support their children as students is to increase parental involvement at home (Epstein, 2008; Harvard Graduate School of Education, 2006; Orozco, 2008). When a parent communicates their belief of educational importance to his/her child in activities engaged in at home, the child gains a greater sense of why school is important (Orozco, 2008; Patel & Stevens, 2010; Wiseman, 2010).

Another type of parent involvement occurs is in the communication occurring between school and home, or home and school, previously referred to as parent and teacher collaboration for student learning (Coleman & McNeese, 2009). When parents communicate with teachers and vice versa, parents gain an understanding of how and what their child is performing in school both academically and behaviorally. This information allows a parent to have a better understanding of the day-to-day workings of a school so he/she might better support their child academically, as well as becoming a part of their school community (Blackmore & Hutchison, 2010; Dixon et al., 2010; Phil, 2011).

Volunteering is a common form of parental involvement. When parents come in to the school and assist in the classroom or tutor struggling students, the activity is mutually beneficial. The students at the school receive a greater percentage of one-on-one academic support and the parent gains a greater understanding of the practices of the school (Patel & Stevens, 2010; Pryor & Pryor, 2009; Radzi, Razak, & Sukor, 2010). There are a great number of parents who

volunteer at the elementary schools their children attend. As students progress into middle school and high school however, parental volunteerism declines significantly (Cripps & Zyromski, 2009; Epstein, 2008; Ziomek, 2010). There is a growing body of research aimed at determining if this drop-off in parental involvement has impacts on student achievement at the middle and high school levels, as well as whether or not it impacts the rate at which students graduate from high school and attend college (Bakker, Denessen, & Gierveld, 2007; Ziomek, 2010).

Parents can be involved in learning which takes place at home. Assisting with homework would be one example of learning at home, but nearly any activity can become a learning experience if parents involve their child in it, from baking a cake to rebuilding a small engine (Bower & Griffin, 2011; Dixon et al., 2010; Green, Walker, Hoover-Dempsey, & Sandler, 2007). The value a parent places on education has a great impact on a child's educational motivation (Baharudin, Hong, Lim, & Zulkefly, 2010). A parent's value of education is shared with his/her child in how he/she speaks about education and the importance they place on activities associated with education (Thurston, 2005; Zellman & Waterman, 1998).

Parents may be involved in school governance through parent/teacher organizations, or become active in decision making committees. When parents are involved in this way, they are invested in their child's school, and that message of being involved is transferred from the parent to the student through what the child sees their parent doing (Bartels & Eskow, 2010; Fabricant, 2011; Epstein & Mavis, 2006).

When the community and a school begin to share information and ideas, another type of involvement emerges. Parents who work in the community can be instrumental in assisting schools to build relationships with businesses and organizations in the community. Building relationships with a diverse group of stakeholders has the potential to benefit schools in many

ways (Bergeson & Davidson, 2007; Epstein & Mavis, 2006; Harvard Graduate School of Education, 2006). From having a community professional come in to speak to students on specific topics, to meeting with community members to see what input they may have about the graduating seniors and the skill-set they bring to the workplace, or the knowledge base students possess upon entering college, the sharing of information between school and community can prove valuable and guide improvement efforts for both entities (Bartels & Eskow, 2010; Bergeson & Davidson, 2007; Epstein & Mavis, 2006).

With so many types of parental involvement and the vast differentiation between the way involvement is defined by different researchers and school systems, it would have been easy to get caught up in looking at too many types of parental involvement in a research study. This study focused on identified and specific parental involvement activities and their impact on student achievement in reading and mathematics at two rural elementary schools in the Western United States during the first four months (September, October, November, and December) of the 2012/2013 school year. School 1 (Experimental) served 719 students, including 370 male students and 349 female students, while School 2 (Control) served 807 students, including 374 male students and 372 female students. Due to the nature of the assessment, only students in 2nd through 5th grade were included in the study. Of the 839 participants, 410 were from School 1 (Experimental) and 429 were from School 2 (Control). The sample used for this study was a convenience sample as the researcher was employed in the school district as an elementary school principal and gained access to student achievement data through the school district. The specific parental involvement activities were derived from a scripted character development curriculum based on twelve pillars of character (Solomon, 2011):

- Goal-Setting

- Self-Awareness

- Valuing Achievement

- Valuing Others

- Self-Control

- Caring

- Responsibility

- Citizenship

- Life-long learning

- Self-confidence

- Respect

- Trustworthiness

Each month parents were provided with suggested activities to complete with their child/children, based on the specific character trait which had been selected for that month. The results from this study added to the professional literature by determining if specific five to fifteen minute character development activities completed by a child and their parent at home on a monthly basis positively impacted student achievement in the areas of reading and mathematics as measured by the STAR Reading and Mathematics assessments (see Appendices H and I). The results from this study provided educational professionals with information on whether working to engage parents in specific character development activities was a worthwhile practice in improving academic achievement in reading and mathematics.

Research Questions and Hypotheses

Research questions focus scholarly work, provide direction for the next steps and identify the specific objectives of the study. This quantitative study answers two main questions:

1. Do elementary students participating in a character education curriculum with specific parent activity components demonstrate greater academic growth in Reading achievement compared to students who participate in a character education curriculum without a parent activity component, as measured by the STAR Reading assessment?

2. Do elementary students participating in a character education curriculum with specific parent activity components demonstrate greater academic growth in Mathematics achievement compared to students who participate in a character education curriculum without a parent activity component, as measured by the STAR Mathematics assessment?

These research questions are quantitative and are designed to investigate the relationship between variables and require corroboration through information by using statistics to support the outcomes of the study (Creswell, 2007). Neuman (2003) states research questions must be interactive in nature and should be developed after forming one's hypothesis. Research questions ask if a relationship exists between two or more variables in the study (Sproull, 2002). In this study, the independent variable (IV) was students and parents completing the specific character education activities provided by School 1 (Experimental). In completing the activities, students and parents engaged in specific character development activities between zero and five times per month, at an average of five to fifteen minutes per activity. For example, the parent and the student who had a desire to practice the pillar of character of citizenship by practicing communications skills might play a game of "Simon Says" using directional words such as: right, left, above, below, in front of, or behind. This game would allow the parent to model the trait of being an effective communicator and then let the child/children practice the character trait.

The dependent variable (DV) in this study was the growth in reading and mathematics achievement measured by the STAR Reading and Mathematics assessments (see Appendices H and I). If a positive relationship between the specific character development activities and academic achievement was discovered once the data from the study were analyzed, other factors could be considered for further research in a qualitative study through interviewing participants in the initial study.

Research Hypothesis. Students participating in a character education curriculum with specific parent activity components will demonstrate greater academic growth in reading and mathematics achievement compared to students who participate in a character education curriculum without a parent activity component, as measured by the STAR Reading assessment.

Null Hypothesis. Students participating in a character education curriculum with specific parent activity components will not demonstrate greater academic growth in reading and mathematics achievement compared to students who participate in a character education curriculum without a parent activity component, as measured by the STAR Reading assessment.

Description of Terms

Analysis of Variance (ANOVA). Analysis of variation in an experimental outcome and especially of statistical variance in order to determine the contributions of given factors or variables to the variance (Tanner, 2011).

Average daily attendance (ADA). A statistic representing total number of days of attendance for students divided by the total number of school days in a given period. These statistics are often used to determine school funding.

Caring. Respecting others' feelings and giving of oneself.

Character education curriculum. Materials which facilitate the teaching of good character at home, school, and in the community (Epstein & Mavis, 2006).

Citizenship. Showing loyalty to the rights of others.

Collaborating. Identifying and integrating resources and services from the community to strengthen school programs, family and parenting practices, and student learning and development (Epstein & Mavis, 2006).

Communicating. The effective use of mail, e-mail, telephone, electronic correspondence, websites, text messaging, home visits and parent/teacher meetings to facilitate school-to-home and home-to-school communication about school programs and student progress (Epstein & Mavis, 2006).

Control. An experiment in which the subjects are treated as in a parallel experiment except for omission of the procedure or agent under test and which is used as a standard of comparison in judging experimental effects (Merriam-Webster, 2013).

Decision making. The process of partnership of shared views and actions toward shared goals, as well as opportunities and support to hear from and communicate with families (Epstein & Mavis, 2006).

Experimental. An experiment in which the operation or procedure is carried out under controlled conditions in order to discover an unknown effect or law, to test or establish a hypothesis, or to illustrate a known law (Merriam-Webster, 2013).

Goal setting. Learning how to plan.

Independent t-test. A statistical test involving confidence limits for the random variable of t of a t distribution and used especially in testing hypotheses about means of normal distributions when the standard deviations are unknown (Tanner, 2011).

Johns Hopkins University. A U.S. higher education institution in Baltimore, Maryland, established in 1867 with funding given by Johns Hopkins, a Baltimore businessman.

Learning at home. Homework completed at home as well as activities shared with others at home or in the community, linking schoolwork to real life. This includes but is not limited to encouraging, listening, reacting, praising, guiding, monitoring, and discussing. It is not to be confused with "teaching school subjects" (Epstein & Mavis, 2006).

Life-long learner. Enhancing learning skills throughout one's life.

National Coalition for Parent/Teacher Organizations. Advocates for the involvement of parents and families in their children's education, and to foster relationships between home, school, and community to enhance the education of the nation's young people.

National Network of Partnership Schools (NNPS). A group of educators, researchers, parents, students, and community members working together at Johns Hopkins University to develop and maintain effective partnership programs in schools, districts, state departments of education, education-oriented organizations and university partners.

National Parent/Teacher Association. This is the largest volunteer child advocacy association in the nation.

I. Communicating: Communication between home and school is regular, two-way, and meaningful.

II. Parenting: Parenting skills are promoted and supported.

III. Student Learning: Parents play an integral role in assisting student learning.

IV. Volunteering: Parents are welcome in the school, and their support and assistance are sought.

V. School Decision Making and Advocacy: Parents are full partners in the decisions that affect children and families.

VI. Collaborating with Community: Community resources are used to strengthen schools, families, and student learning.

Parent Teacher Association (PTA). An organization charged with reminding our country of its obligations to children and provides parents and families with a powerful voice to speak on behalf of every child while providing the best tools for parents to help their children be successful students.

Parenting assistance. Schools make information available about a topic in a variety of forms that can be viewed, heard, or read anywhere, any time and in a variety of formats to assist parents in growing their parenting skill set (Epstein & Mavis, 2006).

Respect. Showing honor or esteem.

Responsible. Following through on commitments.

Self awareness. Understanding what you think and why.

Self confidence. Trusting in your own abilities.

Self control. Keeping action and emotion in check.

Standardized test for the assessment of Reading (STAR) Mathematics assessment. Screening, progress-monitoring, and diagnostic assessment— is a reliable, valid, and efficient, computer-adaptive assessment of general math achievement for grades 1–12. STAR Math provides nationally norm-referenced math scores and criterion-referenced evaluations of skill levels. A STAR Math assessment can be completed without teacher assistance in less than 15 minutes and repeated as often as weekly for progress monitoring (see Appendix I).

Standardized test for the assessment of Reading (STAR) Reading assessment.

Screening and progress-monitoring assessment— is a reliable, valid, and efficient, computer-adaptive assessment of general Reading achievement and comprehension for grades 1–12. STAR Reading provides nationally norm-referenced Reading scores and criterion-referenced scores. A STAR Reading assessment can be completed without teacher assistance in about 10 minutes and repeated as often as weekly for progress monitoring (see Appendix H).

Trustworthiness. Being honest.

 Valuing achievement. Taking pride in accomplishments.

 Valuing others. Being able to see the good in everyone.

 Volunteering. The act of supporting school goals and children's learning or development in any way, at any place, at any time, not just during the school day at the school building.

Significance of the Study

A significant amount of research has been conducted in regards to parent involvement and its impact on student achievement. Several types of parent involvement have been examined, including: socioeconomic status, ethnicity, and family structure in regards to how many parents are in the hope and which parents are in the home, parent assistance with homework, parent volunteerism and even parent communication with children in regards to education. The researcher has been unable to find any research that examines the relationship between specific character development activities completed by students and their parents outside of the regular school day and the impact those activities have on student achievement in reading and mathematics.

Studies are needed to evaluate the relationship between participation in specific character development activities by students and their parents and student achievement in reading and

mathematics. The participants in this study were from two similar schools in a rural school district in the Western United States. School 1 (Experimental) served 719 students, including 370 male students and 349 female students, while School 2 (Control) served 807 students, including 374 male students and 372 female students. Due to the nature of the assessment being used in the study, only students in 2nd through 5th grade student achievement data was included in the study. Of the 839 participants included, 410 participants were from School 1 (Experimental) and 429 participants were from School 2 (Control).

This quantitative research study informed one rural school district in the Western United States, as well as others with similar demographics, of the impact parent involvement in the specific area of character development activities done at home have on student achievement in reading and mathematics. The results of this study provide guidance for other schools in the school district in adjusting their own individual parent involvement programs in the area of character development with a parental activity component. In addition, the results of this study provide parents with information on the impact home learning activities have on the academic achievement of their child/children in the areas of reading and mathematics.

Overview of Research Methods

The study's methodological approach was quantitative and followed a causal-comparative design (Sproull, 2002). The students in the study participated in character development activities in the first four months of the 2012/2013 school year. This study aimed to examine the correlation between parent involvement in specific character development activities completed outside of the regular school day, and academic achievement in the areas of reading and mathematics on the STAR Reading and Mathematics assessments (see Appendices H and I). Data were analyzed using independent t-tests as well as factorial ANOVA.

The correlations between the low, medium, and high levels of participation in the specific character development activities and level of academic achievement scores were intended to discover whether a positive relationship existed between the two variables, and if so, whether there was an increased positive relationship between variables at higher levels of participation in the specific character development activities.

The independent variable (IV) of participation in the specific character development activities by parents and students outside of the regular school day were measured by the monthly distribution and consequent return of feedback forms (see Appendix G). Feedback forms were distributed to every student attending School 1 (Experimental) on September 28, 2012, October 31, 2012, November 30, 2012, and January 2, 2013 to take home. Feedback forms were returned voluntarily, collected by teachers and returned to the main office.

Once returned, the researcher coded the feedback forms for low, medium, and high levels of participation in the specific character development activities. Low participation was measured as 0-1 activities completed, medium participation was measured as 2-3 activities, and high participation was measured as 4 or more activities completed. Data was then turned over to a third party to input into an Excel spreadsheet. STAR Reading and Mathematics assessment data was also entered into the Excel spreadsheet for both School 1 (Experimental) and School 2 (Control). The test scores for School 1 (Experimental) were accessible to the researcher, as the researcher was the principal of the school. The test scores for School 2 (Control) were provided to the researcher by the school district central office. Formal research approval was gained for the methods of this study from Northwest Nazarene University's Human Research Review Committee (see Appendix D), and the school district in which the research was conducted (see Appendix C).

Participants at School 1 (Experimental) completed specific character development activities sent home with students to on September 13, 2012, October 1, 2012, November 1, 2012, and December 3, 2012. Participation data on parent/student activity data was collected monthly at School 1 (Experimental) via feedback forms sent home with students on September 28, 2012, October 31, 2012, November 30, 2012, and again on January 2, 2013.

STAR Reading and Mathematics assessment (see Appendices H and I) student achievement data was collected from the control and School 1 (Experimental) on September 7, 2012, and January 14, 2013 for all 2nd through 5th grade students.

Each school was similar in size, ethnic diversity and socioeconomic makeup. The schools serve students from Kindergarten to 5th grade. Both schools used the STAR Reading and Mathematics assessments (see Appendices H and I) to measure student achievement growth. Kindergarten and first grade students were not assessed using the STAR test, so only 2nd through 5th grade students were targeted for this study. A character development curriculum containing similar components was used at both schools. However, the specific character development activity component was implemented at School 1 (Experimental) only.

Second through fifth grade students at both schools were administered a pre-assessment in Reading and in Mathematics using the Standardized Testing and Reporting (STAR) assessment on September 15, 2012 (see Appendices H and I). On September 28, 2012, October 31, 2012, November 30, 2012, and January 2, 2013, School 1 (Experimental) sent home a feedback forms (see Appendix G) for parents to complete with their child and return to the school. The feedback forms provided the school with data on the number of character development activities students completed with their parents at home during each month. Each month the data collected was coded to reflect low, medium and high participation levels and

recorded in an Excel spreadsheet. A low rating was measured as 0-1 activities completed, a medium rating was measured at 2-3 activities completed, and a high rating was measured at 4 or more activities completed. At the end of the four-month period, second through fifth students at both schools were administered the STAR Reading and Mathematics once again.

STAR data from both schools were analyzed to determine whether or not students from School 1 (Experimental) had a higher growth rate as measured by the STAR Reading and Mathematics Assessment when compared to those students from School 2 (Control). Furthermore, by using SPSS, the data was analyzed to determine if there was a difference in growth between grade-levels or gender, and how that data correlated with the activity level of each student.

Chapter II

The Literature Review

Introduction

School success is highly valued in our American society. School success is often associated with lifelong benefits, including higher socio-economic status, well-being, and even health (Brickman, Rhodes, & Oyserman, 2007). If school success is so important, what strategies exist to promote if not insure a student's academic success?

There is no shortage of research that has been conducted on the relationship existing between parental involvement and student achievement in school. In fact there is over 30 years of research has proven beyond any doubt that a positive correlation exists between family involvement in education and student success (Aina, Grace, & Jethro, 2012; Backman, Nokali, & Votruba-Drzal, 2007; Brickman, Rhodes, & Oyserman, 2007; Cripps & Zyromski, 2009; Ferrara, 2009). The majority of professionals working in the realm of education would consider it obvious that pupils whose parents are involved at a higher level in their child's academic endeavors will experience greater success in academics. Parent involvement ranges in definition from volunteering at school, homework help, attending school social events, visiting classrooms, communicating with teachers, guest speaking and even working on school committees and boards (Bergeson & Davidson, 2007; Blackmore & Hutchison, 2010; Epstein & Mavis, 2006; Larocque, Kleiman, & Darling, 2011).

When exploring the knowledge base of parental involvement, the research on the subject is vast. When parents are involved students achieve at higher levels, regardless of their socio-economic status, ethnic background, or even the educational level of their parents (Coleman &

McNeese, 2009). The more a parent gets involved in their child's education, the more positive the outcome for the child. When parents are involved, students demonstrate more positive attitudes and feelings about school (Gordon & Louis, 2009; Baker & Soden, 2001; Epstein, 2001).

Different types of involvement seem to produce a variety of positive gains. In an attempt to achieve long-lasting gains for students, parent involvement must be analyzed and researched to determine what type of involvement will prove to be the most fruitful. All of the parental involvement activities that will be discussed in the following literature review can be broken into two general categories. The first category might be referred to as parent-school involvement within the school day or within the school structure (Apostoleris, Benjet, Grolnick, & Kurowski, 1997; Bates et al., 2004; File, Powell, San Juan, & Son, 2010). This most generally occurs when parents come out in support of school sponsored events and functions. The second category is often referred to as student achievement support (Dumont et al., 2012; Epstein, 2008). It is fairly simple to look at a given type of parent involvement and select in which category it would best fit. What is less obvious and continues to escape educators and researchers alike is determining the type of parent involvement that is most effective in contributing to academic success (Adjei, Boaduo, & Milondzo, 2009; Dixon et al., 2010; Gould, 2011; Simmons, 2008).

Researchers have studied at length the relationships between parent involvement and how it impacts student achievement. Researchers have attempted to tie student achievement to family dynamics and structure, parent structure within the home, ethnicity, whether or not parents were able to assist with homework, and even family history (Baker & Soden, 2001). Other research has been conducted on the relationship between academic achievement and parent perceptions of school and how they communicate those perceptions with their children. When parents discuss

school issues with a positive disposition, children are more likely to have positive feelings about school. When parents have negative feelings about school, children adopt those same feelings (Jeynes, 2010). These studies are only a few that have been completed in an attempt to establish what variables have the greatest impact on student achievement.

There is a growing body of research suggesting the importance of parent involvement in education and its positive impact may be overstated (Mattingly, Prislin, McKenzi, Rodriguez, & Kayzar, 2002). That research suggests that unilateral assumptions made about parental involvement in schools may in fact have the opposite of the desired effect. This research claims parental involvement, as it is traditionally defined, is nothing more than a ritual that marginalizes populations that are not typical middle class consumers of education (Nock, 1988). Parent involvement is typically designed with white, middle-class students in mind. This body of research contends that families that know or can understand the educational system are able to access and activate the resources to give their students a leg up in their educational endeavors. This can be as simple as knowing what questions to ask or knowing what schools have resources available to provide extra services for students (Mattingly, Prislin, McKenzi, Rodriguez, & Kayzar, 2002). These researchers maintain that typical parent involvement practices actually discriminate against children of different backgrounds and do not offer the same opportunities to students who are not white and not middle-class (Doucet, 2011).

Parent-School Involvement within School Sponsored Events and Functions

Parent involvement is most frequently described as parents being involvement in school sponsored events and activities. These activities and events include parent-teacher conferences, school social events and carnivals, family events and even classroom activities (Blackmore & Hutchison, 2010; Radzi, Razak, & Sukor, 2010). Parents are quick to volunteer for Halloween

Carnivals and Field Days when students are in elementary school, and parents come out in droves to support high school booster clubs and athletics. Rarely do parents shy away from helping out with a rummage sale or book fair.

When parents attend school sponsored activities, they are able to glean information about what their child is learning and the environment in which they are learning (Hill & Tyson, 2009; Larocque, Kleiman, & Darling, 2011). This participation contributes positively to the relationship that parents have with their children. It provides opportunities for parents to discuss what is going on at school or assist in completing school required assignments and projects (Bates et al., 2004). When parents are able to physically attend school functions, it creates an important connection between the parent, the school and the student (Epstein & Mavis, 2006; Ferrara, 2009). However, school to home relationships grow even stronger when parents have the opportunity to attend a variety of school sponsored activities so that they gain a fuller and more accurate perspective of the school community (Larocque, Kleiman, & Darling, 2011; Mo & Singh, 2008; Thurston, 2005).

When parents come to school on a regular basis, it impresses on the child that the home and school are connected in a concrete way. When children see their parents at the school and assisting in school activities it solidifies his/her belief that school is important (Blackmore & Hutchison, 2010; Epstein, Improving parent and family involvement in secondary schools, 2008). If school is important to a child's parents, then it will be more important to the child (Grace, Jethro, & Aina, 2012).

El Nokali, Bachman, and Votruba-Drzal (2010) refer to the school and home environments as two separate Microsystems and the interaction between the two is referred to as a Mesosystem. Both Microsystems can function independently but when the two interact, they

can have a powerful impact on a child (Bachman, El Nokali, & Votruba-Drzal, 2010). In this analogy, the school is one Microsystems and the home is another. When the two work together, their impact is amplified. A great deal of research has been conducted on parental involvement in children's education in developed countries such as Japan, Britain, and the United States of America (Behuniak et al., 2010; Coulter-Kern, DePlanty, & Duchane, 2007; Mo & Singh, 2008).

Research conducted in all of these countries has provided evidence that schools with parental involvement programs produce students who are more successful academically than students from schools that do not have parent involvement programs (Radzi, Razak, & Sukor, 2010). None of the parent involvement programs in this particular study were alike, which may lead one to believe that it is not as important what parents are involved in doing at the school, but rather that they are simply involved (Jeynes, 2010; Radzi, Razak, & Sukor, 2010).

A group of researchers in Canada found efforts put forth to connect with the community at large which included the parents of extremely low socio-economic populations also had a positive impact on student achievement in eleven of their most poorly performing elementary schools (Mintrop & Trujillo, 2007). Some researchers suggest we already know all we need to know about how to educate children and how to involve parents (Levpuscek & Zupancic, 2009). Those researchers believe our shortfall has come in the implementation of effective parent involvement plans that are sustainable, rather than in the lack of parent involvement plans (Levpuscek & Zupancic, 2009). Nearly all researchers in this area agree that parent involvement is a synthesis of the interactions that take place between the family, school and community resulting in increased opportunities for achievement for individual students in the system (Baharudin, Hong, Lim, & Zulkefly, 2010; Bergeson & Davidson, 2007; Cripps & Zyromski, 2009; Epstein & Mavis, 2006).

The National Standards for Parent/Family Involvement Programs developed by the National Parent Teacher Association in cooperation with the National Coalition for Parent Involvement in Education cites six standards for parent involvement programs. The six standards developed by these organizations include:

I.   Communicating: Communication between home and school is regular, two-way, and meaningful.

II.   Parenting: Parenting skills are promoted and supported.

III. Student Learning: Parents play an integral role in assisting student learning.

IV.   Volunteering: Parents are welcome in the school, and their support and assistance are sought.

V.   School Decision Making and Advocacy: Parents are full partners in the decisions that affect children and families.

VI.   Collaborating with Community: Community resources are used to strengthen schools, families, and student learning.

If schools were employing these six standards with fidelity, parent involvement would thrive (Bergeson & Davidson, 2007; Epstein & Mavis, 2006). Instead schools apply them haphazardly and inconsistently, resulting in mixed messages being sent to parents who would otherwise be likely to be involved on a much greater scale (Epstein & Sanders, 2006; Epstein & Sheldon, 2002).

There are a number of benefits for schools that emerge from making an effort to involve parents. Schools that choose to work with families have increased teacher morale and are viewed as better schools in nearly every aspect (U.S. Department of Education, 2007). Schools that

involve parents receive greater support from parents and are seen in a more positive light by the communities in which they operate. A school that regularly involves parents and families can overcome circumstances that have historically lowered academic achievement for students, like poverty and divorce (Gould, 2011; Epstein, 2001).

One significant challenge researchers face when nailing down the specifics about parent involvement is whether parent involvement itself is actually what benefits children, or if parents who are more involved in his/her child's education actually possess different characteristics like motivation and cognitive competence, when compared to parents that are less involved. If parents who are more competent have children who are more developmentally advanced, are more involved in schools, it could potentially bias parent involvement research to show there are greater gains for students whose parents are involved than actually exist. Additionally, if students of poorly performing or struggling students were to get involved, research may show a downward trend in the impact on parent involvement (Backman, Nokali, & Votruba-Drzal, 2007).

Skaggs and Bodenhorn (2006) conducted a study comparing schools in five school districts over a four year period. Over the course of the study, the researchers measured several outcomes in schools where character education programs were being implemented or enhanced. All schools showed a noticeable improvement in character-related behavior. Some schools demonstrated decreased drop-out or suspension rates after implementation. However, the study was inconclusive in the area of academic achievement. The researchers were unable to establish a direct relationship between the two.

Parent Involvement in Achievement Support

Educational achievement is influenced greatly by the level of involvement and the expectations that exist in the parent/child relationship as it applies to school (Xu, Kushner, Mudrey-Camino, & Steiner, 2010). Parental involvement in education often comes in the form of a parent's interest in their child's academic and social lives as it pertains to the K-12 school environment (Bates et al., 2004; Jeynes, 2010; Keith & Keith, 1993). This assistance may be helping with a child's homework, communicating with the child about school and having a general overall interest in how their child is doing on the academic and social front (Bates et al., 2004; Bigelow & Zhou, 2001).

Parents who have positive attitudes toward their child's school, teacher and education have a positive impact on the academic performance of their children. Parents who are engaged increase their child's perception of the importance of school and thereby promote a positive school experience (Topor, Keane, Shelton, & Calkins, 2010). Students' motivational beliefs are largely developed at home based on input from parents. These beliefs including self-value and self-efficacy have great impact on how a student performs academically (Kahraman & Sungar, 2013)

It is important to note, parent-involvement is viewed as an important aspect by most teachers (Baharudin, Hong, Lim, & Zulkefly, 2010; Keith & Keith, 1993; Simmons, 2008). Teachers overwhelmingly believe parents play an important part in the education of their children (Howard & Reynolds, 2008; Peterson et al., 2010). Teachers believe parents should support children in doing homework and provide an environment that facilitates studying (Epstein & Sheldon, 2002; Peterson et al., 2010). If one is to review evidence of parent involvement in a student's academic achievement, it is most evident when a parent is sitting

down with a child to assist them with their homework. The idea that parental homework involvement alone can increase academic achievement has not been researched at an appropriate level as of yet to make such a claim (Raty & Kasanen, 2007). However, this does not lessen the pervasive belief that parent involvement in their child's education enhances their educational experience and even his/her academic achievement (Yoder & Lopez, 2013).

Earlier research indicates that parental involvement in homework can have a negative impact on student achievement (Raty & Kasanen, 2007). Dumont et al. (2011) further suggests there are actually negative associations in regards to parents assisting with homework. Researchers maintained when the parent is not well versed in the subject matter, or are unfamiliar with the expectations of the assignment or school; there can be a negative impact on the student.

There is one area where this research has been debunked and that is in the specific area of literacy. When parents take part in activities with their children that are specific to literacy, it has a positive impact and sometimes overcomes the potential negative influences of other socio-economic and cultural factors that would otherwise have a negative impact on academic achievement in regards to literacy (Flessa, Gallagher-Mackay, & Parker, 2010). It has long been the tradition in many homes to sit down and read a book before going to bed. It has also been widely accepted that it is an example of good parenting to read to your child. This research validates that premise (Bonci, Mottran, & McCoy, 2010).

One study conducted on parent involvement as it relates to high school science achievement showed that when parents were involved, students were more likely to seek challenging tasks and then persevere through completing those difficult undertakings. Students who were successful in persisting through difficult tasks in the study possessed skill sets

including: commitment, the ability to break large tasks into manageable steps, attention to detail, and the elimination of distractions. This task completion led to a high level of student satisfaction in regards their task completion and academic achievement (Shumow, Lyutykh, & Schmidt, 2011).

Simmons (2008) analyzed three types of parental behavior as it pertains to academics within the home: 1) parental pressure, 2) parental support, 3) and parental help. In the case of parental pressure, children perceived their parents were not satisfied with how they were doing academically. Pressure had a negative correlation with achievement (Simmons, 2008). In the case of parental support, a slightly positive correlation occurred. When discussing parental help, a slightly positive correlation also emerged (Simmons, 2008). This warrants attention because parents face a significant hardship in striking the balance and the rhythm of applying enough academic pressure, but not too much (Beebe-Frankenberger, Lane, Bocian, Gresham, & MacMillan, 2005).

Adolescents' academic outcomes were affected positively when a relationship was sustained between their home and school environments. Involvement at home, especially parents discussing school activities with students that occurred at school can have a positive impact (DePlanty, Coulter-Kern, & Duchane, 2007). Sustaining a relationship between school and home environments presents a level of difficulty, especially in areas with highly diverse populations of learners (Bakker, Denessen, & Gierveld, 2007; Bower & Griffin, 2011; Smith, Stern, & Shatrova, 2008). However, based on current research, it is an absolutely necessary component to increase student achievement (Epstein, Jansorn, & Williams, 2004). Schools and parents must forge ahead in fostering relationships through less traditional means. It is no longer enough to make parents feel welcome during the school day (Bakker, Denessen, & Gierveld, 2007).

Instead, schools must meet with families away from the physical school environment at times when parents are available. Administrators and teachers should make efforts to meet with families at times and in places where they spend their time, instead of assuming parents will come to the school. Schools must also use multiple forms of communication in order to reach those diverse populations (Jacobs & Kritsonis, 2007; Larocque, Kleiman, & Darling, 2011).

Understanding the culture and communication tendencies of the population of parents that educators are working with will assist educators in making informed decisions about how to best communicate with and involve parents that would otherwise shy away from being involved in their child's academics (Bakker, Denessen, & Gierveld, 2007; Orozco, 2008).

Balanced Parent-School Involvement

There are several types of parental involvement that work as a means of supporting student academic achievement. Communication with parents through a variety of ways, while ensuring the communication is two-way continues to be effective in positively impacting student achievement (Digennaro, Eckert, Fiese, McIntyre, & Wildenger, 2007). When a school provides clear and concise information to parents while attending to individual needs, such as translated documents, email and text messages, and messages sent over social media, it impacts students positively (Epstein & Sanders, 2006; Kazmi, Pervez, & Sajjid, 2011). Schools must train and retrain their faculties and staffs in the importance of working with families and how to do it most effectively (Apostoleris, Benjet, Grolnick, & Kurowski, 1997; Gould, 2011; Lloyd-Smith & Baron, 2010).

The role and importance of the family cannot be undervalued. Families are the primary unit that creates our society and the parents of children are their first teachers. Parental expectations have a direct impact on a child's academic aspirations and motivations (Benner &

Mistry, 2007; Bowen & Lee, 2006; Harvey & Jacobs, 2005). The influence parents have over

children has a direct correlation with how successful they are in school. When schools and

families work together, children not only experience academic success, but often experience a

higher level of success in life in general (Aina, Grace, & Jethro, 2012; Baharudin, Hong, Lim, &

Zulkefly, 2010). Research continues to support the theory that open communication from schools

and a conscious effort to promote parental involvement reinforces the idea that parent

involvement in the education of their children is vital (Bartels & Eskow, 2010; Patel & Stevens,

2010).

      If schools are to increase their levels of parent involvement, schools must first examine

some basic problems that exist. Parent involvement and its various definitions are reflective of

the inequities of society, cultural variances, and economic opportunities along with different

values and expectations of families (Bower & Griffin, 2011; Wiseman, 2010). It is common

sense to make the connection between school, family and community partnerships and how those

connections can have a positive and lasting impact on student achievement (Epstein & Sheldon,

2002; Fabricant, 2011). Analysis of teacher efforts toward improving parent involvement and

two-way communication has proven to have a positive impact on student achievement (McCoach

et al., 2010). Other research suggests the lack of shared understanding between parents, students

and teachers, in regards to parent involvement, negatively impacts student achievement (Msengi,

2007).

      Bergeson et al. (2007) discusses how family involvement in a child's education surpasses

the idea of being a school program. Data for this study was gathered from several schools.

Educators responded to a survey, based on a Likert scale measuring the level at which the

following elements were a part of the staff's overall belief system:

1. The staff believes students learn more through effective family support.

2. The school works with many community organizations to support its students.

3. The school makes a special effort to contact the families of students who are struggling academically.

4. Teachers have frequent contact with their student's parents.

5. The school provides ample information to families about how to help students succeed in school.

6. Many parents are involved as volunteers at the school.

They claim that high-performing schools "intentionally link family involvement to strategies to academic goals" (Bergeson et al., 2007, p. 119). These schools make parent and family involvement a part of their school improvement plans and work to nurture relationships with parents and families. One of the details highlighted in the report is the idea of teachers and administrators bearing the majority of the responsibility in creating opportunities for parents to get involved in a variety of ways (Bergeson et al., 2007). Through school improvement plans, institutional discourse, administrative meetings, and school board meetings as well as at state and federal levels, parent involvement is becoming increasingly linked to policy to positively impact student achievement (Bergeson & Davidson, 2007; Harvard Graduate School of Education, 2006; Pryor & Pryor, 2009). Implementation recommendations made in the report are comprised of three basic ideas. The first is that parents must understand that they need to be involved in their child's education. This requires schools to bear the load of educating parents on this subject of the importance of parent involvement (Bergeson et al., 2007).

Parents must know that they are capable of making a contribution to their child's education. Parents have the opportunity to discover their value as academic guides if they are

provided with opportunities to volunteer and have success when they do (Blackmore & Hutchison, 2010). Schools must be conscious of the strengths and weaknesses of their parents and assign tasks to parents that are appropriate and are not intimidating. Parents must feel welcome at the school (Bergeson & Davidson, 2007). Although unintentional, school institutions are often set up in a way that they are intimidating and even frightening for those that are unaccustomed to being there (Bergeson et al., 2001). The culture of the school is immediately recognizable when someone like a parent enters the front office. The school must be a warm and inviting place to be (Gewirtz, 2008; Blackmore & Hutchison, 2010).

Parents should have a significant role in student learning and school decision making. Parent involvement must be a shared responsibility of teachers, school staff, students and parents. Parent involvement is more than a school program. Parent involvement is a way of doing business. Schools must recognize the central role families play in the education of a child. Schools and parents must forge partnerships to provide opportunities for students to succeed (Dixon et al., 2010; Ferrara, 2009; Gordon & Louis, 2009).

Pre-school programs can also be an important part of the equation in encouraging parent involvement at the earliest stages of a child's education (Domina, 2005). Before parent involvement can occur in a way that is effective, schools must first understand why it is so critical for parents to be involved and commit to changing their practice to embrace this belief (Gordon & Louis, 2009). Family and school cooperation is more than a program and ultimately is a paradigm shift in the way schools have been doing business since public education began. Increasing the level of parent involvement will require every stakeholder to stretch and grow in ways they have not before (Epstein, 2002; Pryor & Pryor, 2009).

Each stakeholder brings a unique perspective to the table when considering parental involvement in a child's education. There is the perspective of the child, the parent, the teacher and the school administrator (Epstein, Jansorn, & Williams, 2004). An administrator and teacher may want parents to be involved, but deciding what that involvement looks like should fit the comfort level of the parent and the child (Waterman & Wellman, 1998). What provides comfort for one parent may not do the same for another parent. Schools must deliver a variety of ways for parents to be involved in the education of their children. The types of parental opportunities must be as diverse as the parents themselves (Valdez, Shewakramani, Goldberg, & Padilla, 2013). Wiseman (2010) discussed how challenging it can be to link parental involvement to the academic aspirations and potential of the individual child.

The frequency of parent-teacher contact and involvement at the early childhood education site is also associated with preschool performance (Apostoleris, Benjet, Grolnick, & Kurowski, 1997; Backman, Nokali, & Votruba-Drzal, 2007). Parents who maintain direct and regular contact with the educational setting experience fewer barriers to involvement and also have children who demonstrate positive engagement with peers, adults, and learning (Baharudin, Hong, Lim, & Zulkefly, 2010; Dixon et al., 2010). When parents are involved in their child's early educational experiences, it builds a foundation for educational relationships as the child progresses through his or her educational career (Brickman, Oyserman, & Rhodes, 2007). It is critical that school personnel commit to creating opportunities for parents to be an active part of their child's educational experience (Bachman, El Nokali, & Votruba-Drzal, 2010; Coulter-Kern, DePlanty, & Duchane, 2007).

Studies have shown that having family routines like checking homework, and having consistent household rules do have a positive impact on student achievement (Epstein & Sanders,

2006; Howard & Reynolds, 2008). However, other forms of less intrusive types of parental involvement actually showed a greater impact in this study. Jeynes (2010) concluded types of expectations parents have for themselves and their children have the highest impact. Some of the expectations he included in his study were parents expressing their expectation that a child will attend college by making sacrifices to save for the child's tuition. Another was general agreement between children and their parents about the child's intent to go to college. This in and of itself had a positive impact on student achievement (Jeynes, 2010).

In a time when society is growing at an incredible rate, technology is changing daily and children are exposed to a constant torrent of information from multiple media sources, it has become critical for parents and schools to utilize the most effective practices to maximize student achievement (Adjei, Boaduo, & Milondzo, 2009; Bartels & Eskow, 2010; Dixon et al., 2013). It is essential for students to accumulate every bit of education possible, before they graduate from high school if they are going to have the tools to compete both at the collegiate and professional levels (Brickman, Rhodes, & Oyserman, 2007; Simmons, 2008).

Challenges for Schools and Parents

Research consistently points to increased parent involvement having a positive impact on student achievement, student attendance, student behavior, and the overall satisfaction students have in school (Behniak et al., 2010; Bigelow & Zhou, 2001). Unfortunately, the majority of teacher preparation programs do not teach prospective teachers how to effectively involve parents in their classrooms and in the education of their children (Zellman & Waterman, 1998). Due to the variety and sheer number of variables that exist surrounding parental involvement, many research studies have been inconclusive due to the mixed results they have produced

(Domina, 2005). This is why it has become critical for schools to design programs for parent

involvement that are deliberate and purposeful (Gould, 2010).

Barriers that prevent parents, especially barriers that impede minority groups must be

addressed in order to provide equitable access to parental involvement opportunities (Williams &

Sanchez, 2013). Data should be gathered on parent involvement, just like it is on other aspects of

education (Ferrara, 2009; Flessa, Gallagher-Mackay, & Parker, 2010). Once data is gathered, it

should be analyzed and used to guide future practices, just like using academic results to guide

instructional decisions (Ferrara, 2009). It is vital that colleges begin to provide training for pre-

service and current teachers to help broaden their often limited vision of parent involvement

(Domina, 2005). There has been a historical ineptness in preparing teachers and administrators to

work with parents in an effective and efficient manner (Epstein, Williams, & Jansorn, 2004).

However, there is a growing body of research that points at parent involvement as having a

positive impact on not only the academic achievements of their child, but on the effectiveness of

the classroom teacher (Bartels & Eskow, 2010; Boaduo, Milondzo, & Adjei, 2009).

Nevertheless, initial parent involvement in the education of a child depends largely on a

parent's own experience in the educational system. Parents who had a positive experience in

their education are far more likely to become involved in the education of their children

(Wamala, Kizito, & Makerere, 2013).

As educators, researchers and policymakers seek to raise student achievement through

implementing programs addressing not only academic needs, but behavior needs, an increasing

amount of evidence indicates there is a relationship between the two. However, with the sheer

number of variables that exist in the research, it has become increasingly apparent; behaviors do

not exist in isolation of one another (Snyder, et al., 2010). To the contrary, there is a growing

body of research suggesting programs implemented to address academic achievement and behavior must be all encompassing, and not implemented in isolation (Skaggs & Bodenhorn, 2006).

Bartels (2010) conducted a study involving current service teachers participating in a series of three graduate level classes specifically geared at designed to investigate the research behind and the implementation of parent involvement strategies. The purpose of the classes was to enhance school-based professionals' attitudes toward family and professional collaboration. The study was completed in a group of schools identified as a high-needs school. The high needs criteria was met by the school having greater than 25% of the students attending receiving free or reduced lunch. Upon completion of the courses, instructors assisted educators in the actual implementation of the techniques they had studied in the courses. The qualitative analysis demonstrated a significant change in teacher beliefs about the positive aspects of parent involvement and had specific strategies that they were planning to implement immediately in their classrooms and schools (Bartels & Eskow, 2010).

Most parents have a desire to learn about parenting and want to become the best parents that they can (Ferrara, 2009; Swick, et al., 1997). If educators can assist parents in developing academic support skills early, it has a lasting positive impact throughout the academic careers of their children (Ferrara, 2009; Swick, et al., 1997). Without early academic support, parents may find it challenging to intervene or become involved as students move on to middle and upper grades. Adolescence can prove a difficult time to begin parental involvement strategies, as academic habits may already be developed. This can make it particularly challenging to maintain academic relationships for parents (Hill & Tyson, 2009; Levpuscek & Zupancic, 2009). As students move through the education system, they encounter daunting academic challenges

(Cripps & Zyromski, 2009). When students do not have a network of support at school and at home, dropping out becomes a far more plausible option for struggling students (Miners, 2008). Parents in cooperation with teachers, schools and students play a distinctly unique and important role in the educational careers of their children, from pre-school to college (Simmons, 2008).

Lloyd-Smith and Brown (2010) conducted research involving school administrators in South Dakota. School administrators were surveyed to gather data on their perceptions of parent involvement at their specific level which ranged from eight to tenth grade (Lloyd-Smith & Brown, 2010). The study looked at four specific areas: communication, collaboration, competency and other external factors. The outcomes demonstrated the administrators surveyed did not have strong feelings for or against parent involvement (Lloyd-Smith & Brown, 2010).

Results illustrated most of the administrators believed there should be increased communication between the teachers and the parents of their adolescent students. Lloyd-Smith and Brown (2010) went on to conclude that administrators who held degrees higher than that of a Master's degree had stronger tendencies to agree with the importance of parent involvement. This lends itself to the suggestion that not only do teachers receive inadequate training about the importance of parent involvement, but administrators receive inadequate training as well (Lloyd-Smith & Brown, 2010).

The importance of the school and home connection does not diminish as students get older. In fact, the quality of parent relationships middle school students behaviorally, cognitively, and emotionally has shown a positive impact on academic achievement (Mo & Singh, 2008). This confirms the importance of parent involvement in the education of their children. Due to the known importance of parental involvement, practitioners continue to seek new and innovative ways to maintain and increase levels of parent involvement, in order to boost student

achievement (Hoover-Dempsey & Sandler, 2005; Trumbull, Rothstein-Fisch, & Hernandez, 2003). Researchers continue to study ways to promote achievement across grade-levels from elementary all the way to the collegiate level. One of the largest pieces of the achievement puzzle is that of student, school and family cooperation and relationships (Cooper, 2007; Eccles, 2007; Jeynes, 2007).

There is a lack of research conducted at the secondary level of education as it pertains to parent involvement and academic achievement (Epstein, Improving parent and family involvement in secondary schools, 2008). Leon (2003) suggests that this is an indicator that the types of involvement discussed in this literature review occur at a much lower rate in the secondary environment when compared to the primary grades. He goes on to pronounce that striking a balance between an older students' developing independence and an appropriate level of parent involvement can be difficult (Leon, 2003). Shumway (2009) concluded there are many reasons that parental involvement declines at the secondary level. High schools are not structured to support high levels of parent involvement, there are usually a much greater number of students that each high school teacher is working with on a daily basis and the curriculum at the secondary level becomes more difficult and may intimidate or deter some parents from becoming involved in homework (Shumway, 2009).

Secondary schools can provide a great deal of support to parents by structuring procedures and policies to reinforce and encourage parent involvement rather than discourage it. Mo and Singh (2008) gathered data from 1,970 seventh and eighth grade students. Academic performance was assessed by using school grades in four subject areas: math, science, history and language arts or social studies. For the school engagement portion of their study, they used three types of engagement: 1) behavioral, 2) emotional, and 3) cognitive. Mo and Singh (2008)

concluded parent relationships and involvement have significant effects on students' school performance. Mo and Singh (2008) state, "path coefficients in the study were positive, highly involved parents motivate their children to higher engagement in their academic work, and in turn, students have higher achievement." (p. 7). This statement solidifies the researchers' theory of parent involvement in all three area proves beneficial to the student.

Parents encounter other roadblocks when becoming involved in the academic careers of their children. These parents are often identified inappropriately because they are working-class, minority, immigrant or single parents, and are labeled as failing to be good parents because of their inability to support their children in their learning as evidenced in their lack of participation in schools (Blackmore & Hutchison, 2010). Children who come from single-parent homes have an overall lower average educational outcome when compared with children who come from a two parent home (Apostoleris, Benjet, Grolnick, & Kurowski, 1997; Patel & Stevens, 2010). There are even differences in achievement levels between students from single parent homes depending on whether or not their custodial parent is their father or their mother (Updegraff, Delgado, & Wheeler, 2009). This has an even higher impact when the child in the single-parent home is a pre-school student (Nock, 1988).

A complete family structure with both parents being in the home and participating in their respective roles every day assists a child in developing to their fullest potential. However, Baharudin, Hong, Lim, and Zulkefly (2010) suggest that given additional and intensive support, children from single parent families can do just as well academically as their peers that come from two parent homes. The study did not outline strategies for supplying more intensive support.

Parent involvement, especially when it applies to low socio-economic status youth, can mitigate some but not all of the achievement inequities that exist between that population and students from higher socio-economic backgrounds (Bakker, Denessen, & Gierveld, 2007; Keith & Keith, 1993; Orozco, 2008). Relationships between a parent's educational levels and their child's school performance are predictors of a child's ability to achieve academically (Davis-Kean & Sexton, 2009). However, as stated previously, negative impact can be decreased substantially through increased family, student and school cooperation.

Many policies that advocate parental involvement fail to recognize that teachers are being positioned as professionals in relation to parents, and therefore a step above (Blackmore & Hutchison, 2010). This structure can make it intimidating for some parents to become involved in school, if they had a less than positive school experience, or view themselves as not having the ability to make a positive contribution to their student or school (Blackmore & Hutchison, 2010). In addition to race and ethnicity, considerations must be made for unique issues that impede traditional parent involvement (Patel & Stevens, 2010).

Poverty can have an immense effect on whether or not a parent is able to be involved in their child's academic or school activities. Bower and Griffin (2011) conducted a study in an impoverished elementary school. Their goal was to increase students' and parents' awareness of post-secondary opportunities. This study took place over the course of one semester, but was part of a larger study that took three years to complete. Data was collected through observations, interviews, and document analysis. In addition, field notes were kept in great detail. Bower and Griffin (2011) note, "Work schedules, lack of transportation, and lack of child care may prevent families from attending school events or volunteering" (p. 79). Schools traditionally operate between the hours of eight in the morning and three in the afternoon. For parents who work

during those hours and have jobs that do not allow for flexibility in scheduling or time off for participating in a child's school activities, attending school meetings and events presents a significant hardship.

School and home have been traditionally thought of as separate entities. However, with the complexity of our communities growing each day, cooperation between the two is essential to student success. School and home are institutions which must work together in providing the very best education for students (Radzi, Razak, & Sukor, 2010). This type of cooperation requires changes in practice for parents and for educators. Parents may have to make personal sacrifices in order to attend an important school meeting, or make time to speak with a teacher over the telephone. Educators may need to hold meetings and school sponsored activities outside of the traditional hours of the school day or in locations other than the school building (Radzi, Razak, & Sukor, 2010; Smith, Stern, & Shatrova, 2008).

Theoretical Framework

The theoretical framework of this study was grounded in the theories of Epstein (2001). Epstein's theory of overlapping spheres of influence extends and amalgamates sociological perspectives on social organization and interactions. Epstein (2002) pioneered a framework which includes six specific types of involvement in the late 1980's. It is from Epstein's research the subject of this dissertation emerged.

Epstein conducted over three decades of research on parental involvement, family engagement, and community partnerships. She is the founder and the director of the National Network of Partnership Schools at Johns Hopkins University. Her research encompasses all levels of parental involvement program development. It includes studies in the elementary, middle, and high school level, as well as research focused on entire school districts. Studies

conducted contributed to the body of research including improving student achievement, student attendance, increasing credits students earn and even how to negate the impact of high poverty rates with parent involvement programs.

In a study conducted in 2004 and spanning until 2007, Epstein demonstrated a Title I school could organize an entire school change model effectively. She organized the school into five action teams for Reading, Mathematics, writing, behavior, and effective partnerships. Longitudinal data gathered showed by reorganizing the school in this way, the school improved its state achievement test scores in Reading, Mathematics and writing when compared to similar schools, despite the fact those schools were located in much more affluent areas. The school also improved in the area of student behavior and increased the number of families involved in students' educational endeavors both at school and at home. This study documented the importance of a paradigm shift in how the educators in the study thought about school, as well as the important elements that had to be sustained over time (Epstein, 2008).

Epstein's (2002) research encompasses six types of involvement in regards to parents and families. Parenting in and of itself has an impact on a student's level of success in school. Communicating with teachers and have a working knowledge of what is taking place over the course of a typical school day benefits a child. Volunteering has a positive impact in that, students who see their parents at school value school at higher levels than students who are unable to volunteer. Learning at home, decision making and collaborating with community are all ways in which parents can become involved with their child's education. (Epstein & Mavis, 2006). All six of the areas of involvement warrant and many have their own bodies of research. (Bower & Griffin, 2011; Dumont et al., 2012; Gordon & Louis, 2009; Jacobs & Kritsonis, 2007; Swick et al., 1997; Thurston, 2005)

All six of Epstein's components have shown differing impacts on student achievement (Epstein, 2002). One component, by Epstein's own account has a greater impact on student achievement than the other five components. That component is learning at home (Epstein, 2002). Epstein (2001) analyzes learning at home from the perspective of students, parents and educators. A school that is implementing effective practices in the area of supporting learning at home provides information to families on the skills that are required for students to learn at their specific grade level (Epstein & Mavis, 2006; Thurston, 2005).

Schools providing information on homework policies and instruction on how parents can monitor and discuss their child's schoolwork at home support parents in being an active contributor to their child's education. (Jacobs & Kritsonis, 2007; Swick et al., 1997) Providing support and information on how to assist students in improving skills on various types of classroom and school-wide assessments, as well as calendars for parents to use to discuss and interact with their child about topics they are learning about in school are incredibly helpful. Documents like these construct opportunities for parent and child discussions regarding school to take place (Epstein & Sheldon, 2002). A school that is providing adequate support in the area of learning at home provides activities for parents and children to do at home. Family math, science, and Reading nights are held at schools that support learning at home, and summer learning packets are provided to parents (Epstein, Jansorn, & William, 2004). Schools that support learning at home encourage parents to participate in goal setting with their children each year and in planning ahead for college or work (Bower & Griffin, 2011; Epstein & Mavis, 2006).

Epstein (2002) stated, "The way schools care about the children they serve is reflected in the way they care about the families of those children." (p. 7). If schools only recognize children as students and not part of a greater whole which is their family they will miss out on the

opportunity to build powerful partnerships with families that will mutually benefit the child, the family and the school (Epstein & Mavis, 2006; Gordon & Louis, 2009). If schools work collaboratively with families, they maximize the opportunities available for the children who are their students.

In research studies where this component has been implemented in practice, students experience an increased positive attitude toward schoolwork and have a better self-concept of their ability to learn (Dumont et al., 2012; Epstein & Mavis, 2006; Thurston, 2005). Parent involvement assists parents in having a better understanding of how to support, encourage and assist their children, as well as have a greater appreciation for teachers and teaching techniques. Teachers gain respect for family time and gain an understanding of the families from which their students come from when given the opportunity to interact with parents (Epstein, Improving parent and family involvement in secondary schools, 2008; Gordon & Louis, 2009; Thurston, 2005).

Conclusion

The education of today's students is not as simple as it used to be. The old adage, "It takes a village to raise a child," has never been truer than it is today. The only way to guarantee that each and every child reaches his/her greatest potential is through a complex system of cooperation that involves teachers, parents, family members, administrators, community members and most of all children (Bakker, Denessen, & Gierveld, 2007; Epstein, Improving parent and family involvement in secondary schools, 2008; Orozco, 2008). This is true for children of all ability levels and ages, as well as children from all different socio-economic and ethnic backgrounds (Patel & Stevens, 2010; Smith, Stern, & Shatrova, 2008). The education of

today's children is everyone's responsibility, because whether or not each and every child becomes a productive member of our society is everyone's concern (Bergeson et al., 2007). The primary responsibility for nurturing and forging parental relationships as it relates to schools belongs to the professionals in education (Baron & Lloyd-Smith, 2010).

Teachers must employ practices that encourage and even require parents to get involved (Dusek, Lopoo, Smyth, & Rutchick, 2009). Administrators must provide opportunities for parents to feel that they are a valued team member when it comes to their child's education (Baron & Lloyd-Smith, 2010). Schools must be warm, welcoming places to be, by cultivating a positive and healthy school culture that is safe for students and parents (Brickman, Rhodes, & Oyserman, 2007). All of this can be accomplished by finding the common ground that is the educational interests of each and every student that attends our public schools (Epstein, 2002).

This study determined the impact of parent involvement defined as specific character development activities completed by parents and students outside of the regular school day on academic achievement in reading and mathematics as measured by the STAR Reading and Mathematics Assessment (see Appendices H and I). The review of the literature produced indicators that suggest students from financially affluent and more highly educated families may influence the participation levels of parents in all types of school activities (Apostoleris, Benjet, Grolnick, & Kurowski, 1997; Bower & Griffin, 2011). Considering indicators found in the literature review, the purpose of this study was to investigate the impact of parental participation in specific character development activities completed with his/her child outside of the regular school day and its impact on Reading and math achievement.

Chapter III

Design and Methodology

Introduction

Given the magnitude of influence and importance parents have in the lives of their children, research demonstrates parental participation in a child's learning is equally as monumental. This research design was used to answer the research questions. The research questions posed in this study were as follows:

Research Hypothesis. Students participating in a character education curriculum with specific parent activity components will demonstrate greater academic growth in reading and mathematics achievement compared to students who participate in a character education curriculum without a parent activity component, as measured by the STAR Reading assessment.

Null Hypothesis. Students participating in a character education curriculum with specific parent activity components will not demonstrate greater academic growth in reading and mathematics achievement compared to students who participate in a character education curriculum without a parent activity component, as measured by the STAR Reading assessment.

The study was conducted in two similar elementary schools, in a rural school district in the Western United States during the first four months (September, October, November, and December) of the 2012/2013 school year. School 1(Experimental) served 719 students, including 370 male students and 349 female students, while School 2 (Control) served 807 students, including 374 male students and 372 female students. Due to the nature of the assessment, only students in 2nd through 5th grade were included in the study. Of the 839 participants included in the study, 410 attended the School 1 (Experimental) and 429 participants were attended School 2

(Control). The sample used for this study was a convenience sample as the researcher was employed in the school district as an elementary school principal and had access to student achievement data through the school district.

This quantitative research study measured the impact parent involvement in the form of specific character development activities completed by a parent and child outside of the regular school day has on academic achievement in reading and mathematics as measured by the STAR Reading and Mathematics assessments (see Appendices H and I).

Research Design

The researcher selected a quantitative research design for this study, as it was the most appropriate choice for the research conducted. Quantitative designs are most commonly used when a hypothesis is to be proved or disproved. The hypothesis in a quantitative study must be able to be proved or disproved by mathematical or statistical means, and is the foundation upon which the experiment is designed. Additionally, a control group should be included whenever possible. The soundest quantitative designs manipulate only one or two variables at a time; otherwise the statistical analysis can become open to criticism (Tanner, 2011).

The quantitative design constructed for this study analyzed student achievement growth data from the STAR Reading and Mathematics assessments (see Appendices H and I) administered at two rural elementary schools in the Western United States. Both schools had a character development curriculum which contained similar components. However, School 1 (Experimental) added an additional component in the way of the specific character development activities completed by the parent and student at home, outside of the regular school day. The learning at home component was comprised of suggested character development activities for students to complete with their parents. These activities were sent home with students of School

1 (Experimental) on a monthly basis and participation data in those activities was collected monthly in the months of September, 2012, October, 2012, November, 2012, and December, 2012.

The study investigated the relationship between one specific type of parent involvement, defined as specific character development activities completed by parents and children outside of the regular school day, and student achievement in reading and mathematics as measured by the STAR Reading and Mathematics assessments (see Appendices H and I). The most appropriate research design for this study was a quantitative approach. Bordens and Abbott (2008), state that a quantitative theory encompasses defining the relationship between variables and between constants in a group of mathematical formulas. These conclusions support the researcher's decision to us a quantitative approach in this study. The students in the study participated in the character development activities during the first four months (September, October, November, and December) of the 2012/2013 school year. This study used the STAR Reading and Mathematics assessments (see Appendices H and I) at two similar elementary schools in the Western United States. There was an interest in improvement of one specific type of parent involvement in specific character development activities completed by the students and parents outside of the regular school day.

In this study, the researcher was looking to identify the relationship between the independent variable (IV) which was participation in the character development activities at School 1 (Experimental) by parents and students, and the dependent variable (DV) which was the academic achievement growth in reading and mathematics. This type of relationship is known as a causal relationship. A causal relationship is what occurs when on variable influences another (Bordens & Abbott, 2008). In addition to the causal relationship, the researcher analyzed

the data gathered to determine whether or not correlations between variables an if a relationship existed between variables.

In order to inform parents about the study, the researcher held an initial informational meeting at School 1 (Experimental) on September 12, 2012 at 7:00 PM. The following day, the researcher held an additional meeting on September 13, 2012 and 1:00 PM. On September 13, 2012 and again on September 17, 2012 information about the study was sent out over the school's electronic phone, text, and e-mail service, as well as posted to the school Face book page, and school website. The meetings and communications that were sent out informed parents about the research during the coming months. The meetings and messages also informed them of their right to not be included in the data collection. Parents were encouraged to participate if they believed there was value in the research that was being done. Following the initial meetings and messages, a letter went out to all families explain the research that would be taking place at School 1 (Experimental) and parents were encouraged to ask questions and voice concerns. An informed consent was received from every child attending School 1 (Experimental). Only 6% of the parents opted out of having their student's data used for the study, leaving 94% of student data available for the researcher to use for analysis.

School 2 (Control) serves preschool through fifth grade students, while School 1 (Experimental) serves only kindergarten through fifth grade students. This difference in the school did not impact the study, as preschool, kindergarten and first grade students are not assessed using the STAR Reading and Mathematics assessments (see Appendices H and I) in this school district. Second through fifth grade students at both schools were historically and for the purpose of this study assessed using the STAR Reading and Mathematics Assessment (see Appendices H and I). Preschool, kindergarten and first grade students were excluded from the

study as they do not participate in the STAR Reading and Mathematics Assessment (see Appendices H and I).

Both the experimental and control schools utilize similar character development programs taught by teachers and counselors cooperatively. Both curriculums focus on pillars of character, have scripted lessons for teachers and counselors to teach, and use role-playing as a strategy for teaching the skills taught in the program. For the purpose of this study, students School 1 (Experimental) were asked to participate in an additional component of the character development curriculum. This component was specific character development activities completed by parents and students together, outside of the regular school day. The students attending School 2 (Control) will not participate in the additional component of the character development program, thereby creating the opportunity for the researcher to compare the experimental group to the control group and determine whether or not a relationship exists between student achievement in reading and mathematics as measured by the STAR Reading and Mathematics Assessment (see Appendices H and I) and specific character development activities completed by students and their parents outside of the regular school day.

Each month, teachers and counselors at both schools taught a unique character trait. For instance, during the month of September 2012, the character trait taught was citizenship. Teachers constructed activities to teach and practice citizenship in the classroom and other areas of the school. In the experimental group, students were provided with an at activity sheet (see Appendix F) to take home on September 13, 2012 students were given an activity sheet to take home that had five suggested activities they could complete with their parents in order to practice the month's character trait. Parents and students were encouraged to develop original activities as

well. This procedure was repeated on October 1, 2012, November 1, 2012, and December 12, 2012.

Reminders were sent out monthly over the school's electronic phone, email and message system, and social media to parents of School 1 (Experimental) students regarding what activities they could be working on with their students at home. In addition to these reminders, students were encouraged by their teachers to share what they were learning about the pillars of character with their parents and others in their home.

At the end of each month, a feedback form (see Appendix G) was sent home with the students from the School 1 (Experimental). The feedback form allowed parents to report the number of activities they had completed with their child, as well as provided them an area to share feedback about the activities they completed with their child. Feedback forms were sent home with students on September 28, 2012, October 31, 2012, November 30, 2012, and January 2, 2013. Frequent emails were sent out, as well as electronic messages including telephone calls, and text messages. These messages were sent three days after the feed-back forms were sent home. The intent of the electronic messages was to encourage the majority of the feedback forms to be returned before the fifth day of the following month. In September, 68% of feedback forms were returned, in October 62% were returned, in November, 59% were returned, and in December 72% of feedback forms were returned. Teachers reminded students to return their feedback forms and students were positively praised when forms were returned.

When the feedback forms were returned to the student's teacher, the teacher turned them in to the office, where they were gathered by the researcher, sorted. The researcher then coded each feedback-form for high, medium and low participation. Feed-back forms with 0-1 recorded activities were coded as low; 2-3 activities were coded as medium; and 4 or more activities will

were coded as high. Once coded by the researcher, the feedback forms were turned over to a data entry person hired by the researcher as in impartial third party, and the data was entered into an excel spreadsheet designed by the researcher. Once entered, the data was checked for accuracy by the researcher before proceeding to the analysis phase of the research.

The research is intended to find whether time spent by parents and children participating in specific learning at home activities with a character development focus would positively impact academic achievement in reading and mathematics. Academic growth in reading and mathematics was to be measured using the STAR Reading and Mathematics assessment (see Appendices H and I). This assessment was administered to School 1 (Experimental) and the School 2 (Control). The STAR assessments were administered at the beginning of September, prior to the introduction of any character development curriculum and then again in January, after four months of data collection.

Participants

This study was conducted in two similar elementary schools, in a rural school district in the Western United States during the first four months (September, October, November, and December) of the 2012/2013 school year. During the 2012/2013 school year School 1 (Experimental) served 719 students, including 370 male and 349 female students, while School 2 (Control) served 807 students, including 374 male students and 372 female students. Due to the nature of the assessment only students in 2nd through 5th grade were included in the study. Of the 839 participants included in the study, 410 attended School 1 (Experimental) and 429 attended School 2 (Control). The sample used for this study was a convenience sample as the researcher was employed in the school district as an elementary school principal and had access to student achievement data through the school district. Each school in the study employs one school

administrator, 30-32 regular classroom teachers, two special education teachers, one part-time counselor, one part-time physical education teacher, one behaviorist, one custodian, and two school secretaries.

Both schools in the study have a poverty rate between 40% and 45%, which translates to approximately 50% of the student population receiving free or reduced lunch. Both schools have student populations that are 95% white, while the other 5% of students are of Hispanic, Latino or African American dissent. The demographics of each school are not identical, but for the purposes of this study are very similar and provided two samples that could be compared to one another very effectively, without having to compensate for radical differences.

Because the researcher is the principal at one of the elementary schools in the study, the amount of bias which may have interfered with the internal validity of the study was decreased by involving an impartial third party to enter the data collected into an Excel spreadsheet document. In addition, the researcher reported this data in a highly objective manner, as not to taint the outcome of the study.

Data Collection

The researcher had school district approval to conduct the research (see Appendix C). In addition permission was granted through Northwest Nazarene University's Human Research Review Committee (HRRC) to conduct the research, reference #6062012 (see Appendix D). All permissions were acquired prior to any data collection taking place. The researcher used independent sample *t*-tests as well as two separate ANOVAs with descriptive statistics to assess the differences between the academic growth as measured by the STAR Reading and Mathematics assessments (see Appendices H and I) at both School 1 (Experimental) and School 2 (Control).

Data was collected from two different rural elementary schools in the Western United States. The experimental and School 2 (Control) s were similar in size, ethnic diversity, and had a similar socioeconomic makeup. School 1 (Experimental) serves students from kindergarten through fifth grade, and School 2 (Control) serves students from preschool to fifth grade. The experimental and control schools both teach a similar character development curriculum to their students with similar components. For the purpose of this study, School 1 (Experimental) employed the additional component of the specific character development activities completed by parents and children outside of the regular school day. Home activities were aligned with the character development curriculum that was being taught at. School 1 (Experimental) School 2 (Control) implemented the character development curriculum as it has historically done, thus, not including a specific character development activities completed at home by parents and students outside of the regular school day.

Each month, specific character development activities to be completed by parents and students outside of the regular school day were sent home with students from. School 1 (Experimental) The activities (see Appendix F) were sent home on September 12, 2012, October 1, 2012, November 1, 2012 and December 3, 2012. The activities sent home were based on the character trait that students were learning about at school during the month in which the activities were sent home. At the end of the month, teachers from School 1 (Experimental) collected the raw data monthly in the form of a parent feedback form (see Appendix G). Feedback forms were sent home to be completed by parents on September 28, 2012, October 31, 2012, November 30, 2012, and January 2, 2012. Electronic messages were sent out to encourage parents to return the feedback forms to the school with their children, and students were encouraged to return the feedback forms to by their teachers. Teachers positively praised

students for returning their feedback forms to the school. Once the feedback forms were collected by the teacher they were turned into the school's main office, where the researcher collected the forms, sorted, and coded them for low, medium, and high levels of participation in the activities. Once sorted and coded, the feedback forms were passed on to an impartial third party hired by the researcher to input the activity data into an Excel spreadsheet which was designed by the researcher. This spreadsheet was then returned to the researcher so that data could be analyzed in SPSS 20.0 (SPSS, 2013).

Analytical Methods

For this study, data from two elementary schools, both from a rural school district in the Western United States were collected and analyzed to illustrate the relationship between the independent and dependent variables using independent *t*-tests, and two separate ANOVAs. The independent variable (IV) of specific character development activities completed by parents and students of School 1 (Experimental) outside of the school day was measured by the data collected from the feedback forms students returned to their teachers on a monthly basis, in the months of September, October, November and December of the 2012/2013 school year. The dependent variable (DV) growth in reading and mathematics achievement as measured by the STAR Reading and Mathematics assessments (see Appendices H and I) was measured by the analysis of academic growth. Growth occurred between the first STAR Reading and Mathematics assessments (see Appendices H and I) that was administered to students from both School 1 (Experimental) and School 2 (Control) on September 7, 2012. The second STAR Reading and Mathematics assessments (see Appendices H and I) were administered to students at both School 2 (Experimental) and School 2 (Control) on January 14, 2013.

Students at both elementary schools were administered the STAR Reading and Mathematics assessments (see Appendices H and I) on September 7, 2012. The STAR Reading and Mathematics assessments (see Appendices H and I) have historically been administered to students in this district for the purpose of screening students to determine math and Reading achievement levels and placement. In previous years, the STAR Reading and Mathematics assessments (see Appendices H and I) have been administered on the first or second day of each trimester of the school year. For the purposes of this study, the assessments were given at their regular times and intervals. Students were familiar with the procedure for taking this assessment and therefore it yielded reliable results as a measure of instructional levels, independent levels, instructional levels and grade-level equivalencies for students that took the test. In addition, once the assessment has been completed by a student a minimum of two times, STAR Reading and Mathematics assessments (see Appendices H and I) have an online component available for teachers and school administrators to use to measure academic growth over time in reading and mathematics.

The reliability of the STAR assessments remained the same between the two administrations of the assessment due to the relatively short window of time in which the two assessments were administered. The National Center on Student Progress Monitoring (NCSPM) has found the STAR assessments to be technically sound (National center on Student Progress Monitoring, 2013). The Southwest Educational Development Laboratory (SEDL) has determined that the STAR assessments are criterion-referenced and norm-referenced assessments, and are a reliable source of data to measure a student's academic abilities in reading and mathematics (Southwest Educational Development Laboratory, 2013).

Although the STAR Reading and Mathematics assessments (see Appendices H and I) are broadly accepted as reliable, the STAR assessments are not without their critics. The Illinois State Board of Education no longer accepts STAR scores to indicate Reading levels to apply for their Reading Improvement Block Grant. Illinois does however, still allows STAR to be used for progress monitoring and instruction (Illinois State Board of Education, 2013). Following the Illinois decision, the Southwest educational Development Laboratory (SEDL) re-categorized the STAR Reading assessment as a measure of Reading comprehension (Southwest Educational Development Laboratory, 2013).

Data gathered from the STAR assessments was analyzed in SPSS statistical software, using independent *t*-tests, a dependent *t*-test and two separate ANOVAs (SPSS, 2013). Data gathered from these statistical tests demonstrated the relationship between parent and student participation in specific character development activities completed outside of the school day and academic growth in reading and mathematics over time as measured by the STAR Reading and Mathematics assessments (see Appendices H and I). In addition to the independent variable (IV) of participation in the character development activities, other independent variables (IVs) included: grade levels (2, 3, 4 and 5, and gender (M/F). The dependent *t*-tests were conducted determine whether or not the independent variables (IVs) had different levels of impact within the same school. The same tests were repeated for, School 2 (Control) minus the independent variable (IV) of level of participation in the specific character development activities completed by parents and students with one another outside of the regular school day.

At the end of the four-month period, the researcher reported demographic data of the participants in the study including grade-level and gender, sample-size of both the experimental and control groups, frequency data for the return of feedback forms broken down by grade-level

and gender, participation levels in the specific character development activities broken down by grade-level and gender, average academic growth as measured by the STAR Reading and Mathematics assessments broken down by grade-level and gender within the experimental and control schools, and between the experimental and control schools.

Limitations

Some of the assumptions made by the researcher were that for the most part, students who began the school year at both the experimental and control schools would remain at those schools for the duration of the study which began in September of 2012 and ended in the first week of January of 2013. This assumption proved true with the exception of four students who moved away from School 1 (Experimental), and seven students leaving School 2 (Control). All incomplete data was omitted from the data set analyzed for the study.

Return rate of feedback forms was inconsistent even with regular reminders to parents and students. In spite of this limitation, participation data from School 1 (Experimental) was returned at a high enough level to conduct the research. Participation in the data collection portion of the research occurred between a 59% and 72% over the course of the four-month study.

Bias that could have impacted the internal validity of the study was decreased by the researcher hiring an impartial third party to complete the data entry portion of the study. Once data was entered, student names were removed from the Excel spreadsheet so the data could be cut and pasted into SPSS (SPSS, 2013). From that point forward, students were identified by school attended, grade-level and gender only.

The results of this study are collected solely from participants in two elementary schools in a rural school district in the Western United States. Additional research may need to be

conducted if the results of the study were going to be generalized to schools in other areas. Only

students in the 2nd through 5th grade participate in the STAR Reading and Mathematics

Assessment, therefore the sample of students for the study was relatively small.

Neither of the schools participating in the study have a significantly high poverty rate, when

compared to other schools in the district. Although the populations of the two schools are

somewhat diverse, the findings of this study may not be appropriately generalized to schools

with a significantly higher level of students who have a lower socioeconomic status.

Protection of Human Subjects and Approval

As the primary researcher, consent from the school district was granted. (see Appendix

C) Ethical principles of autonomy, confidentiality, and justice were followed (see Appendices C

and D). Creswell (2007) notes that regardless of the approach to inquiry, permission needs to be

sought from a human subjects review board. Green (2002) also suggests the protection for

human subjects is of vital importance to the world of research. This research was successfully

approved by Northwest Nazarene University's Human Research Review Committee (HRRC),

reference #6062012. In addition to institutional consent, parents of students attending School 1

(Experimental) were provided with informed consent and provided the opportunity to opt in or

out of the study (see Appendix A). Informed consent forms were returned at a rate of 100% from

students at School 1 (Experimental).

Two extemporaneous variables were present during the study, as is often the case in

educational research. The school district where the study took place adopted a new elementary

mathematics curriculum during the time the study took place. Both schools in the study

implemented the curriculum during the data gathering window. Additionally, at School 1

(Experimental) a school wide positive behavior intervention support system (SWPBIS) was

implemented during the study period.

Chapter IV

Results

Introduction

The outcome of this quantitative research study informed one rural school district in the Western United States as well as others with similar demographics of the impact parent involvement on student achievement. For the purposes of this study, parent involvement is defined as specific character development activities completed by parents and children outside of the regular school. In addition, student achievement is defined as growth over a four-month period of time on the STAR Reading and Mathematics assessments (see Appendices H and I). The research questions guiding this study were:

1. Do elementary students participating in a character education curriculum with specific parent activity components demonstrate greater academic growth in Reading achievement compared to students who participate in a character education curriculum without a parent activity component, as measured by the STAR Reading assessment?

2. Do elementary students participating in a character education curriculum with specific parent activity components demonstrate greater academic growth in mathematics achievement compared to students who participate in a character education curriculum without a parent activity component, as measured by the STAR Mathematics Assessment?

Research Hypothesis. Students participating in a character education curriculum with specific parent activity components will demonstrate greater academic growth in reading and mathematics achievement compared to students who participate in a character education

curriculum without a parent activity component, as measured by the STAR Reading and

Mathematics Assessment.

Null Hypothesis. Students participating in a character education curriculum with specific

parent activity components will not demonstrate greater academic growth in reading and

mathematics achievement compared to students who participate in a character education

curriculum without a parent activity component, as measured by the STAR Reading and

Mathematics Assessment.

Timeline

Once permission was obtained from the school district where the research was to be

conducted and approval from the HRRC at Northwest Nazarene University was received, on

September12, 2012 at 7:00PM, the researcher held an initial meeting. The purpose of the

meeting was to inform the parents of the students attending School 1 (Experimental) of the

research that would be conducted at the school. Details reviewed included the character

development curriculum the school would use (see Appendices F and G), the dates during which

the data collection would take place, and the informed consent process (see Appendix A). A

meeting with the same agenda was held in the afternoon of the following day. On September 12,

2012, 340 students were represented by having one or more parents attend the meeting and on

September 13, 2012 at 1:00PM in the afternoon, and addition 74 students were represented by

having one or more parents in attendance.

On September 13, 2012, informed consent forms were sent home with every child

attending School 1 (Experimental). Within a two-week time frame, ending on September 27,

2012, all informed consent forms were returned for a response rate of 100%. The researcher

recorded all informed consent data to eliminate individuals from the study who elected not have

their data used. This in conjunction with students, who had incomplete testing data, withdrew from school early or registered late in the school year decreased the sample size at School 1 (Experimental) from an original 469 students to 411 students. This adjustment left the sample size at 87% of its original size. Similar circumstances decreased the sample size at School 2 (Control) from 488 students to 429, leaving it at 88% of its original size. The decrease in sample size was nearly identical at both, School 1 (Experimental) and School 2 (Control).

On September 7, 2012 students at both the experimental and control schools were administered the STAR Reading and Mathematics assessments (see Appendices H and I). This initial test, along with the same STAR Reading and Mathematics assessments (see Appendices H and I) administered on January 14, 2013, provided the academic achievement data used for the purpose of answering the academic achievement portion of the research questions.

Summary of the Results

In order to establish demographic similarities and differences between the experimental and control schools, the researcher conducted an analysis of both schools including enrollment, grade-level, gender, ethnicity, full pay lunch, reduced pay lunch and no pay or free lunch. The differences between the two schools were mainly in the area of population. This was mostly due to the control school housing the pre-school program for the school district in which the study took place. The overall results of this comparison indicate that the two schools used for the research are very similar and are therefore a good choice for comparison in all areas of the study.

School 1(Experimental) served 719 students, including 370 male students and 349 female students, while School 2 (Control) served 807 students, including 374 male students and 372 female students.

Table 1

Demographic Comparison by Gender

Enrollment by Group	Control School	Experimental School
Total	807	719
Male	379	399
Female	370	349

Due to the nature of the STAR Reading and Mathematics Assessment, only students in 2nd through 5th grade were included in the study. Of the 839 participants included in the study, 410 attended the School 1 (Experimental) and 429 participants were attended School 2 (Control).

Table 2

Demographic Comparison by Grade-Level

Grade-level	Control School	Experimental School
Pre-K	64	0
1st grade	105	120
2nd grade	144	134
3rd grade	138	122
4th grade	127	129
5th grade	117	109

School 1(Experimental) and School 2 (Control) served similar populations of students at each grade-level, with the exclusion of preschool. This difference did not impact the study, as student achievement data was only gathered in regards to students in 2nd through 5th grade.

Table 3

Demographic Comparison by Ethnicity

Ethnicity	School 1 (Experimental)	School 2 (Control)
White	671	714
Non-White	33	83

School 2 (Control) has a slightly higher population of Non-White students when compared to School 1 (Experimental). The difference in populations occurred due to School 2 (Control) having additional students attending the pre-school for the school district being housed at that facility. In 2nd, 3rd, 4th, and 5th grades, the student population was very similar. Slight difference existed in the students at both schools receiving free lunch as well.

Table 4

Demographic Comparison by Full pay/ reduced pay/ no-pay lunch

Payment type	School 1 (Experimental)	School 2 (Control)
Full pay lunch	208	212
Reduced pay lunch	93	95
No-pay lunch	418	500

For the purposes of this study, the sample size n=411, and the sample size n=429, were

comparable. As stated previously, the results of this study are collected solely from participants

in two elementary schools in a rural school district in the Western United States. Additional

research may need to be conducted if the results of the study were going to be generalized to

other school in other areas. Only students in the 2nd through 5th grade participated in the STAR

Reading and Mathematics Assessment. During the 2012/2013 school year School 1

(Experimental) served 719 students, including 370 male and 349 female students, while School 2

(Control) served 807 students, including 374 male and 372 female students.

Due to the nature of the assessment, only students in 2nd through 5th grade were included in the

study. Of the 839 participants included in the study, 410 participants attended School 1

(Experimental), and 429 attended School 2 (Control). The sample for this study was a

convenience sample because the researcher was employed in the school district as an elementary

school principal and had access to student achievement data through the school district. Although

there were differences in the school populations, students included in the samples used for data

gathering were very similar.

Table 5

Demographic Comparison by School Site

School	Male	Female	Total
School 1(Exp.)	215	196	411
School 2 (Control)	202	227	429

An independent t-test was selected as the best test to examine the significant differences or factors between the means of School 1 (Experimental), and School 2 (Control) in order to unearth the impact after the treatment had occurred **(Tanner, 2011)**.

The initial STAR Reading and Mathematics Assessment (see Appendices H and I) comparing the two schools, demonstrated no statistically significant difference in the area of reading or mathematics between School 1 (Experimental) and School 2 (Control). Table 6 outlines the findings of a mean or average score on the STAR Reading Assessment of 3.62, compared to School 2 (Control) with a mean score of 3.57. This was demonstrated similarly in the data from the STAR Mathematics Assessment with School 1 (Experimental) finishing with a mean score of 3.44, and School 2 (Control) with a mean score of 3.35. The mean scores in reading and mathematics of the two groups being statistically comparable as determined by the independent *t*-test, further reinforced the researchers conclusion that the two schools were appropriate to be compared for the purposes of this quantitative study.

Table 6

Comparison of Mean Scores for Pre-Reading and Pre-Mathematics Assessments for School 1 (Experimental) and School 2 (Control)

Assessment	Group	N	Mean
Reading Pre-Test	Experimental	410	3.62
Reading Pre-Test	Control	429	3.57
Math Pre-Test	Experimental	410	3.44
Math Pre-Test	Control	428	3.35

The p-values for both the experiment and control groups STAR Pre-Reading and Pre-Mathematics Assessment were greater than what was determined to be statistically ($p<0.05$). The STAR Pre-Reading Assessment for School 1 (Experimental) and School 2 (Control) was $p=0.742$. In addition, the STAR Pre-Mathematics Assessment for the School 1 (Experimental) and School 2 (Control) was $p=0.530$.

A series of independent t-test were conducted to determine if there were pre-existing differences between individual grade-levels at the two schools in the study. Each grade-level included in the study was compared to the corresponding grade-level from the opposite school. This comparison was conducted to determine whether or not there were statistically significant differences between grade-levels in regards to how they performed on the STAR Reading and Mathematics pre-assessments (see Appendices H and I).

Table 7

Grade Level Mean Comparisons Between Schools

Test	School 1 (Exp.) Mean	School 2 (Control) Mean
2nd grade Pre-Read	1.95	2.0
2nd grade Pre-Math	1.86	1.85
3rd grade Pre-Read	3.12	3.22
3rd grade Pre-Math	2.69	2.76
4th grade Pre-Read	4.17	4.40
4th grade Pre-Math	3.82	3.90
5th grade Pre-Read	5.59	5.23
5th grade Pre-Math	5.79	5.27

During the months of September, October, November, and December 2012, data was collected and coded to reflect low, medium and high participation levels and recorded in an Excel spreadsheet. A low rating was measured as 0-1 activities completed, a medium rating was measured at 2-3 activities completed, and a high rating was measured at 4 or more activities completed. Tables 8, 9, 10, and 11 indicate monthly frequency data that was gathered by the researcher. Low, medium and high categories were based on total activity level for the month. The table 12 displays overall participation frequency and level data for the combined four months of data collection.

Table 8 indicates the greatest activity frequency was found at the low activity level, with a cumulative of 73%, medium level of participation is measured at 9%, and high level participation is measured at 18%.The low level frequency increases in the following month (October).

Table 8

Participation, Frequency, and Activity Level for September, 2012

Activity level	Frequency	Percent	Cumulative percent
Low	301	73%	73%
Medium	37	9%	82%
High	73	18%	100%
Total	411	100%	

Table 9 indicates the greatest activity frequency was found at the low activity level, with slightly lower frequencies in the medium and high activity levels than in the previous month of September. Percentages in the low and medium activity levels dropped only slightly from the month previous.

Table 9

Participation Frequency and Activity Level for October, 2012

Activity level	Frequency	Percent	Cumulative percent
Low	323	79%	79%
Medium	20	5%	84%
High	68	17%	100%
Total	411	100%	

Table 10 indicates an even higher frequency of low activity level for the month of November. Again, medium and high activity levels are lower than the previous months. This trend of percentages at the low activity level increasing each month and medium and high level activities dwindling was consistent for the first three months of the treatment.

Table 10

Participation Frequency and Activity Level for November, 2012

Activity level	Frequency	Percent	Cumulative percent
Low	351	85%	85%
Medium	16	4%	89%
High	44	11%	100%
Total	411	100%	

Table 11 indicates a slightly lower level of frequency in the low activity level, and a slightly elevated frequency in medium and high activity levels. These levels are illustrated in table 11. December was the first month low level activity decreased and medium and high level activity increased.

Table 11

Participation Frequency and Activity Level for December, 2012

Activity level	Frequency	Percent	Cumulative percent
Low	298	73%	73%
Medium	37	9%	82%
High	76	19%	100%
Total	411	100%	

Overall, table 12 demonstrates what the previous four tables have shown. Over the course of the four-month data gathering process, the greatest amount of participation was evident at the lowest activity level. This trend continued over the course of the study's four-month timeline.

Table 12

Combined Participation Frequency and Level for September, 2012 through December, 2012

Activity level	Frequency	Percent	Cumulative percent
Low	306	75%	75%
Medium	59	14%	89%
High	46	11%	100%
Total	411	100%	

In addition to frequency data, two separate ANOVAs were conducted by the researcher in order to compare STAR Reading and Mathematics Assessment (see Appendices H and I) growth of School 1 (Experimental) and School 2 (Control) over the four month data gathering window. An Analysis of Variance (ANOVA) was chosen by the researcher as the most appropriate test in order to compare two groups. As with a t-test, an ANOVA is the best test to test different populations that do not include individuals from both populations in either group (Neuman, 2003). There are assumptions that must be considered in using the ANOVA statistic. The two most important assumptions are that within each group to be compared the data follow a normal distribution and that these normal distributions share a common standard deviation (Tanner, 2011).

Table 13 illustrates the ANOVA indicated a statistically significant difference in student achievement during the four month data gathering window did not exist when the two schools were compared in reading. All p-values were calculated at p>0.05.

Table 13

Comparison Between Groups (School1 and School 2) STAR Reading Growth

Data Collection by Month (Reading)	P-value
September	0.679
October	0.884
November	0.898
December	0.493

The ANOVA conducted further indicated a statistically significant difference in student achievement during the four month data gathering window did not exist when the two schools were compared in mathematics. All p-values were calculated at p>0.05.

Table 14

Comparison Between Groups (School1 and School 2) STAR Mathematics Growth

Data Collection by Month (Mathematics)	P-value
September	0.549
October	0.167
November	0.104
December	0.144

A Factorial ANOVA was conducted to measure the effect of the variables of gender, grade, and character development activity participation level on academic achievement in regards to the STAR Reading and Mathematics assessments (see Appendices H and I). In Table 15, the p-value for grade-level is 0.042; therefore the conclusion can be drawn that grade level is significant in regards to growth on the STAR Mathematics assessment.

Table 15

Significance of Gender, Grade Level, and Character Development Activity Level on Mathematics Achievement

Source	P-value
Gender	0.522
Grade-level	0.042
Character development activity level	0.699

The p-value for gender is 0.015, indicated that gender is significant in regards to growth on the STAR Reading assessment. All other variables indicate no statistically significant impact on student performance on the STAR Reading and Mathematics assessments (p>0.05).

Table 16

Significance of Gender, Grade Level, and Character Development Activity Level on Reading Achievement

Source	P-value
Gender	0.015
Grade-level	0.167
Character Development Activity Level	0.648

After the four months of participation, data collection, and instruction, students were assessed using the STAR Reading and Mathematics assessments (see Appendices H and I), this time as a post-assessment. Pre and post assessment data was analyzed. Using a paired sample t-test the researcher determined that there was a significant difference between the pre-assessment and post-assessment Mathematics and Reading scores of both the experimental and control groups, indicated by a p-value of p<0.001.

Both School 1(Experimental), and School 2 (Control) data indicates change from STAR Reading and Mathematics assessments (see Appendices H and I) in the way of growth. School 1

(Experimental) experienced a greater change in growth in Mathematics, while School 2 (Control) exhibited greater change in Reading growth.

Table 17 indicates the growth that occurred at both School 1 (Experimental) and School 2 (Control) over the four month data gathering window. School 1 (Experimental) began tested with a mean score in Reading of 3.35 and finished with a mean score of 4.36. In Mathematics, School 1 (Experimental) began with a mean score of 3.37 and finished with a mean score of 4.16. School 2 (Control) began tested with a mean score in Reading of 3.44 and finished with a mean score of 4.42. In Mathematics, School 2 (Control) began with a mean score of 3.61 and finished with a mean score of 4.28. Participants at both schools experienced statistically significant academic growth in the areas of reading and mathematics over the data gathering window. However, the analysis did not indicate that one group had statistically greater levels of growth over that time period when compared to the other group.

Table 17

School 1(Experimental) and School 2 (Control) Pre-Math and Pre-Reading vs. Post-Math and

Post-Reading

School	Assessment	Mean
School 1(Experimental)	Pre-Mathematics	3.35
School 1(Experimental)	Post-Mathematics	4.36
School 1(Experimental)	Pre-Reading	3.57
School 1(Experimental)	Post-Reading	4.16
School 2 (Control)	Pre-Mathematics	3.44
School 2 (Control)	Post-Mathematics	4.42
School 2 (Control)	Pre-Reading	3.61
School 2 (Control)	Post-Reading	4.28

Table 17 indicates the change that occurred at both School 1 (Experimental) and School 2 (Control) over the four month data gathering window. Both schools experienced similar change over the four month period of time.

Table 18

Mean Growth on STAR Reading and Mathematics Assessments for School 1 (Experimental) and School 2(Control)

Assessment	Group	N	Mean Growth
Math change	Experimental	411	0.98
Math change	Control	429	1.01
Reading change	Experimental	411	0.67
Reading change	Control	429	0.59

During the four month duration in which the study was taking place, office discipline referrals at School 1 (Experimental) decreased from a total of 184, during the previous September through December, to a total of 8, during the four month study timeline. Office discipline referrals at School 2 (Control) remained at approximately the same level as reported by the administrator of School 2 (Control). The administrator of School 2 (Control), estimated office discipline referrals for September, October, November, and December for the 201/2012 school year, and the 2012/2013 school year to have remained the same at 150 each year The rate of office referral occurrences at School 1(Experimental) was the lowest rate seen in the four year history of the school. This indicates a positive impact on student behavior as measured by office discipline referrals at School 1 (Experimental) when compared to School 2 (Control).

Table 19

Comparison of Office Discipline Referrals, School 1 (Experimental) and School 2(Control)

School	Office Referrals 2011/2012	Office Referrals 2012/2013
School 1 (Experimental)	n=184	n=150
School 2 (Control)	n=8	n=150

Another unexpected finding in the research was attendance levels at School 1 (Experimental), when compared to School 2 (Control). In September, October, November, and December of 2012, which was the duration of the study, School 1 (Experimental) had an average daily attendance rate (ADA) of 95.94%. In contrast, School 2 (Control) had an average daily attendance rate (ADA) of 89.58%. School 1 (Experiment) had a higher level of average daily attendance than School 2 (Control) by a margin of 6.36%. In the previous September, October, November, and December of 2011, School 1 (Experimental) had an average daily attendance rate (ADA) of 89.46%, while School 2 (Control) had an average daily attendance rate ADA of 89.24%. The difference between School 1 (Experimental) and School 2 (Control) during the 2011 school year was only 0.22%, with School 1 (Experimental) being only slightly higher in average daily attendance, than School 2 (Control). This data indicates there was a significant positive impact on average daily attendance (ADA) at the school where the treatment was applied.

Table 20

Comparison of Average Daily Attendance (2011 and 2012), School 1 (Experimental) and School 2 (Control)

Year	School 1 (Experimental)	School 2 (Control)
2011	89.45%	89.24%
2012	95.94%	89.58%

Conclusion

The initial STAR Reading and Mathematics Assessment (see Appendices H and I) comparing the two schools, demonstrated no statistically significant difference in the area of Reading or Mathematics between School 1 (Experimental) and School 2 (Control). Data was gathered over the four month data collection window and an analysis of that data was completed by the researcher using a series of independent *t*-tests, dependent *t*-tests and factorial ANOVAs.

The mean growth in both the STAR Reading and Mathematics assessments (see Appendices H and I) indicated no statistically significant differences. The difference in growth on the STAR Reading assessment was measured at $p=0.188$ indicating no statistical significance at $p<0.05$. The difference in growth on the STAR Mathematics assessment was measured at $p=0.829$ indicates no statistical significance at $p<0.05$. The degree to which academic achievement outcomes can be attributed to the implementation of specific character education activities completed by parents and students outside of the regular school day is limited. However, students in third and fifth grade at School 1 (Experimental) did experience a greater

amount of student achievement growth when compared to their second and fourth grade school-mates. Students of School 2 (Control) experienced the same academic growth rate in second through fifth grade.

Chapter V

Conclusions

Introduction

Parent involvement has often been characterized as volunteering or assisting in the classroom, chaperoning or even fundraising (Skaggs & Bodenhorn, 2006). In the current educational system, parent involvement has become far more complex. Epstein (2002) pioneered a framework which includes six specific types of involvement in the late 1980's. It is from Epstein's research the theoretical framework and subject of this study emerged. Character education programs have been widely implemented in schools across the nation. Good character is described in general terms as having the ability to apply principles like respect for others, as well as truthfulness, and fairness (Skaggs & Bodenhorn, 2006). Character education, however, does not refer to a single approach to teaching what is socially acceptable. It is more of an umbrella term used to describe teaching a number of qualities and characteristics (Schwartz, Beatty, & Dachnowicx, 2006).

Epstein conducted over three decades of research on parental involvement, family engagement, and community partnerships. She is the founder and the director of the National Network of Partnership Schools at Johns Hopkins University, (Epstein, 2001). Epstein's research encompasses all levels of parental involvement program development. It includes studies in the elementary, middle, and high school level, as well as research focused on entire school districts (Epstein & Mavis, 2006). Studies conducted contribute to a body of research focused on improving student achievement, improving student attendance, increasing credits students earn

and even negating the impact high poverty rates have on academic outcomes (Snyder, et al., 2010).

Epstein's theorized reciprocal relationships between parents and educators as having a positive effect on student achievement. Epstein's research has consistently demonstrated the positive relationship between parent involvement and student achievement (Epstein, 2002). Epstein defines parent involvement by separating it into six separate types. The literature review completed for this study generated an excess of evidence that parent, family, and community involvement in education correlates with positive academic outcomes for students (Bates, et al., 2004). Research completed by the U. S. Department of Education (2007) concluded, students who experience higher level of involvement from their parents concerning their academics, have higher grades, attend school with greater regularity, leave school less often, and set loftier academic goals for themselves.

Epstein (2002) describes parental involvement as six unique categories: parenting, communicating, volunteering, learning at home, decision making, and collaborating with community. A great deal of research has been conducted on how implementing Epstein's (2002) six parent and family involvement standards can impact schools with low socio-economic status, and high rates of failure. This research study sought to answer the following research questions and hypotheses:

1. Do elementary students participating in a character education curriculum with specific parent activity components demonstrate greater academic growth in Reading achievement compared to students who participate in a character education curriculum without a parent activity component, as measured by the STAR Reading assessment?

2. Do elementary students participating in a character education curriculum with specific

parent activity components demonstrate greater academic growth in Mathematics

achievement compared to students who participate in a character education curriculum

without a parent activity component, as measured by the STAR Mathematics assessment?

Research Hypothesis. Students participating in a character education curriculum with

specific parent activity components will demonstrate greater academic growth in reading and

mathematics achievement compared to students who participate in a character education

curriculum without a parent activity component, as measured by the STAR Reading and

Mathematics assessments.

Null Hypothesis. Students participating in a character education curriculum with specific

parent activity components will not demonstrate greater academic growth in reading and

mathematics achievement compared to students who participate in a character education

curriculum without a parent activity component, as measured by the STAR Reading and

Mathematics assessments.

The researcher in this research study sought to establish the relationship between specific

character development completed by students and their parents outside of the regular school day,

and growth in reading and mathematics achievement over a four month period of time.

There is no shortage of chatter amongst educators drawing conclusions about the weakening of

the family, or less quality time spent with children having an impact on a student's success at

school. The researcher sought to establish whether parents spending structured time with their

child would have a measurable outcome in reading and mathematics achievement. The vehicle

chosen by the researcher to provide the opportunity for parents and students to have the

opportunity to spend time in short one-on-one increments was the specific character development

activities designed to be completed by students and parents outside the regular school day (Solomon, 2011).

This study was approved by the Human Research Review Committee at Northwest Nazarene University (see Appendix D) and school district approval (see Appendix C) was gained prior to the data collection process. In order to inform parents about the study, the researcher held an initial informational meeting School 1(Experimental) on September 12, 2012 at 7:00 PM. The following day, the researcher held an additional meeting on September 13, 2012 and 1:00 PM. On September 13, 2012 and again on September 17, 2012 information regarding this study was sent out over the school's electronic phone, text, and e-mail service, as well as posted to the school Face book page, and school website.

The meetings and communications sent out informed parents about the research during the coming months. These meetings and messages also informed them of their right to not be included in the data collection. Parents were encouraged to participate if they believed there was value in the research that was being done. Following the initial meetings and messages, a letter went out to all families explain the research that would be taking place at School 1 (Experimental) and parents were encouraged to ask questions and voice concerns. An informed consent was received from every child at School 1 (Experimental). Only 6% of the parents opted out of having their student's data used for the study, leaving 94% of student data available for the researcher to use for analysis.

The quantitative design constructed for this study analyzed student achievement growth data from the STAR Reading and Mathematics assessments (see Appendices H and I) administered at two rural elementary schools in the Western United States. Both schools had a character development curriculum which contained similar components. However, School 1

(Experimental) added an additional component in the way of the specific character development activities completed by the parent and student at home, outside of the regular school day. The learning at home component was comprised of suggested character development activities for students to complete with their parents. These activities were sent home with students of School 1 (Experimental) on a monthly basis and participation data in those activities was collected monthly in the months of September, 2012, October, 2012, November, 2012, and December, 2012.

The specific parent involvement activities were derived from a scripted character development curriculum based on twelve pillars of character including: goal-setting, self-awareness, valuing achievement, valuing others, self-control, caring, responsibility, citizenship, life-long learning, self-confidence, respect, and trustworthiness (Solomon, 2011). Each month parents were provided with an activity sheet each month with suggested activities to complete with their child/children, based on the specific character trait which had been selected for that month. Activities were designed to take five to fifteen minutes to complete. There was also an area on the activity sheet for parents and students to fill in activities they had come up with on their own.

For the month of September, the pillar of character focused on was lifelong learning. Activities sent home were all aligned with this pillar of character. There was some differentiation for each grade level, so the activities were age appropriate. For example, Kindergarten activities focused on Reading for pleasure, and first grade activities involved discovery learning through finding out about the world. Second grade activities were based on honing listening and attention skills, while third grade completed activities to practice attentive and alert behavior. Fourth grade

worked on being creative and using their imagination, while fifth grade practiced fact-finding

and seeking information (Solomon, 2011).

During the month of October, the focus of activities was on self-confidence and trusting

your own abilities. Kindergarten worked on trying to complete tasks independently, and first

grade practiced working independently. Second grade focused on having a positive outlook,

while third grade practiced being courageous. Fourth grade looked for things in their day that

brought them joy, and fifth grade practiced analyzing and solving problems (Solomon, 2011).

For November, students focused on respect. Kindergarten practiced being courteous to

others, and first grade practiced using good manners. Second grade learned how to be fair in the

games they play on the playground, while third grade practiced patience. Fourth grade learned

what it meant to be honorable, and fifth grade worked on being open to new ideas (Solomon,

2011).

 In the last month of data collection, students focused on being trustworthy. Kindergarten

learned about and practiced honesty, while first grade worked on learning what it meant to be

sincere. Second grade learned and practiced loyalty, and third grade practiced truthfulness.

Fourth grade practiced being reliable by following through on commitments they made, and fifth

grade learned what it meant to be self-aware (Solomon, 2011).

The STAR Reading and Mathematics assessments (see Appendices H and I) have

historically been used in the school district where the research was conducted for the purpose of

student placement in instructional groups. The assessments provide students, teachers, parents,

and school administrators with information regarding a student's ability level in Reading and in

Mathematics. The STAR Reading and Mathematics assessments (see Appendices H and I) are

administered at four regular intervals throughout each school year. Since the STAR Reading and

Mathematics assessments (see Appendices H and I) are used as a main data point to measure academic achievement, the researcher thought it appropriate to use growth data from the STAR Reading and Mathematics assessments (see Appendices H and I) as an indicator of whether specific character development activities as outlined by this study, had an impact on student achievement at School 1 (Experimental) when compared to School 2 (Control).

Summary of Results

This study was conducted in two similar elementary schools, in a rural school district in the Western United States during the first four months (September, October, November, and December) of the 2012/2013 school year. School 1(Experimental) served 719 students, including 370 male (51%) and 349 female (49%) students, while School 2 (Control) served 807 students, including 374 male (51%) and 372 female (49%) students. Due to the nature of the assessment, only students in 2nd through 5th grade were included in the study. Of the 839 participants included in the study, 410 (49%) attended the School 1 (Experimental) and 429 (51%) participants were attended School 2 (Control). The sample used for this study was a convenience sample as the researcher was employed in the school district as an elementary school principal and had access to student achievement data through the school district.

This quantitative research study measured the impact parent involvement in the form of specific character development activities completed by a parent and child outside of the regular school day has on academic achievement in reading and mathematics as measured by the STAR Reading and Mathematics assessments (see Appendices H and I).

The initial STAR Reading and Mathematics Assessment (see Appendices H and I), comparing the two schools, demonstrated no statistically significant difference in the area of reading or mathematics between School 1 (Experimental) and School 2 (Control) prior to the

beginning of the study. School 1 (Experimental) had a mean score of 3.62 on the STAR Reading assessment, while School 2 (Control) had a mean score of 3.57. Similarly on the STAR Mathematics assessment, School 1 (Experimental) had a mean score of 3.44, and School 2 (Control) had a mean score of 3.35.

After four months of implementation of the specific character development activities completed by students and their parents outside of the regular school day, the students at School 1 and School 2 were analyzed with the same STAR Reading and Mathematics assessments (see Appendices H and I). Students at both schools displayed significant growth in the areas of reading and mathematics. On the STAR Reading Assessment, School 1 (Experimental) had a mean score of 4.28, and a mean score of 4.42 on the STAR Mathematics Assessment. School 2 (Control) had similar growth with a STAR Reading Assessment mean score of 4.16, and a STAR Mathematics Assessment mean score of 4.36. School 1 (Experimental) experienced a greater change in growth in mathematics, while School 2 (Control) exhibited greater change in Reading.

The following graphic indicates the STAR Reading and Mathematics academic growth benchmark score for a four month time period in blue, the academic growth in reading and mathematics of School 1 (Experimental) in red, and the academic growth in reading and mathematics of School 2 (Control) in green. As stated previously, both groups had statistically significant academic growth over the four month data gathering window. Both schools far surpassed the STAR Reading and Mathematics Assessment benchmark score for four months worth of growth.

Figure 1

STAR Reading and Mathematics Academic Growth
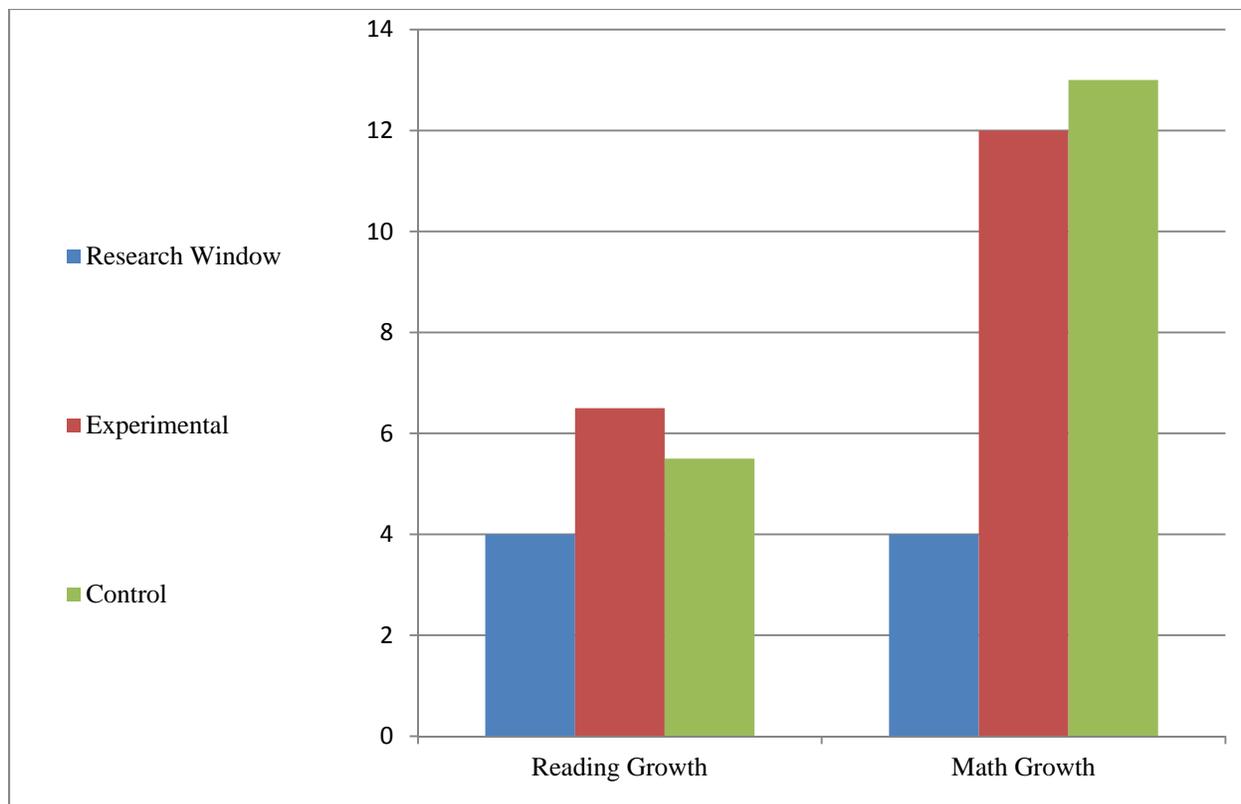
Figure 1 demonstrates the growth equivalencies by month for both School 1 (Experimental) and school 2 (Control). The blue bar represents the amount of typically expected growth on the STAR Reading and Mathematics Assessments for a four month period of time. The red bar represents the average growth at School 1 (Experimental). The green bar represents the average growth at School 2 (Control).

Students at both schools experienced statistically significant academic achievement growth in reading and mathematics indicated by both schools having an academic change p-value of $p < 0.001$. However, there was not a statistically significant difference between the STAR Reading and Mathematics assessments when comparing the academic achievement change. An

analysis was conducted using an independent t-test to compare the change in STAR Reading and Mathematics Assessment scores between School 1 (Experimental) and School 2 (Control). When School 1 (Experimental) and School 2 (Control) were compared in the area of change in mean scores on the STAR Reading assessment, the p-value for that comparison was p=0.188. When School 1 (Experimental) and School 2 (Control) were compared in the area of change in mean scores in STAR Mathematics assessment the p-value for that comparison was p=0.829.

The data suggest parent involvement defined as specific character development activities completed by students and their parents outside of the regular school day did not have a statistically significant impact on student achievement. For the purpose of this study, achievement is defined as growth on the STAR Reading and Mathematics assessments (see Appendices H and I).

Although the results of this study suggest parental involvement, as defined by this study, does not have an impact on student achievement, as measured by the STAR Reading and Mathematics assessments (see Appendices H and I), the study did produce additional data relevant to the research questions. The researcher conducted a one-way ANOVA with the comparison among means using a post-hoc Tukey test. This test allowed the researcher to more closely compare whether or not there were statistically significant differences between how students performed on the STAR Reading and Mathematics assessments when compared to other grade-levels, other genders, and differing activity levels, defined as low, medium and high program activity participation levels.

Cohen's *d* is often calculated during a quantitative analysis in order to determine the strength of a phenomenon or a treatment (Tanner, 2011). A Cohen's *d* analysis was conducted to measure the strength of the treatment on reading and mathematics achievement and the result

indicated the effect was trivial, with a d=0.02 in mathematics, and d=0.09 in reading at School 1 (Experimental).

When grade levels at School 1 (Experimental) were compared to one another, a p-value of p=0.42 indicated grade level was significant in regards to growth on the STAR Mathematics assessment. Students in third and fifth grade demonstrated higher levels of growth than those students in second and fourth grade. When School 1 (Experimental)'s third and fifth grade students' mean scores were compared, a p-value of p=0.003 was indicated for STAR Reading and Mathematics Assessment growth. Data from School 2 (Control) did not indicate a statistically significant difference in academic growth in Mathematics, as measured by the STAR Mathematics assessment, when grade levels were compared to one another.

In comparing academic growth between different genders of students at School 1 (Experimental), the researcher discovered gender was significant at a p-value of p=0.015. Female students attending School 1 (Experimental) experienced a greater level of academic growth in the area of Reading achievement as measured by the STAR Reading assessment. Students attending School 2 (Control) did not experience a statistically significant difference in growth when compared by gender.

The data did indicate there was no statistically significant difference in academic achievement growth when comparing program activity participation level. Participation levels were measured as low (0-1 activities), medium (2-3 activities), and high (4-5) activities. Participation in a lesser or greater number of activities did not suggest differing levels of achievement.

Conclusions

      The degree to which academic achievement outcomes can be attributed to the implementation of specific character education activities completed by parents and students outside of the regular school day is limited. In light of the findings of this study, the researcher accepts the null hypothesis. Specific character development activities completed by parents and students outside of the regular school day did not produce statistically significant academic growth in reading and mathematics as measured by the STAR Reading and Mathematics assessments, when compared to students who participate in a character education curriculum without a parent activity component, as measured by the STAR Reading and Mathematics assessments (see Appendices H and I). Nevertheless, a great deal of research has been conducted related to the relationship between parent involvement and student achievement (Jeynes, 2010; File, Powell, San Juan, & Son, 2010).

      The review of the literature as part of this study exposed a blind spot in the research. Inquiry has been published on family structures, socioeconomic issues suffered by parents and families, parent assistance with homework, and even academic achievement (Jeynes, 2010; Topor, Keane, Shelton, & Calkins, 2010; Thurston, 2005). However, a gap in the professional literature was found concerning the relationship between specific types of learning at home activities and students' academic achievement. The current study did not take place in the types of schools most often found in the majority of research studies. The schools the current study took place in have high concentrations of two parent families, the majority of families whose children attend the schools identify themselves as middle-class, and for the most part, the ethnicity of students is homogenous.

There is an urgent need in education to establish the role behavior, social skills, and character development play in achievement (Snyder, et al., 2010). Numerous programs have been developed in order to target academic achievement issues, and then focus on specific behavior problems and how those issues can be mitigated, in hopes of positively impacting student achievement (Snyder, et al., 2010).Both schools in this study implemented a character development curriculum during the study. Each curriculum was based on pillars of character including: goal-setting, self-awareness, valuing achievement, valuing others, self-control, caring, responsibility, citizenship, life-long learning, self-confidence, respect, and trustworthiness (Solomon, 2011; Schwartz, Beatty, & Dachnowicx, 2006). School 1 (Experimental) added the additional learning at home component to their curriculum. This component was added in the form of specific character development activities completed by the student and parent outside of the regular school day. The researcher intended to find what relationship, if any, existed between the specific activities and students' academic achievement as measured by the STAR Reading and Mathematics assessments (see Appendices H and I).

Character development curricula are often multi-component based, using character development, academics, and behavior elements. These multifaceted approaches have the propensity to make navigating the variables in a study difficult (Beets, et al., 2009). In this research study, the independent variables (IV) are the number of activities completed by students and their parents, which was measured as high (4 or more activities), medium (2-3 activities), or low (0-1 activity) activity levels each month.

The majority of participants in the study participated in the character development activities at the low level. This level of activity may have impacted the outcome of the study. Dependent variables (DV) were students' scores on the STAR Reading and Mathematics

assessments (see Appendices H and I). Results of this study indicate there is no statistical difference between School 1 (Experimental) and School 2 (Control) in regards to student growth on the STAR Reading and Mathematics assessments (see Appendices H and I). Variables that could not be taken into consideration for this study were the reasons why parents and students participated in the specific character development activities at a low level or not at all. A study utilizing a greater number of schools may have shed more light on the reasons behind the absence of a relationship between the character development activities completed at home by students and parents, academic achievement. Including a school that has not character development program may also have provided some noteworthy data.

The outcome of the study demonstrate scores for students from School 1 (Experimental) had a mean change in Reading achievement of M=0.67, while students from School 2 (Control) had a mean change of M=0.59. Students from School 1 (Experimental) had a mean change in Mathematics achievement of M=0.98, and School 2 (Control) had a mean change of M=1.01. School 1 (Experimental) did not experience greater growth in academic achievement when compared to School 2 (Control).

It is worth mentioning that both schools experienced the equivalent of nearly six months worth of Reading growth in a four month period of time as measured by the STAR Reading assessment. It is also worth mentioning that both schools experienced nearly the equivalent of one year's worth of growth in Mathematics as measured by the STAR Mathematics assessment. When compared with one another, there was no statistically significant difference in Reading achievement (p=0.188), and no statistically significant difference in Mathematics achievement (p=0.829). The null hypothesis was not rejected.

Epstein (2007) redefines learning at home as homework, to mean not only work that is done alone at home by the student, but inclusive of interactive activities shared with others in their home or community, linking homework to real life. The researcher chose to analyze the impact character development activities completed at home by students and their parents outside of the regular school day may or may not have on academic achievement as measured by the STAR Reading and Mathematics assessments.

For the purposes of this study, the researcher sought to link homework completed with cooperation with parents to social experiences students would not only encounter during the school day, but in their communities as well (Creswell, 2007). Prior studies have recognized character education as a program meeting evidentiary requirements for improving both academics and behavior (Snyder, et al., 2010). Increased academic achievement is often the indicator that is most widely accepted in determining a program's effectiveness, or lack thereof (Schwartz, Beatty, & Dachnowicx, 2006). Skaggs (2006), maintains there is a presence of a relationship between character education programs and student behavior and school achievement.

Although the character development activities did not have a statistically significant impact on student achievement overall, as measured by the STAR Reading and Mathematics assessments (see Appendices H and I), additional results emerged in relation to the study conducted. Students in third and fifth grade at School 1 (Experimental) did experience a greater amount of student achievement growth when compared to their second and fourth grade school-mates. Students of School 2 (Control) experienced the same academic growth rate in second through fifth grade. Different rates of growth at different grade levels could be impacted by a child's brain development. Different windows of time during brain development have been

associated with heightened abilities to grasp unique or more complex concepts (Fitzgerald, 2000).

During the four month duration in which the study was taking place, office discipline referrals at School 1 (Experimental) decreased from a total of 184, during the previous September through December 2012, to a total of 8, during the four month study timeline. Office discipline referrals at School 2 (Control) remained at approximately the same level as reported by the administrator of School 2 (Control). The administrator of School 2 (Control), estimated office discipline referrals for September, October, November, and December for the 2011/2012 school year, and the 2012/2013 school year to be 150 each year. When students are not spending time in the office dealing with discipline and behavior issues, time in the classroom is increased. This time in the classroom leads to greater exposure to the curriculum through engagement in instruction. The issue of lost instructional time is only compounded for students who visit the office on multiple occasions, due to repeat offenses or discipline issues (Backman, Nokali, & Votruba-Drzal, 2007).

Another unexpected finding in the research was attendance levels at School 1 (Experimental), when compared to School 2 (Control) were average attendance levels. In September, October, November, and December of 2012, School 1 (Experimental) had an average daily attendance rate (ADA) of 95.94%. In contrast, School 2 (Control) had an average daily attendance rate (ADA) of 89.58%. School 1 (Experiment) had a higher level of average daily attendance than School 2 (Control) by a margin of 6.36%. In the previous September, October, November, and December of 2011, School 1 (Experimental) had an average daily attendance rate (ADA) of 89.46%, while School 2 (Control) had an average daily attendance rate ADA of 89.24%. The difference between School 1 (Experimental) and School 2 (Control) during the

2011 school year was only 0.22%, with School 1 (Experimental) being only slightly higher in average daily attendance, than School 2 (Control). This data indicates there was a significant positive impact on average daily attendance (ADA) at the school where the treatment was applied.

When students are at school, the loss of academic progress created by lack of instruction is negated. As with discipline referrals that take away from classroom instructional time, absenteeism has a negative impact on student achievement (Swick, et al., 1997). Students who are exposed to more instruction, naturally do better in their coursework (Snyder, et al., 2010). School 1 (Experimental) and School 2 (Control) exhibited another interesting attribute during the research timeline. In regards to growth, School 1 (Experimental) experienced a slightly greater academic growth rate in Reading, while School 2 (Control) experienced a slightly greater academic growth rate in Mathematics. School 1 (Experimental) has a school administrator who is a certified Reading specialist, while School 2 (Control), has a school administrator who is a certified Mathematics specialist. One research study examined the relationship between a classroom teacher's areas of expertise in relation to the level of achievement student attained in that same subject area in the teacher's class. Although the studies reviewed by the researcher predominantly looked at these circumstances in special education classrooms, a parallel might be drawn, or further research conducted, to include administrator expertise and student achievement in his/her school (Bronwell, et al., 2009).

Recommendations for Further Research

The outcomes of this study suggest that further research is warranted. This study focused on identified specific parental involvement activities and their impact on student achievement in reading and mathematics at two rural elementary schools in the Western United States during the

first four months (September, October, November, and December) of the 2012/2013 school year. The purpose of this study was to investigate the impact of parental participation in specific character development activities completed with his/her child outside of the regular school day and its impact on reading and math achievement.

Results of this study could be used to rule-out one particular strand of parental involvement that may not impact academic achievement drastically. However, the results of this study do not suggest parental involvement to be ineffective at increasing academic achievement overall. On the contrary, there are a great number of parental involvement strategies that still need be addressed (Epstein, 2001). Additional research needs to be completed to confirm Epstein's claim that learning at home has a positive impact on academic achievement.

Another consideration to be considered in future research is that parent involvement has multiple definitions, and can be a moving target. (Bachman, El Nokali, & Votruba-Drzal, 2010). Parent involvement may need to be measured amongst all the other variables that impact how a student does in school.

Other research could be conducted to measure whether or not learning at home has an impact on student discipline and behavior issues at school. Although the information gathered at the end of this study in regards to student discipline was not able to be analyzed, it suggested that something at School 1 (Experimental) caused student discipline issues to decrease in frequency. It would also be important to study how an administrator's area of expertise in education impacts student achievement at the school where they are assigned. Perhaps only by chance, but information in this study appears to indicate there may be a link between the two. Ground has already been broken in the area of classroom teachers' areas of expertise, and the impact on academic achievement in his/her students (Bronwell, et al., 2009).

Additional topics for further research in the area of learning at home might include exploring different types of activities completed at home and measuring their impact on student achievement. For instance, if a school designed interactive homework activities that were to be completed in cooperation with a parent at home, academic achievement may increase. One example might be flipping the traditional classroom. A teacher could create a ten-minute video about a concept those students will be expected to come to school having already been exposed to (Aina, Grace, & Jethro, 2012). Once at school, students will be given project-based opportunities to demonstrate what they learned, as well as engage in activities to expand their understanding of the subject. This type of study could measure the level of engagement of parents in the home activity and how that impacts student achievement (Bates, et al., 2004).

Other research might explore the relationship between parents' attending a class offered by the school where they could learn strategies to assist their child with homework and the impact this might have on academic achievement (Bergeson & Davidson, 2007). In addition, a study on the relationship between students whose parents attend parent/teacher conferences and academic achievement could warrant further exploration. The current study affirms that further research is needed on the different types of learning at home activities and how those activities impact academic achievement (Brickman, Rhodes, & Oyserman, 2007).

Implications for Professional Practice

The results from this study added to the professional literature by determining if specific, five to fifteen minute character development activities completed by a child and their parent at home on a monthly basis positively impacted student achievement in the areas of reading and mathematics as measured by the STAR Reading and Mathematics assessments (see Appendices H and I). This study did not show an overall statistically significant impact on academic

achievement by way of specific character development activities completed by students and parents. However it does inform educational professionals within one rural school district in the Western United States, and may be helpful when they are designing their own parent involvement programs.

Many schools utilize a character development curriculum of one sort or another (Skaggs & Bodenhorn, 2006). Findings from this study indicate character development activities completed at home did not prove to make a statistically significant impact on student achievement in the school where the study took place. However, significant decreases in office discipline referrals were observed, as well as well as a significant increase in student attendance, when School 1 (Experimental) was compared to itself in the previous year, as well as School 2 (Control) (Schwartz, Beatty, & Dachnowicx, 2006).

At School 1 (Experimental), during the four month data gathering window, 306 students and their parents participated at a low activity level (0-1 activities). Those students and their parents make up 75% of the student population of School 1 (Experimental). Only 14% of students and their parents participated at a medium level (2-3 activities), and an even smaller percent at 11% participated at a high level (4-5 activities).

During the four month duration in which the study was taking place, office discipline referrals at School 1 (Experimental) decreased from a total of 184, during the previous September through December, 2012, to a total of 8, during the four month study timeline. Office discipline referrals at School 2 (Control) remained at approximately the same level as reported by the administrator of School 2 (Control). The administrator of School 2 (Control), estimated office discipline referrals for September, October, November, and December for the 2011/2012 school year, and the 2012/2013 school year to be between 150 and 175 each year.

Another finding in the research involved attendance levels at School 1 (Experimental), when compared to School 2 (Control) were average attendance levels. In September, October, November, and December of 2012, School 1 (Experimental) had an average daily attendance rate (ADA) of 95.94%. In contrast, School 2 (Control) had an average daily attendance rate (ADA) of 89.58%. School 1 (Experiment) had a higher level of average daily attendance than School 2 (Control) by a margin of 6.36%.

The possible positive impact on student achievement in the current study may have been negated by lack of participation in the study. Families may have been met with challenges in completing the activities. Epstein (2002), discusses challenges that may arise in regards to learning at home. Families often struggle to design a regular schedule for homework, especially homework that is interactive and requires time set aside for a child and parent to work together. Parents may not be aware of the importance of completing learning at home activities (Bates, et al., 2004), or how their contributions to those activities positively impact the student (Bergeson & Davidson, 2007). On the other hand, there are positive trends in behavior and attendance data present at School 1 (Experimental), where the treatment was applied, when compared to School 2 (Control).

Lack of parent involvement may not be as simple as scheduling issues for families. Teachers and parents often have very different opinions of what parents should be in their child's education (Baker & Soden, 2001). The gap between what a teachers and schools see as parent involvement and how parents define parent involvement only compounds the problem of parents not becoming involved (Baker & Soden, 2001).
Schools often view parent involvement as attending school functions. Parents, however, often have a much different definition, including instilling their family and cultural values, and even

talking to their children. Both definitions are correct, but both definitions are not always recognized by everyone involved (Epstein, 2002).

Schools and the educators who make up those institutions are often guilty of underutilizing parents as an asset for students and their academic achievement (Bachman, El Nokali, & Votruba-Drzal, 2010). Although the importance of family involvement is widely recognized in education, its implementation is weak at best. A survey of 3700 elementary school teachers' practices by Epstein and Becker (1982), across 600 schools located in Maryland found that parents reported that teachers at the school where their children attended had little or no parent involvement in their classrooms.

There is a large research base that touts the great benefits that exist when parents become actively involved and engaged in the academic endeavors of their children. To this end, parent involvement and its impact on academic achievement will continue to attract interest from educators, researchers, politicians, and parents alike.

References

Aina, F., Grace, A., & Jethro, O. (2012, January). Roles of parent on the academic performance of pupils in elementary schools. *International Journal of Academic Research in Business and Social Sciences, 2*(1).

Apostoleris, N. H., Benjet, C., Grolnick, W., & Kurowski, C. O. (1997). Predictors of parent involvement in children's schooling. *Journal of Educational Psychology, 89*(3), 538-548.

Bachman, H., El Nokali, N., & Votruba-Drzal, E. (2010). Parent involvement and children's academic and social developement in elementary school. *Child Development, 81*(3), 1-18.

Backman, H., Nokali, N., & Votruba-Drzal, E. (2007). Parental involvement and children's academic and social development in elementary school. *Child Development, 81*(3), 988-1005.

Baharudin, R., Hong, C. Y., Lim, S. J., & Zulkefly, N. S. (2010). Educational goals, parenting practices and adolescents' academic achievement. *Asian Social Science, 6*(12), 144-152.

Baker, & Soden. (2001). Advancing the research base for family and community connections. *Emerging Issues in School, Family, and Community Connections*, 7-11.

Bakker, J., Denessen, E., & Gierveld, M. (2007). Multi-ethnic schools' parental involvement policies and practices. *The School Community Journal, 17*(2), 27-44.

Bartels, S. M., & Eskow, K. G. (2010). Training school professionals to engage families: A pilot university/state department education partnership. *The School Community Journal*, 45-71.

Bates, J., Castellino, D., Dodge, K., Hill, N. E., Lansford, J., Nowlin, P., & Pettit, G. (2004). Parent academic involvement as related to school behavior, achievement and aspirations: Demographic variations across adolescence. *Child Development, 75*(5), 1491-1509.

Beebe-Frankenberger, M., Bocian, K., Grasham, F., Lane, K., & MacMillan, D. (2005, Winter). Students with or at risk for problem behavior: Betwixt and between teacher and parent expectations. *Preventing School Failure, 49*(2), 10-17.

Beets, M., Flay, B., Vuchinich, S., Snyder, F. J., Acock, A., Burns, K., . . . Durlak, J. (2009). Use of a social and character development program to prevent substance use, violent behaviors, and sexual activity among elementary-school students in Hawaii. *American Journal of Public Health*, 1438-1445.

Behuniak, P., Black, A. C., Goldstein, J., McCoach, D., Rambo, K., Reis, S. M., & Sullivan, E. E. (2010, Spring). Examining the unexpected: Outlier analyses of factors affecting student achievement. *Journal of Advanced Academics, 21*(3), 426-268.

Bergeson, T., & Davidson, C. (2007). *Nine characteristics of high-performing schools.* Washington: Office of Superintendent of Public Instruction.

Bergin, C., & Bergin, D. (2009, May 21). Attachment in the classroom. *Educational Psychological Review, 21*, 141-170. doi:10.1007/s10648-009-9104-0

Bigelow, B. J., & Zhou, R. M. (2001). Relational scoffolding of school motivation: Developmental continuities in students' and parents' ratings of the importance of school goals. *The Journal of Genetic Psychology, 162*(1), 75-92.

Blackmore, J., & Hutchison, K. (2010, August). Ambivalent relations: The tricky footwork of parental involvement in school communities. *International Journal of Inclusive Education, 14*(5), 499-515.

Bordens, K. S., & Abbott, B. B. (2008). *Research Design and Methods: A Process Approach.* New York: McGraw HIll.

Bower, H. A., & Griffin, D. (2011). Can the epstein model of parental involvement work in a high-minority, high-poverty elementary school? A case study. *ASCA, 15*(2), 77-87.

Brickman, D., Rhodes, M., & Oyserman, D. (2007). School success, possible selves, and parent school involvement. *Family Relations, 56*(12), 479-489.

Bronfenbrenner, U. (1993). Ecological models of human developement. *International Encyclopedia of Education*, 37-43.

Bronwell, M. T., Bishop, A. G., Hersten, R., Klingner, J. K., Penfield, R. D., Dimino, J., . . . Sindelar, P. T. (2009). The rold of domain expertise in beginning special education teacher quality. *Council for Exceptional Children*, 391-411.

Cancio, E. J., West, R. P., & Young, K. R. (2004). Improving mathematics homework completion and accuracy of students with EBD through self-management and parent participation. *Journal of Emotional and Behavioral Disorders, 12*(1), 9-22.

Center on Educational Policy. (2012). What roles do parent involvement, family background, and culture play in student motivation? *The George Washington University*, 1-14.

Coleman, B., & McNeese, M. N. (2009). From home to school: The relationship among parental involvement, student motivation, and academic achievement. *The International Journal of Learning*, 459-471.

Coulter-Kern, R., DePlanty, J., & Duchane, K. A. (2007). Perceptions of parent involvement in academic achievement. *The Journal of Educational Research, 100*(6), 361-368.

Creswell, J. W. (2007). *Educational research: planning conducting, and evaluating quantitative and qualitative research.* New York: Pearson Merrill Prentice Hall.

Cripps, K., & Zyromski, B. (2009). Adolescents' psychological well-being and perceived

    parental involvement: Implications for parental involvement in middle schools. *Research*

    in Middle Level Education, 1-13.

Dixon, R. S., Elley-Brown, M. J., Irving, S. E., Peterson, E. R., Rubie-Davies, C. M., &

    Widdowson, D. A. (2010). Who is to blame? Students, teachers and parents views on

    who is responsible for student achievement. *Research in Education, 86*(6), 1-12.

Doucet, F. (2011, December). Parent involvement as ritualized practice. *Anthropology and*

    Education Quarterly, 42(4), 404-421.

Dumont, H., Ludtke, O., Neumann, M., Niggli, A., Schnyder, I., & Trautwein, U. (2012). Does

    parental homework involvement mediate the relationship between family background and

    educatinal outcomes? *Contemporary Educational Psychology, 37*(1), 55-69.

Dusek, J. B., Lopoo, L. M., & Smyth, J. M. (2009). Great expectations: The biasing effects of

    reported child behavior problems on educational expectancies and subsequent academic

    achievement. *Journal of Social and Clinical psychology, 28*(3), 392-413.

Epstein. (1997). Involving parents in homework in the midddle grades. *Phi Delta Kappa*

    Research Bulletin, 18.

Epstein. (2001). Building bridges of home, school, and community: The importance of design.

    Journal of Education for Students Placed at Risk, 161-167.

Epstein. (2001). More than minutes: Teachers' roles in designing homework. *Educational*

    Psychologist, 36(3), 181-193.

Epstein. (2002). Family, school , and community connections. In J. W. Guthrie, *Encyclopedia of*

    Education: Vol 3 (pp. 821-828). New York: Macmillan.

Epstein. (2008). Improving parent and family involvement in secondary schools. *Principal leadership*, 9-12.

Epstein, J. L., & Mavis, S. (2006). Prospects for change: Preparing educators for school, family, and community partnerships. *Peobody journal of education*, 81-120.

Eshleman, J. R., & Bulcorft, R. A. (2006). *The Family.* Boston: Pearson Allyn and Bacon.

Fabricant, M. (2011). Organizing for equity. *American Educator*, 36-47.

Ferrara, M. M. (2009). Broadening the myopic vision of parent involvement. *The School Community Journal*, 125-127.

File, N., Powell, D. R., San Juan, R. R., & Son, S.-H. (2010). Parent-school relationships and children's academic and social outcomes in public school pre-kindergarten. *Journal of School Psychology, 48*(4), 269-292.

Fitgerald, Nancy. (2000). So smart so fast: How little brains grow. *Scholastic Choices, 15*(4), 2-26.

Flessa, J., Gallagher-Mackay, K., & Parker, D. C. (2010). Good, steady progress: Success stories from ontario elementary schools in challenging circumstances. *Canadian Journal of Educational Admnistration and Policy, 1*(101), 1-38.

Gordon, M., & Louis, K. (2009). Linking parent and community involvement with student achievement: Comparing principal and teacher perceptions of stakeholder influence. *American Journal of Education, 116*(11), 1-31.

Gould, J. (2011). Does it really take a village to raise a child (or just a parent?): An examination of the relationship between the members of the residence of a middle-school student and the student's satisfaction with school. *Education & State*, 28-38.

Green, Walker, Hoover-Dempsey, & Sandler. (2007). Parents' motivations for involvement in children's education: An empirical test of theoretical model of parental involvement. *Journal of Education Psychology, 99*(3), 532-544.

Harvard Graduate School of Education. (2006). *Family involvement in early childhood education.* Boston: Harvard Graduate School of Education.

Hill, N. E., & Tyson, D. F. (2009). Parental involvement in the middle school: a meta-analytic assessment of the strategies that promote achievement. *Developmental Psychology*, 740-763.

Howard, T. C., & Reynolds, R. (2008). Examining parent involvement in reversing the uncerachievement of african american students in middle-class schools. *Educational Foundations*, 79-98.

Illinois State Board of Education. (2013, March 8). *Illinois State Board of Education.* Retrieved from Illinois State Board of Education: www.isbe.state.il.us

Jacobs, K. D., & Kritsonis, W. A. (2007). Utilizing culture to improve communication and school involvement with parents from diverse backgrounds as a means to improve student achievements levels in the united states: A national focus. *The Lamar University Electronic Journal*, 1-7.

Jeynes, W. H. (2010, March). The salience of the subtle aspects of parental involvement and encouraging that involvement: Implications for school-based programs. *Teachers College Record, 112*(3), 747-774.

Kahraman, N., & Sungar, S. (2013). Antecedents and consequences of middle school students' achievement goals in science. *Asia-Pacific Educational Resources, 22*, 45-60. doi:10.1007/s40299-012-0024-2

Keith, T., & Keith, P. (1993). Does parental involvement affect eighth-grade student achievement? *School Psychology Review*, 474-495.

Kim, S., & Hocevar. (1998). Racial differences in eighth-grade mathematics. *The Clearing House, 71*(3), 175-178.

Larocque, M., Kleiman, I., & Darling, S. (2011). Parental involvement: The missing link in school achievement. *Preventing School Failure, 55*(3), 115-122. doi:10.1080/10459880903472876

Levpuscek, M., & Zupancic, M. (2009, August). Math achievement in early adolescence. *Journal of Early Adolescence, 29*(4), 541-569.

Lloyd-Smith, L., & Baron, M. (2010). Beyond conferences: attitudes of high school administrators toward parental involvement in one small midwester state. *The School Community Journal*, 32-39.

Mattingly, D. J., Prislin, R., McKenzi, T. L., Rodriguez, J. L., & Kayzar, B. (2002). Evaluating evaluations: The case of parent involvement programs. *Review of Educational Research*, 549-576.

McIntintyre, L., Eckert, T., Fiese, B., DiGennaro, F., & Wildenger, L. K. (2007). Transition to kindergarten: Family experiences and involvement. *Early Childhood Education Journal, 35*(1), 83-88.

Merriam-Webster. (2013, March 9). *Merriam Webster*. Retrieved from http://www.merriam-webster.com: http://www.merriam-webster.com/info/faq.htm

Midraj, J., & Midraj, S. (2011). Parental involvement and grade four students' english reading achievement. *Journal of Research and Development in Education, 12*(3), 41-55.

Mo, Y., & Singh, K. (2008). Parents' relationships and involvment: effects on students' school engagement and performance. *Research In Middle Level Education, Online*, 1-11.

Msengi, S. (2007). Family, child, and teacher perceptions of african american adult assistance to young readers. *The School Community Journal, 17*(1), 33-60.

National center on Student Progress Monitoring. (2013, March 8). *National Center on Student Progress Monitoring*. Retrieved from National Center on Student Progress Monitoring: www.studentprogress.org/weblibrary.asp

Neuman, W. L. (2003). *Social Research Methods.* Boston: Allyn and BAcon.

Nock, S. (1988). The family and the hierarchy. *Journal of Marriage and the Family, 50*(4), 957-966.

Orozco, G. L. (2008). Understanding the culture of low-income immigrant latino parents: Key to involvement. *The School Community Journal*, 21-37.

Patel, N., & Stevens, S. (2010). Parent-teacher-student discrepancies in academic ability beliefs: Influences on parent involvement. *The School Community Journal*, 115-136.

Phil, M. (2011). Parental style and academic achievement among the students. *International Journal of Academic Research, 3*(2), 582-588.

Pryor, B. W., & Pryor, C. R. (2009). What will teachers do to involve parents in education?: Using a theory of reasoned action. *Journal of Educational Research & Policy Studies*, 45-59.

Radzi, F., Razak, M., & Sukor, N. (2010). Parental involvment in school to improve academic achievement: Primary techers' view. *International Journal of Learning*, 259-270.

Schwartz, M. J., Beatty, A., & Dachnowicx, E. (2006). Character education: Frill or foundation? *Principal Leadership*, 6-9.

Shumow, L., Lyutykh, E., & Schmidt, J. A. (2011). Predictorws and outcomes of parental involvement with high school students in science. *The School Community Journal*, 81-98.

Simmons, A. (2008, Fall). A reliable sounding board: Parent involvement in students' academic and career decision making. *NACADA Journal, 28*(2), 33-43.

Skaggs, G., & Bodenhorn, N. (2006). Relationships between implementing character education, student behavior and student achievement. *Journal of Advanced Academics*, 82-114.

Smith, J., Stern, K., & Shatrova, Z. (2008). Factors inhibiting hispanic parents' school involvement. *The Rural Educator*, 8-13.

Snyder, F., Flay, B., Vuchinich, S., Acock, A., Washburn, I., Beets, B., & Li, K.-K. (2010). Impact of social-emotional and character development program on school-level indicators of academic achievement, absenteeism, and disciplinary outcomes: A matched-pair, cluster-randomized, controlled trial. *Kpirma; pf Researcj pm Edicatopma; Effectiveness*, 26-55.

Solomon, E. (2011). I Care Positive Parenting Character Curriculum. *I Care Positive Parenting Character Curriculum* (pp. 52-53). Atlanta: I Care Products.

Southwest Educational Development Laboratory. (2013, March 8). *SEDL Advancing Research Improving Education*. Retrieved from SEDL Advancing Research Improving Education: www.sedl.org

Sproull, N. L. (2002). *Handbook of Research Methods: A Guide for Practitioners and Students in the Social Sciences.* Maryland: Scarecrow press.

Swick, K., Grafwallner, R., Cockey, M., Roach, J., Davidson, S., Mayor, M., & Gardner, N. (1997). On board early: Building strong family-school relations. *Early Childhood Educational Journal, 24*(4), 269-273.

Tanner, D. (2011). *Using Statistics to Make Educational Decisions.* Thousand Oaks: Sage.

Thurston, D. (2005). Leveling the home advantage: Assessing the effectiveness of parental

involvement in elementary chool. *Sociaology of Education, 78*(July), 233-249.

Topor, D. R., Keane, S. P., Shelton, T. L., & Calkins, S. D. (2010). Parent involvement and

student acaeemid performance: A multiple mediational analysis. *Journal of Prevention*

and Intervention in the Community, 183-197.

U.S. Department of Education. (2007, June). *Engaging parents in education: Lessons from five*

parental informational resource centers. Retrieved from http://www.ed.gov/:

http://www2.ed.gov/admins/comm/parents/parentinvolve/index.html

Valdez, C. R., Shewakramani, V., Goldberg, S., & Padilla, B. (2013). Parenting influences on

latino children's social competence in the first grade: Parental depression and parent

involvement at home and at school. *Child Psychiatry and Human Development*, 46-51.

doi:10.1007/s10578-013-0358-x

Wamala, R., Kizito, O. S., & Makerere, E. J. (2013). Academic achievement of ugandan sixt

grade students: Influence of parents' education levels. *Comtemporary Issues in Education*

Research, 133-141.

Williams, T., & Sanchez, B. (2013, March). Identifying and decreasing the barriers to parent

involvement for inner-city parents. *Youth and Society, 45*(1), 54-74.

Wiseman, A. (2010). Family involvement in four voices: administrator, teacher, students, and

community member. *Perspectives on Urban Education*, 115-124.

Yoder, J. R., & Lopez, A. (2013). Parent's perceptions of involvement in children's education:

Findings from a qualitative study of public housing residents. *Child and Adolescent*

Social Work Journal, 50-62.

Zellman, G., & Waterman, J. (1998). Understanding the impact of parent school involvement on children's educational outcomes. *Journal of Educational Research*, 370-380.

Ziomek. (2010). Schools, families and communities affecting the dropout rate; Implications and strategies for family counselors. *The Family Journal*, 377-385.

Appendix A

Informed Consent

This year, students at ████████████████ will be participating in a character development curriculum that focuses on one character trait each month. The first character trait that will be focused on is Life-Long Learner. The administration and teachers at South Fork know that Parents are the most important people in the lives of the students that attend here. With that in mind, we have decided to ask for your help in doing a bit of research.

This year, we would like to implement a parental involvement component to our character development curriculum. We would like to gather data on that parent involvement, and then compare our academic achievement to another school similar to ours in size and demographics and see if our academic achievement improves as our parent involvement increases.

This is completely voluntary, and if you choose not to participate, your child will not be treated any differently, or receive more or less recognition in any way.

The expectations include:
   a. Teachers will supply you with an activity sheet at the beginning of each month, like the one you see here (an example of the activity sheet will be available for the parents to view).

   b. We will ask you to place this activity sheet in a visible area in your home and try to either do some of the activities with your child over the course of the month, or come up with a few of your own.

   c. At the end of the month, we will be sending home a feedback for you and your child to fill out together, like the one you see here (an example feedback for will be available for parents to view)

   d. You child will return that feedback form to their classroom, where there will be a basket or box available for them to turn in the forms. There will be no negative consequences for form that are not turned in, and we will not call and bother you to get the form back to us. As I stated before, this is strictly voluntary, and is only meant to see if there is a positive correlation between positive parent/student interactions outside of school and student academic achievement.

   e. Once your forms are returned, the data from them will be entered into a confidential database by the principal (she is the researcher). She and only she will have access to information on all of the students. The names of your students or your names WILL NOT are used in any of the research. Only the number of parent/student activities that were reported and whether or not that had a positive impact on student achievement.

   f. Per required by all human subjects' research, data will be kept for three years in a confidential manner, after which the data will be destroyed.

If you would like to have a copy of the results of my research, please contact me █████████ ███ or my advisor, ████████████████████████

Sincerely,

██████████

****
I have read the accompanying letter and I understand that nothing negative will happen if I do not let my child participate. I know that I can stop his/her participation at any time. I voluntarily agree to let my child participate in this study as follows:

Yes _____ (child's name) may participate in this study, <u>OR</u>

No _____(child's name) may NOT participate in this study.

Parent/Guardian Printed Name: _____

Parent/Guardian Signature: _____

Date: _____

THE NORTHWEST NAZARENE UNIVERSITY HUMAN RESEARCH COMMITTEE HAS REVIEWED THIS PROJECT FOR THE PROTECTION OF HUMAN PARTICIPANTS IN RESEARCH. REFERENCE #6062012.

Appendix B

NIH Certificate of Completion

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that ▮▮▮▮▮▮▮ successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 10/25/2011

Certification Number: 793077
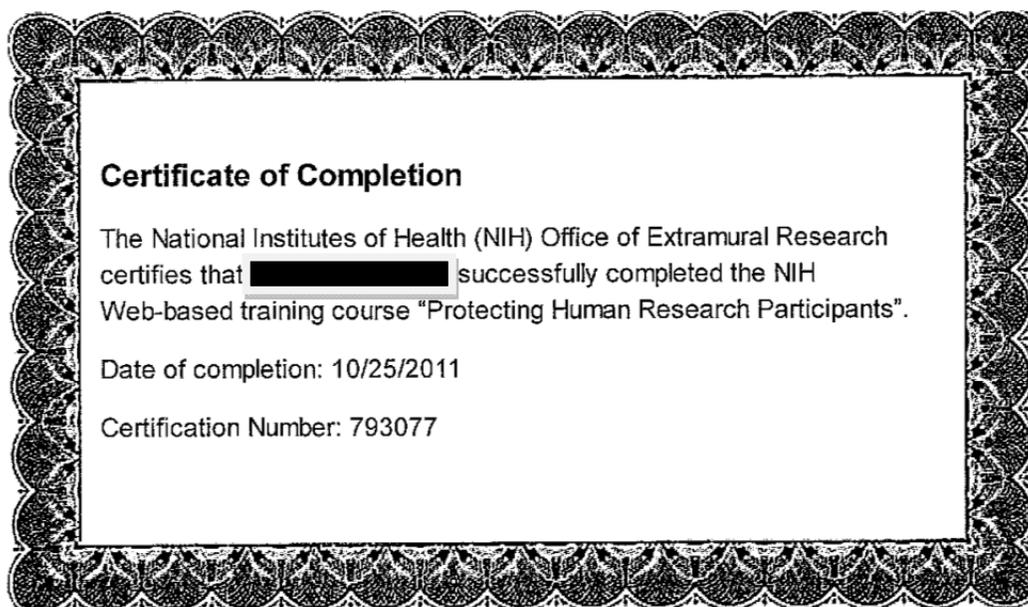
Appendix C

School District Approval to Conduct Research

May 28, 2012

Attn: Members of Human Research Review Committee, Northwest Nazarene University

RE: ███████████, Parent Involvement Research

To Whom It May Concern:
Please be advised that in accordance with ██████████████████████ Policy Regarding Research, contained within School Board Policy Section 4270 I hereby grant permission for Mrs. Yvonne Thurber to conduct the research outlined in this HRRC Application regarding the impact of parental involvement on student achievement in the areas of Reading and Math.

Educational Research in District Schools:
All requests from the public to conduct research within the school district must be directed to the Superintendent of Schools. The following criteria will be utilized to make a determination regarding approval of such requests:

1) *The study results in direct benefits or provides direct services to the children of within the school district;*
2) *The study provides in-service opportunities for the growth and development of faculty and/or staff;*
3) *There will be no expenditures of district funds or use of staff/faculty time unless there are benefits as described in 1 and 2 above.*
4) *Students participating in studies, authorized by school administration, must have the approval of their parents.*

Cross-reference: 5380 Professional Research and Publishing
Policy History:
Adopted on: March 10, 2010

5/28/2012
_____
Date

Appendix D

NORTHWEST NAZARENE
UNIVERSITY

July 20, 2012

██████████
3828 E 180 N
Rigby, ID 83442

Dear ████████

This letter is to inform you that your project entitled "Parent Involvement and the Impact on Student Achievement" has been approved by the Human Research Review Committee. Your reference number is 6062012.

The required forms have been signed and a full copy is being retained in the Human Research Review Committee files.

Please let me know if you have any questions.

Sincerely,

Appendix E

Letter to Parents

Letter To Parents

To the Parents of _____ :

You are your child's first and most important teacher. The "I Care" Three–in–One Curriculum and Workbooks for Parental Involvement, Character Development, and Community Involvement are designed to assist you in helping your child become the very best he or she can be.

Each month you will receive:

- A positive character–building trait
- An encouraging message for you to discuss with your child
- Five (5) suggested character–building parenting and mentoring activities to reinforce the monthly character trait

Here are some recommendations to help you be successful with this curriculum:

- Carefully read through the character–building parenting and mentoring activities
- Place the activity sheet(s) in a highly visible area (refrigerator, message board, etc.)
- Read the positive message often to your child
- Talk about the message and discuss its meaning
- Read to and with your child each day
- Spend quality time listening to and talking with your child.
- Model the monthly character–building traits

At the end of the month, record the number of sent home and self–initiated positive activities you completed with your child during the month on the provided Feedback Form or Reflection Log. At the top of the form, circle the total number of activities you did with your child during the month and circle "Yes" or "No" to indicate whether your child's teacher shared something positive with you about your child. At the bottom of the form, write down five (5) additional activities you did with your child that were not on the sent home activities. This information will be used in classroom instructions and placed in your child's parental involvement file.

Thank you for your participation and for taking the time to show your child that you care.

Sincerely,

_____
(Teacher/Administrator Signature)

_____
(School)

_____
(Title)

_____
(Date)

Copyright© 2009 "I Care" Products & Services   www.icarenow.com

Appendix F

Activity Sheet

"I CARE"™

AUGUST

Teach Your Child To Develop A Positive Attitude Toward School

To The Parent: Helping your child maintain a positive attitude about school is very important. Positive talk about school, attending school events, helping with homework, quickly responding to school requests, and supporting school projects will create a powerful force for learning.

Communication

Ask your child to tell and teach you something (s)he has learned at school daily. Your child will enjoy having you as a student while encouraging him/her to learn something else. Let your child know that (s)he is a member of his/her classroom and should cooperate with others. **(Social Studies)**

Craft

Encourage your child to treat others the way (s)he would like to be treated. Role play situations that your child may encounter at school. Examples: A child is sitting in a swing with no one to give him a push. What could you do?; A child does not have a black crayon in his box. You are not using your black crayon. What could you do? **(Guidance)**

Math

Play a game of "Simon Says" with your child using directional and positional words such as *under, on, in, inside, outside, behind, in front of, up, down, above, below*, etc. Example: "Simon says put your hand *on* the table. Simon says stand *behind* the chair." **(Math)**

Science

Make sure your child has appropriate supplies for school and at home. Check with the school to find out if grade-level supply lists are available. Keep extra supplies at home, such as pencils, crayons, scissors (blunt ends), paperclips, etc. Demonstrate how to use these tools safely. **(Science)**

Reading

Read and discuss the book *Stephanie's Ponytail* by Robert Munsch with your child. Other books may be used. **(Language Arts)**

Tell me what happened at school today. Did you say your numbers? Did you go out to play? I want you to listen to what your teacher has to say. Then you will come home a little smarter every day.

COLOR ME!

Character–Building Activities have been standardized with core subject areas (indicated after each activity).

Appendix G

Parent Feedback Form

"I CARE"™
Feedback Form

Month

Return
Completed Form
To School

Student's Name

Character Trait

Parent Signature   **Date**

Teacher's Name   **Grade**

Positive Teacher–Parent Contact
(Please indicate if your child's teacher has shared anything positive about your child with you during the month.):

    Yes   **No**

School Provided Activities
(Indicate how many of the activities you did with your child during the month by circling the number. These are activities from the *Character–Building Activity Sheet*.): **1 2 3 4 5**

Community Partnerships
(Please indicate if your child talked about, heard about, or saw the month's character trait some-where other than at home and at school during the month.):

    Yes   **No**

Additional Comments

Please write down five more positive activities that you have done with your child during the month that are not on the Character–Building Activity Sheet
(These activities will enable teachers to connect classroom instructions to positive activities you are doing with your child at home.)

1. _____
   _____

2. _____
   _____

3. _____
   _____

4. _____
   _____

5. _____
   _____

Appendix H

STAR Reading Assessment Information and Example Questions

STAR Reading™

Test Preparation Checklist

It is extremely important that you follow standard testing procedures when you administer the STAR Reading™ test to your students. Before you begin testing, please check the following:

☐ Explain the test to your students. The Pretest Instructions will walk you through a basic orientation with your students.

☐ Cover or remove any materials on the walls, chalkboard, and other areas that might help students answer the test items.

☐ Make sure there is enough light and ventilation in the test area. Make sure the area is free from noise. Try to avoid distracting locations or times when other students, school bells, or public address announcements can interfere with student concentration.

STAR Reading™

Pretest Instructions

(Reading Time: 2 Minutes)

Teachers: Please read these instructions to your students before they take the STAR Reading test. (You can use the enclosed materials to make handouts if you think it will help your students understand the test format.) Read each section aloud exactly as it is printed so that students know what to expect at each stage of the test.

Only students with assigned grades from K–12 will be allowed to take the test. Please note that in general, only students who have a reading vocabulary of at least 100 words should take the STAR Reading test. (In other words, the student should have at least beginning reading skills.) Practically, students who can work through the practice questions unassisted should be able to take the STAR Reading test.

You are going to take a test called STAR Reading. It is a reading test that has fill-in-the-blank questions. You will answer 25 questions on a computer. It will take about ten minutes to answer all of the questions. Don't worry if someone finishes their test before you because every test is different. Don't worry about how many questions you think you get right, or how many you get wrong. Everyone will probably miss some of the questions. The main goal is for you to do the best you can.

STAR Reading™

Picture 1

Each of the questions have a sentence with a word missing. There will also be a list of three or four words that could fit in the blank. Your job is to choose the word that best completes the sentence.

Bianca White	1
I can tie my _____.	
1. car	
2. shoe	
3. sky	

Picture 2

For grades 3–12, the last five questions will each have more than one sentence. One of the sentences will have a word missing. From the list of answers, choose the word that best completes the sentence. You will be given extra time to answer these questions, so don't rush.

Bianca White	25 / 25
And, it being a windy day, Little Oliver was completely enshrouded by the skirts of Mr. Bumble's coat as they blew open, and disclosed to great advantage his flapped waistcoat and drab plush knee-breeches. He heard the news of his destination, in perfect silence; and, having had his luggage put into his hand, he pulled his cap over his eyes; and once more attaching himself to Mr. Bumble's coat cuff, was led away by that _dignitary_. Mr. Bumble drew Oliver along, without notice or remark; for the deacon carried his head very erect, as he always should.	
1. colleague	2. creditor
3. dignitary	4. namesake

Picture 3

Choosing your answer on the computer is easy. Each possible answer has a number next to it. Just press the number on the keyboard (1, 2, 3, or 4) that matches the number of your answer choice. Then, press the **Enter** or **return** key. Picture 3 shows the location of each of the keys that you will use during the test.

Picture 4

When you press the number of your answer choice, a blue circle will appear around it as shown in Picture 4. The blue circle only shows you which answer you picked. *It does not mean that you have picked the correct answer.* The program also puts the word you picked in the blank so you can see how it fits in the sentence.

Bianca White	1
I can tie my _shoe_.	
1. car	
2. shoe	
3. sky	

STAR Reading™

You can change your answer before you press the **Enter** or **return** key. Just press a different number on the keyboard. The program will draw a blue circle around your new choice and fill in the blank with the word so you can see it in the sentence. *You cannot change your answer after you press the Enter or return key.*

Picture 5

If you see a picture of a clock at the upper-right corner of the screen as shown in Picture 5, time is almost up for that question. Press the number of your answer and the **Enter** or **return** key.

Bianca White	1
I can tie my _shoe_.	
1. car	
2. shoe	
3. sky	

Time is up for this question.

Picture 6

If you don't choose an answer in time, you will see a message that says time is up for that question. The next question will come up in a few seconds, so be ready.

Picture 7

Before you take the test, you will get some practice questions. The practice questions look just like the real test, except they also have an instruction box to remind you how to pick an answer. If you see this message when you are practicing, raise your hand and ask the teacher or test monitor for help. He or she will know what to do.

STAR Reading Student
Please ask the monitor to help you the next time you practice.
OK

When you finish answering the practice questions, the program will show you this message: "The test is about to start." The real test will start automatically. Relax and get ready; the first question will come up soon. Keep answering the questions until the computer tells you that you have finished the test.

If you don't know the answer to a question, go ahead and choose what you think is the best answer. When you have finished the test, tell the teacher or test monitor that you are finished so the next student can take the test.

If you have any questions about this test, please ask them now. You can ask for help before you start the test and during the practice questions. Once the test starts, the teacher or test monitor will not be able to explain any of the words to you or tell you if you have picked the right answer.

Have fun, and do your best!

STAR Reading™

Pretest Instructions

Picture 1

This is what the questions look like.

| Bianca White	1

I can tie my _____.

1. car

2. shoe

3. sky

STAR Reading™

Pretest Instructions

Picture 7

If you see this message during the practice session,
raise your hand and ask the teacher or test monitor for help.

STAR Reading Student

Please ask the monitor to help you the next time you practice.

OK

STAR Reading™
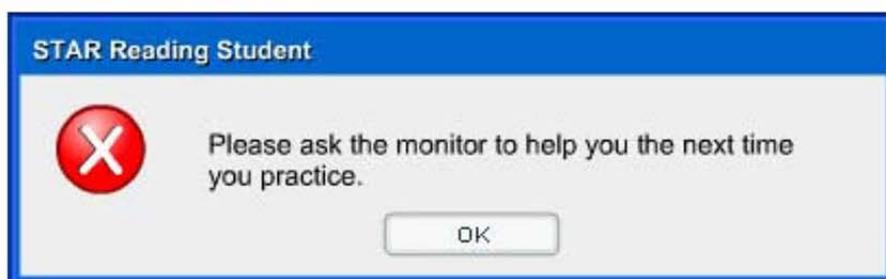
Pretest Instructions

Picture 2

This is what the longer questions look like.

Note: You will see these only if you are in grades 3–12.

Bianca White	25 / 25

And, it being a windy day, Little Oliver was completely enshrouded by the skirts of Mr. Bumble's coat as they blew open, and disclosed to great advantage his flapped waistcoat and drab plush knee-breeches. He heard the news of his destination, in perfect silence; and, having had his luggage put into his hand, he pulled his cap over his eyes; and once more attaching himself to Mr. Bumble's coat cuff, was led away by that _dignitary_. Mr. Bumble drew Oliver along, without notice or remark; for the deacon carried his head very erect, as he always should.

1. colleague   2. creditor

3. dignitary   4. namesake

STAR Reading™

Pretest Instructions

Picture 3

Press the **1, 2, 3**, and **4** keys on your keyboard
to choose the number of your answer.
Then, press the **Enter** or **return** key.

STAR Reading™

Pretest Instructions

Picture 4

When you pick an answer, you'll see a blue circle around the number of your choice. You'll also see the word put in the blank. This shows the answer you chose. *It does not mean you picked the correct answer.*

Bianca White	1

I can tie my _shoe_.

1. car

2. shoe

3. sky

STAR Reading™

Pretest Instructions

Picture 5

A clock in the upper-right corner of the screen means that time is almost up for this question. Choose your answer quickly.

STAR Reading™

Pretest Instructions

Picture 6

If you run out of time, you'll see this message in the middle of your screen. Get ready for the next question.

Time is up for this question.
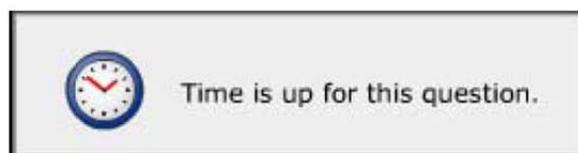
Appendix I

STAR Mathematics Assessment Information and Sample Questions

STAR Math

Test Preparation Checklist

It is extremely important that you follow standard testing procedures when you administer the STAR Math™ test to your students. Before you begin testing, please check the following:

☐ Make sure you have provided enough scratch paper and sharpened pencils for the students to use during the test.

☐ Explain the test to your students. The Pretest Instructions will walk you through a basic orientation with your students.

☐ Cover or remove any materials on the walls, chalkboards, and other areas that might help students answer the test items. Do NOT permit students to use calculators or other devices during the test.

☐ Arrange the desks or computer stations so that students have enough room to work on the test. This should include enough space for scratch paper so that students can perform the necessary calculations for the test items.

☐ Make sure there is enough light and ventilation in the test area. Make sure the area is free from noise. Try to avoid distracting locations or times when other students, school bells, or public address announcements can interfere with student concentration.

STAR Math

Pretest Instructions
(Reading Time: 2 Minutes)

Teachers: Please read these instructions to your students before they take the STAR Math test. (You can use the enclosed materials to make handouts if you think it will help your students understand the test format.) Read each section aloud exactly as it is printed so that students know what to expect at each stage of the test.

You are going to take a test called STAR Math. It is a math test that has multiple-choice questions. You will answer the questions on a computer, but you can work the problems out on scratch paper. There are 24 questions on the test, and it should take you somewhere between 15 and 30 minutes to answer all of the questions.

This test will probably be harder than other math tests you have taken. That is because STAR Math selects questions just for you to see how much you know about math. You will probably even see math concepts or problems that you have never been taught in school. This is normal for how this special type of test works. Try not to get frustrated by this. Just try to give the best answer to each problem and you will do fine.

Don't worry if someone finishes their test before you because every test is different. Don't worry about how many questions you think you get right, or how many you get wrong. Everyone will probably miss some of the questions. The main goal is for you to do the best you can.

STAR Math™

Pretest Instructions

Picture 3

When you pick an answer, you'll see a blue circle around the letter of your choice. This shows the answer you picked. It does *not* mean that you have picked the correct answer.

STAR Math™

Pretest Instructions

Picture 1

This is what the questions look like.

★ Michael Casey	1

$$2 + 3 = \underline{\quad}$$

(A) 2

(B) 3

(C) 4

(D) not given

STAR Math™

Pretest Instructions

Picture 2

Press the **A**, **B**, **C**, or **D** key on your keyboard
to choose the letter of your answer.
Then, press the **Enter** or **return** key.

STAR Math

Picture 1

Each of the questions have a mathematical problem and a list of four possible answers. Your job is to choose the best answer for the question. Sometimes the correct answer might not be one of the choices in the list. For example, in the problem shown in Picture 1, two plus three equals five, but five is not one of the possible answers. In this case, choose "not given" as your answer.

Michael Casey

$2 + 3 = \_\_\_$

Ⓐ 2
Ⓑ 3
Ⓒ 4
Ⓓ not given

Picture 2

Choosing your answer on the computer is easy. Each possible answer has a letter next to it (**A, B, C,** or **D**). Just press the letter on the keyboard that matches the letter of your answer choice. Then press **Enter** or **return**. Picture 2 shows the location of each of the keys that you will use during the test.

Picture 3

When you press the letter of your answer choice, a blue circle will appear around it as shown in Picture 3. The blue circle only shows you which answer you picked. It does *not* mean that you have picked the correct answer.

You can change your answer before you press **Enter** or **return**. Just press the letter of your new answer choice. The program will draw the blue circle around your new choice. *You cannot change your answer after you press **Enter** or **return**.*

Michael Casey

$2 + 1 = \_\_\_$

Ⓐ 2
Ⓑ 3
Ⓒ 4
Ⓓ not given

Picture 4

If you see a picture of a clock in the upper-right corner of the screen as shown in Picture 4, time is almost up for that question. You should make your answer choice and then press **Enter** or **return**. If you do not choose an answer in time, you will see a message that says time has run out. The next question will come up in a few seconds, so be ready.

Michael Casey

$2 + 1 = \_\_\_$

Ⓐ 2
Ⓑ 3
Ⓒ 4
Ⓓ not given

Picture 5

Before you take the test, you will get some practice questions. The practice questions look just like the questions on the real test. If you see this message when you are answering the practice questions, you should raise your hand and call the teacher or test monitor. He or she will know what to do.

STAR Math

Please ask the monitor to help you the next time you practice
OK

When you finish answering all of the practice questions, the program will show you this message: "Great job with the practice test! Let's go on to the actual test." The real test will start automatically. Relax and get ready; the first question will come up soon. Keep answering the questions until the computer tells you that you have finished the test.

Don't forget that you can work the math problems out on scratch paper. If you do not know the answer to a question, go ahead and choose what you think is the best response.

When you are finished with the test, tell the teacher or test monitor that you are done so the next student can get started.

If you have any questions about this test, please ask them now. You can ask for help before you start the test and during the practice questions. Once the test starts, the teacher will *not* be able to explain any of the questions or help you choose an answer. Also, the teacher cannot tell you if you picked the right answer.

Have fun, and do your best!

STAR Math™

Pretest Instructions

Picture 4

A clock in the upper-right corner of the screen means that time is almost up for this question. Choose your answer quickly.
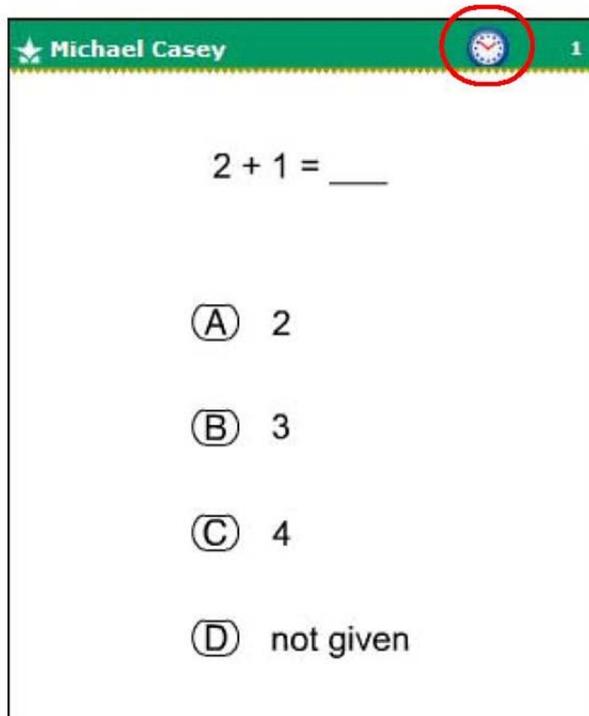
Appendix J

Approval Letter from Renaissance Learning

901 Deming Way, Suite 301
Madison, WI 53717
Phone: 608-664-3880
Fax: 608-664-3882
www.renlearn.com

April 9, 2013

Dear Yvonne Thurber:

The purpose of this letter is to grant you permission to use Renaissance Learning's materials, including

STAR Math and STAR Reading, in your research project.

If you have any questions about the research base for any of our products, please do not hesitate to contact

the Research Department, email research@renlearn.com.

Best regards,

Eric Stickney

Director of Educational Research

Renaissance Learning, Inc.

901 Deming Way, Suite 301

Madison, WI 53717-1979

eric.stickney@renlearn.com

(608) 664-3880, ext. 2009