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Cross-Age Peer Mentoring to Improve Sixth-Grade Student Reading

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COLLEGE OF EDUCATION

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MA, Walden University, 2010

BS, Barry University, 2006

Doctoral Study Submitted in Fulfillment

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Abstract

In a middle school in the southern United States, administrators and teachers are concerned that approximately 40% of sixth-grade students are reading below grade level despite intervention programs. The purpose of this mixed-methods case study was to inquire whether a cross-age peer mentoring program would improve sixth-graders' reading achievement and motivation to read. The theoretical framework for the study was Vygotsky's constructivist theory, with a focus on scaffolding. Research questions focused on sixth-grade students' perception of their participation in a cross-age peer mentoring program and the effect of the program on reading achievement and motivation. Data were collected through pre- and post administrations of the Standardized Test for the Assessment of Reading (STAR) and the Motivation to Read Profile (MRP), observations during the mentoring sessions, and interviews with the 6 sixth-grade participants. STAR and MRP scores indicated that each sixth-grade participant demonstrated reading growth and an increase in motivation to read. Observations revealed positive interactions between the 6 mentors and mentees, and during the interviews, participants described the mentoring program as beneficial to reading growth. The findings from the study led to the development of a professional development project for teachers. The results of this study related to social change indicated that participation in a cross-age peer mentoring program may increase students' reading achievement and motivation to read. The professional development project for teachers and administrators is designed to assist educators in designing and implementing peer mentoring programs to improve reading achievement.

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Dedication

This study is dedicated to my mother, Tina Belotti. She believes in me and has supported every one of my endeavors to include seeking a doctoral degree and has instilled a thirst for learning and the importance of education in me beginning at a very young age. She continues to make a difference in the lives of her children and all the children she comes into contact with on a daily basis. Additionally, this study is dedicated to all educators who in the face of increased accountability and limited resources in our schools continue to do everything in their power to meet the needs of the students in their care. Finally, this study is dedicated to all of my friends and colleagues who have supported me through this long and challenging journey.

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Section 1: The Problem

Introduction

Marine County School District (pseudonym) encompasses schools in a sparsley populated area in the southern Unted States that stretches for 100 miles. The district contains 18 schools, including two alternative and six charter schools. Enrollment in August 2013 was approximately 8,000 students. The student population of the district is made up of the following ethnicities: 1.4% Asian, 10% Black, 35.4% Hispanic, 0.2% Native American, 2.6% multiracial, 0.2% Pacific Islander, and 50.2% White. Approximately 40% of students in the district qualify for free or reduced lunch, indicating low income (Marine County School District, 2013). The location of the school district can cause challenges as it is isolated and has access to limited resources.

Mustang Middle/High School (pseudonym) is a sixth- through 12th-grade educational facility located in a rural island community. Mustang Middle/High School is one of five high schools and eight middle schools within the Marine County School District. Mustang Middle/High School has a student enrollment of approximately 500. The student population is made up of the following ethnicities: 46.99% White, 43.37% Hispanic, 7.43% Black, 1.20% Asian, and 1% multiracial (Marine County School District, 2013). Fourteen percent of students at Mustang Middle/High School are enrolled in the English Language Learner (ELL) program with another 14% having completed the program. Students either complete the program by timing out after 6 years of arriving in the country, receiving teacher recommendation, or demonstrating proficiency on an English proficiency exam. Students who are exited from the ELL program based on the

last two criteria are still considered part of the program and are provided support on an as-needed basis, because they are no longer serviced in the ELL classroom. This support continues until they have reached the maximum of 6 years in the program. Thirty percent of the students enrolled at Mustang Middle/High School are served by the "exceptional student education program" (Marine County School District, 2013). The exceptional student education program includes students who have been diagnosed with disabilities, ranging from students receiving minimal support in the general education classroom to those with more severe cognitive and behavioral disabilities educated in self-contained classrooms. In the course of my studies, it became apparent that in many ways reading issues at the school are a reflection of the varied demographic characteristics of the local community.

To understand the relationship between the demographics and the reading issues at the school it is necessary to review the FCAT data, as these allow me to identify the problem that prompted the study. I used FCAT data to identify the problem that prompted this study as this was the assessment used in the state of Florida at the time that research began. I used the FCAT to determine eligibility for sixth-grade student participants, as students entered sixth-grade with a fifth-grade FCAT score. Due to a shift in standards in the state of Florida a new assessment was administered beginning the 2014–2015 school year. The Florida Standards Assessment (FSA), the new reading, writing, and math assessment measures student progress and achievement on the new Florida Standards. Because the standards have changed, the FCAT is no longer a valid measurement of the new standards and, therefore, the FSA is now administered to students. The new

assessment places an emphasis on analytical thinking and includes questions other than multiple choice (Florida Department of Education, 2014).

The 2014–2015 school year was the first time the FSA was used to measure reading achievement of Florida students; therefore, students do not have comparison scores for this test. I administered the Standardized Test for the Assessment of Reading (STAR) before and following the 9-week mentoring program to measure growth in reading achievement among sixth-grade participants.

Definition of the Problem

The problem that prompted this study was that during the 2012–2014 school years, approximately 40% of the Mustang Middle/High School sixth-grade students were not performing at grade level in reading as shown on the sixth-grade FCAT (Florida Department of Education 2012, 2013, 2014). In this study, I investigated the effect of a reading-based cross-age peer mentoring program on reading achievement and motivation to read.

Students who are reading below grade level when they enter sixth-grade may not see the value or importance in reading. Students scoring at Level 1 or Level 2 (below grade level) on the FCAT in reading are required to take an intensive reading class. Having to take an intensive reading class disrupts student schedules and limits their choice of classes.

Transitioning to middle school can be challenging for many students. Students may have been average readers in elementary school but struggle in middle school where the text becomes more complex (Brinda, 2011). Students' sixth-grade reading scores are

a strong indicator of those who will need additional support to achieve a score of 3 on the 10th-grade FCAT. Students who do not pass the FCAT may be required to take remedial classes, limiting their opportunities to enroll in other courses. Testing outcomes affect the overall schedule of middle and high school students and decrease their availability to enroll in classes that will prepare them for college (Wixon, 2013).

In addition to student impact, low reading achievement also negatively affects schools, teachers, districts, and communities. Reading below grade level is also a problem because if students do not increase their reading ability before high school, lack of reading achievement can affect high school graduation rates and decrease the school grade (Florida Department of Education, 2013). Each school in the state of Florida is assigned a school letter grade based on many factors. Schools scoring a letter grade of D or F suffer repercussions to include state intervention and an increase in accountability measures (Florida Department of Education, 2013). Students attending low-scoring schools often have the option of school choice. When students enroll in higher achieving schools, school enrollment in lower achieving schools can negatively affect school budgets as for each student enrolled Fulltime Equivalency Dollars (FTEs) are provided (Florida Department of Education, 2013).

Lack of funding for schools influences teacher and program allocations. All students enrolled are affected because class, program, and extracurricular offerings can be limited. Schools scoring an A receive A-Plus money that can be distributed among employees (Florida Department of Education, 2013). The school grade is calculated based on several factors including high school graduation rate; percentage of students

who take the FCAT; percentage of students scoring a 3 or higher on the reading, science, math, and writing FCAT; learning gains demonstrated on the FCAT as determined by the Developmental Scale Score (DSS) gains (different by grade and subject) for students scoring a Level 1 or Level 2 on the previous test; increase of a level; or maintaining a Level 3, 4, or 5. For sixth-grade students scoring a Level 1 on the fifth-grade FCAT, an increase of 7 points in the DSS score and 6 points for a student scoring a Level 2 on the fifth-grade FCAT indicates learning gains were made in reading (Florida Department of Education, 2012). Other factors include the percentage of students enrolled in advanced placement and career/technical classes (Florida Department of Education, 2012). The overall FCAT reading scores and learning gains affect the school grade. In addition, student reading achievement directly affects graduation rate and enrollment in advanced placement courses that affect the school grade. Student reading achievement affects teachers, school administrators, and the district.

Furthermore, teachers are often overtaxed with state and district mandates and may lack the necessary time to reach their below-level students. Teachers are often not able to work one on one with students due to time constraints and large class sizes. Given these circumstances schools are often in need of support to meet the needs of diverse learners "as classrooms and schools become more complex environments and the needs of learners more diverse, educators must rely on effective interventions for teaching reading" (Lingo, 2014, p. 53). A one-on-one cross-age peer mentoring program is an intervention that can make the gains that teachers have not been able to as the peer

mentors will not be under the same constraints as teachers are. The mentoring program was in addition to the standard reading instruction not instead of it.

Rationale

Evidence of the Problem at the Local Level

In seven of nine middle schools in the Marine County School District, approximately 10% of sixth-grade students are not reading at grade level (Florida Department of Education, 2013). Historically, sixth-grade students in Florida, who are considered reading below grade level, have been called struggling readers and have often spent years in intensive reading classes. Reading below grade-level status is determined by a score lower than 3 on the reading FCAT. Section 1003.4156, F.S., states that students in middle school who score a Level 1 on the reading FCAT are needed to be enrolled in an intensive reading course. In addition, students in middle school who score a Level 2 on the reading FCAT are required to be enrolled in an intensive reading class or content area reading class (Just Read Florida, 2013). Reading interventions for these students include intensive reading classes with small- and whole-group reading strategy instruction; exposure to below-grade-level reading materials; and both teacher and computer-based instruction, reinforcement, and practice. Reading intervention programs often used with students reading below-grade-level include Read 180, Jamestown, and Journeys. The authors of the Student Reading Intervention Requirements suggested that reading intervention courses should include explicit whole class teaching, differentiated small group instruction, monitored independent reading, accelerated reading, and

exposure to informational text in a ratio that matches the state reading assessment (Just Read Florida, 2013).

Based on observations and discussions with sixth- and seventh-grade students who read below grade level, by the time a student enters sixth-grade, if they are reading below grade level, they become frustrated with school and are self-conscious when asked to read in front of their peers (Enriquez, 2011). Enriquez conducted a study in a middle school classroom. Two middle school struggling readers were highlighted in the study as they demonstrated the negative social effect that students reading below grade level often face. One student called that Raquel tried to blend in with her classmates by opening a book on grade level and appearing to be reading during silent reading until she realized her peers and teacher are unaware that she is not reading and starts to daydream. On the other hand, a student called Omar tries to comply by pulling a book on his reading level, but far below his grade level, out of his backpack to start reading. Once a few peers spot the book, they begin to tease and make fun of him (Enriquez, 2011). Reading below grade level is an embarrassment and becomes a social issue in middle school. The inability to read on grade level is not only an academic problem but also a social problem.

Before the beginning of the cross-age, reading-focused mentoring program sixth-grade participants selected books that were of interest and within their Lexile LPD range as determined by the pre-STAR reading assessment. Reading with a ninth-grade mentor twice per week, sixth-grade students received support through scaffolding to complete the book and increase reading achievement. Reading levels were determined by the pre-

STAR reading assessment to guide book selection. Through modeling, shared reading, and discussions in person and through dialogue journals, students were supported and scaffolded to reading gains. Through the support of the high school mentor, sixth-grade students were able to read and comprehend books at levels within their Lexile ZPD range as determined by the STAR prereading assessment. Reading with support allowed students to see themselves as successful readers, which has the possibility to increase future reading and school success. One case study examined a possible relationship between reading fluency and self-efficacy (Nes Ferrara, 2007). A student named Sally was included in the study; she revealed that her reading self-efficacy was related to what others thought about her reading ability. Throughout the study, as her fluency increased, her reading self-efficacy also increased, as did her perception of what others thought of her reading ability (Nes Ferrara, 2007).

Mustang Middle/High School is unique in the area because it is the only school in which middle and high school students share a campus. For this study, that factor was a distinct advantage, because the cross-age peer mentoring program included sixth-grade and ninth-grade students. However, the mentoring model could be adapted based on the students' needs in other schools in the district and other places in the nation with similar demographics. Schools that have elementary and middle school students on the same campus may even be able to target students reading below grade level in elementary grades and use the middle school students as the mentors.

Although 58% of Mustang Middle/High School's sixth-grade students showed learning gains on the 2013 reading FCAT, only 59% scored a 3, 4, or 5, signifying

reading at or above grade level. In 2012, 53% of sixth-grade students, and 2011, 58% of sixth-grade students, scored a 3, 4, or 5 (State of Florida Department of Education, 2011, 2012, 2013). A score of 3 indicates that a student is reading on grade level with a score of 4 or 5 showing that a student is reading above grade level. During the past 3 years, fewer than 60% of the Mustang Middle/High School sixth-grade students are scoring on grade level. Forty-one percent of the sixth-grade students at Mustang Middle/High School demonstrated below grade-level reading ability on the 2013 FCAT. The district average of sixth-grade students scoring a 3 or higher was 61% (Florida Department of Education, 2013). Mustang Middle/High School sixth-grade students have scored below this level for the past 3 years.

Among the eight middle schools in the district, two of the schools demonstrated the majority of their sixth-grade students were reading at or above grade level with 83% and 93% of their students scoring a 3, 4, or 5. Among the other six schools, sixth-grade students scoring a 3 or greater were 49%, 59%, 60%, 65%, and two were at 69% (State of Florida Department of Education, 2013). At Mustang Middle/High School, 58% and 53% of sixth-grade students scored a 3 or higher in 2011 and 2012, respectively.

Based on data from the 2013 Florida Comprehensive Assessment Test (FCAT), 41% of the Mustang Middle/High School sixth-graders were not reading at grade level. FCAT data also indicated that the majority of the schools in the school district had similar results (State of Florida Department of Education, 2013). This problem is not unique to the academic year 2012–2013, because data from past years show similar

trends. These data demonstrate a need to study how reading achievement among sixth-grade students can be increased.

A review of data indicates a lack of student reading achievement statewide as noted by large percentages of students scoring below grade level on the FCAT. Data show that below grade-level reading is also a national problem. According to the National Center for Education Statistics, in 2011, fourth-grade students in Florida earned an average scale score of 225 on reading assessments, which is above the national average of 221 (National Center for Education Statistics, 2011). Although this appears promising for Florida, when compared with other states, the scores are only average.

In addition, a clear achievement gap between White and minority students exists in both Florida and at the national level, signaling the necessity for considering in this study the variables that underlie the statistics. Of the fourth-grade students enrolled in Florida schools in 2011, the average FCAT reading scale score for White students was 235, for Black students 211, and for Hispanic students 221. The gap was even more evident when compared with the national average: White students, 231; Black students, 207; and Hispanic students, 210. Furthermore, the state reading average for students with disabilities was 203, whereas the national average was 190. The state average for English language learners was 197, and the national average was 193. Though the state data are not positive, the Florida average is slightly higher than the national average (National Center for Education Statistics, 2011). Grogan-Kaylor and Woolley (2010) examined how economic, family, and neighborhood factors contributed to the avoidance of problem

behaviors, a feeling of coherence, and increased grades. Results indicated that family and neighborhood economic factors had the strongest effect on the achievement gap.

This information relates to the study given the demographics of Mustang Middle/High School. White and Hispanic students were included in the study, as were ESE and ELL students. A large achievement gap exists between minority students, students with disabilities, and ELLs (National Center for Education Statistics, 2011). This gap is a concern because this population is not achieving at the level of its peers in reading and need additional support to do so. Fourth-grade data were used because, according to research, if the gap exists in upper elementary school, the trend continues into middle school and secondary education. The majority of middle school students identified as struggling readers at Mustang Middle/High School were often first identified based on their third-grade FCAT scores and were often retained based on a below-grade-level FCAT scores.

Evidence of the Problem From the Professional Literature

A review of the literature indicates the lack of student reading achievement statewide, with 58% in 2011, 57% in 2012, and 59% in 2013 reading at grade level as identified by a score of 3, 4, or 5 on the FCAT. On the 2013 reading FCAT, 41% of sixth-grade students in the state demonstrated below-grade-level reading ability at a score of 1 or 2 (Florida Department of Education, 2013). The literature indicates the lack of students reading proficiently is not isolated to the Florida Keys or even to Florida. The research also shows peer mentoring programs are successful in increased student

achievement. On average, only 31% of pupils in fourth grade and 28% of eighth-grade students read at a proficient level nationally (Lee, Grigg, Donahue, & Dion, 2007).

According to the National Assessment of Educational Progress (NAEP), there have not been significant changes in reading data between 2009 and 2011; however, there were increases seen in these scores as compared with the scores between 1993 and 2005. The NAEP scores range from 0 to 500, and achievement levels classify students as below basic, basic, proficient, and advanced. Proficient signifies a student is competent in challenging content, whereas proficient signifies superior performance. In 2007, 2009, and 2011, 33% of fourth-grade students in the United States scored below basic, with 34% scoring basic on the NAEP. These data signifies that 67% of fourth-grade students have reading achievement levels below the proficient level. Among eighth-grade students, 26% in 2007, 25% in 2009, and 24% in 2011 scored below basic, whereas 43% in 2007 and 2008, and 42% in 2011 scored at the basic level. These data indicate that 69% in 2007, 68% in 2009, and 66% in 2011 scored at the below basic or basic levels in reading achievement (National Center of Education Statistics, 2012). According to the Progress in International Reading Literacy Study (PIRLS) in 2011, fourth graders in the United States had a literacy score of 556 compared with the PIRLS scale average of 500. There were 52 educational systems included in the study; five had a higher average reading score than that of the United States. The United States was outscored by Finland, Hong Kong-CHN, the Russian Federation, and Singapore (National Center of Education Statistics, 2012).

In addition to remedial classes, "Students who score poorly on high-stakes tests may be retained and suffer adverse consequences for future high school graduation" (Stanley & Stanley, 2011, p. 99). Based on observations and discussions with sixth- and seventh-grade students who read below grade level, by the time a student enter sixth-grade, if they are reading below grade level, they become frustrated with school and are self-conscious when asked to read in front of their peers (C. Belotti, personal observation, 2013). They often consider themselves poor readers and have a poor reading identity. According to Hall, Johnson, Juzwik, Wortham, & Mosely, (2010); McRae & Guthrie, (2009) as cited in Hall, (2012) "The term reading identity refers to how capable individuals believe they are in comprehending texts, the value they place on reading, and their understandings of what it means to be a particular type of reader within a given context" (Hall, Johnson, Juzwik, Wortham, & Mosely, 2010; McRae & Guthrie, 2009 as cited in Hall, 2012, p. 369). It has been my experience while teaching students who read below grade level that reading identity affects reading achievement (C. Belotti, personal observation, 2013). The inability to read at grade level is not only an academic problem but also a social problem.

Lack of reading achievement extends beyond Mustang Middle/High School and the Marine County School District. In 2013, 47% of sixth-grade students in the state of Florida scored a Level 1 or Level 2 on the reading FCAT, indicating that they are reading below grade level (Florida Department of Education, 2013). In 2011, 67% of fourth-grade students and 66% of eighth-grade students scored below proficiently in reading in the United States (National Center of Education Statistics, 2012). Changes in

accountability policies have placed high expectations on middle-level educators to meet the academic, mental, social, and emotional needs of students while increasing rigor and producing high levels of student achievement. New expectations have caused many teachers to feel increased pressure for students to perform on assessments and, as a result, abandon methods of teaching that meet the needs of middle grades students (Powell, Cambers, Cantrell, & Rightmyer, 2013).

The push for accountably and the pressure that high-stakes tests place on educators may contribute to the lack of reading achievement for adolescent learners. With teachers facing new mandates and increased workloads, struggling readers may not improve their reading ability. Peer mentors may take this pressure off of educators and allow students to increase reading ability without adding to the workload of the educators.

Definitions

Perceptions: In this study, the perceptions of participants regarding the study were collected through interviews following participation in the 9-week cross-age peer mentoring reading-focused program. Perceptions are not opinions of the participants but rather were based on critical, informed judgment formed through their participation in the program. Burkitt (2012) defined *perception* as the following:

> [The] ability to see, hear, or become aware of the world through the senses we possess, such as sight, hearing, or touch. It is through the senses that the body perceives something and becomes consciously aware of it. But sense also means

> to have a feeling that something is the case, to sense it in a way that it might be meaningful for us. (p. 458)

Through participation in the cross-age peer mentoring program, students gained a sense of whether their involvement was meaningful to them personally and academically.

Mentoring: Packard (2003) defined *mentoring* as the relationship between a more skilled person, the mentor, and a less skilled person, the mentee.

Motivation: This term refers to "A willingness to engage in an activity and a willingness to persist in that activity, even when it becomes difficult" (Urdan & Schenfelder, 2006, cited in Malloy, Marinak, Gambrell, & Mazzoni, 2013, p. 273).

Significance

Educational Significance of the Study

Being proficient in reading is critical in the attainment of literacy. MacDonald (2010), an educator and researcher, wrote about the benefits of the paired reading strategy to increase reading proficiency. MacDonald noted that when students read proficiently, "this allows them to access the curriculum in all subjects and helps them to become confident, successful, motivated learners" (p. 15). Many students who do not read at grade level in sixth-grade have challenges reading textbooks and materials as they advance through core area classes in middle and high school. Increasing reading proficiency is critical for students to be successful throughout middle school, high school, and beyond. The state of Florida requires students to pass the 10th-grade reading FCAT with a score of 3 or greater as evidence that they are reading at grade level to make them eligible for high school graduation with a standard diploma. Students who do not pass the

reading FCAT receive a certificate of attendance, which signifies that a student attended high school and may substantially limit college and career options for students. It may be possible to prevent problems later in student motivation to read and reading ability is addressed in middle school.

> It is important to examine motivation to read in middle school because many states require standardized graduation exams and students who read poorly in adolescence are not likely to pass them. Students who fail these exams often drop out of school. (Ivey, 1999; Ivey & Broaddus, 2001; Wentzel, 1989, 1996, cited in Mucherah & Yofer, 2008, p. 214)

A gap in practice is evident and justified a local need for the research study. Peer-mentoring relationships have often been found to positively affect both groups of students involved. Benefits have been documented with elementary, secondary, and college-age students. Snowden and Hardy (2012) conducted a study on the effectiveness of a peer mentor program for mentors and mentees in an undergraduate health course at a university in England. According to Snowden and Hardy, mentoring programs can improve performance on assessments, reduce stress, and add overall value to the learning experience for both mentors and mentees (Snowden & Hardy, 2012).

For this project study, sixth-grade students met with their mentors weekly with a focus on reading and reading based activities. Mentors and mentees participated in a paired reading cross-age peer mentoring program. Macdonald (2010) indicated that paired reading can be an effective approach to increase reading ability and motivation to

read. When students read with a partner or aloud independently, they often gain confidence and improve fluency and reading accuracy (Macdonald, 2010).

The project study implemented a cross-age peer mentoring program and used pre- and post-reading scores of sixth-grade students to determine whether reading achievement increased following participation in the program. Peers often have a greater influence than teachers with regard to remediation and support. According to Wawrzynski, LoConte, and Straker (2011), "The strength of peer influence has several benefits on the outcomes of student learning, attitudes, and behaviors" (p. 17). The two main benefits noted in this study were that mentors serving as role models had the opportunity to confront their mentees about possible participation in risky behaviors. At the college level, this allowed the mentees to be more successful and have an overall improved college experience. Wawryznski, LoConte, and Straker (2011) conducted a long range study with a focus on peer educators. In 2005, Wawryznski et al. first administered the National Peer Educator Survey, and since then, it has been given to more than 1,700 peer educators. In addition to race, gender, and other basic questions, peer educators are asked what they perceived had the largest effect on encourages changes in others. Thirty-three percent believe that it was role modeling, 32% believed it was one-on-one time, 16% believed that it was a confrontation about risky behavior, and 12% believed that it was the presentation of an educational program (Wawrynski et al., 2011). Although this was at the college level, it relates to the study of role modeling and one-on-one time were both included in the study and were believed by the researchers to be the two areas with the highest effect on motivating a change within others. Mentees

often value the information provided by their peer mentors and that of their teachers; this is especially true for adolescents.

The purpose of this research was to determine whether a cross-age peer mentoring program would improve sixth-graders' reading achievement and motivation to read. The model that I created could be used throughout the district, in other grade levels, and even outside of the district to increase reading achievement among numerous students. Responsible correlation between the local issue and its functional application to other global situations will have significant potential for effecting social change. Participants in the study made gains in both reading and motivation to read,. Data from the study could significantly affect students, schools, and education in general. Increased reading ability will make students more successful in their other classes as they will have the ability to comprehend their texts. School reading test scores will increase, which could increase funding and other opportunities to schools. In addition to a comparison of test scores to determine an increase in reading ability, I conducted interviews with students to gather insight into the cross-age peer mentoring program. Based on data collected from the cross-age reading-focused peer mentoring program, it might be replicated in other schools throughout the state and country.

A peer tutoring program has been recognized by many researchers as an effective method in increasing student achievement. Dufrene et al. (2010) researched the outcomes of four middle school students requiring remedial support. These students were participants in a peer tutoring program. Following the program, data collected showed the oral reading rates of the students on instructional probes increased (Dufrene et al., 2010).

The lack of reading achievement is a large-scale problem, and it affects students and educators. Students who do not score proficiently on high-stakes tests may be retained or face consequences with regard to high school graduation. Teachers may face job loss and school funding can be affected by test scores (Stanley & Stanley, 2011).

If there were a way to increase reading achievement, both students and educators would benefit. The implications from the data generated from the cross-age peer mentoring program could have an effect much greater than at one middle/high school.

The data from the study can contribute to an understanding of the local problem: a lack of reading achievement growth among sixth-grade students. It does not suffice to say that sixth-grade students in Marine County are reading below grade level. The data demonstrate that fewer than 40% are reading at grade level, indicating a local problem. The data from the study can inform the findings by providing pre- and post-STAR reading scores for sixth-grade student mentoring program participants. From these data, conclusions can be drawn, and educators can take action to increase reading achievement of pupils throughout the district and state. It also shows the outcomes of a mentoring program. Sixth-grade program participants demonstrated reading gains; therefore, the study can serve as a model for improvement at other schools. The research derived from this study can also contribute to an understanding of the local problem as well as a possible solution to the local, state, and national problem of lack of reading achievement.

Based on data generated from the study, larger-scale mentoring programs can be implemented not only at Mustang Middle/High School but also at the other schools in the

district. Schools can tailor the idea of a cross-age peer mentoring program to meet the needs of their students within their school constraints.

Social Significance

A reading-based peer mentoring program also showed advantages for the mentors and mentees. The mentors experienced increased confidence and reading skills, whereas the mentors experienced academic and social improvements (Jordan, 2012). This research study included a mentoring program with a partnership between sixth-grade students reading below grade level (mentees) and high achieving ninth-grade students (mentors).

Lifelong consequences stem from poor school outcomes. These results are a predictor of future development for youth and can affect health, mental health, marital, parenting, career, and income (Woolley & Bowen, 2007). Poor school outcomes and their predictor of future development for youth are especially true with Latino and African American youth (Grogran-Kaylor & Woolley, 2010). Lack of reading ability may also affect the ability to acquire a job and, if hired, ability to fulfill the rigorous reading demands required in many jobs today. Employers have stated that high school graduates often lack the necessary reading skills to be successful employees (Kelley & Decker, 2009). According to Barton (2000, cited in Kelley & Decker 2009), “The literacy demands for all American occupations rose greatly in the past decades and will continue to rise in the future at a rapid rate” (p. 466). Lack of reading achievement can not only hurt students while they are in school, but it may also present challenges for struggling readers in the workplace.

Guiding/Research Question

The problem that grounds this case study was the low number of sixth-grade students scoring proficiently on the Florida Comprehensive Assessment Test (FCAT) at Mustang Middle/High School and in Marine County School District. The study paired sixth-grade students who were reading below grade level with ninth-grade students in a nine-week reading-focused cross-age peer mentoring program. The purpose of this study was to determine if a cross-age peer mentoring program would improve sixth-graders' reading achievement and motivation to read. Four research questions drove the proposed study.

The qualitative research questions that guided this research were:

1. What are sixth-grade student mentee perceptions of growth in reading ability and motivation to read following participation in the cross-age peer mentoring program?
2. How will the interactions among mentors and mentees demonstrate the effectiveness of the cross-age peer mentoring program?

Quantitative research questions that guided this research were:

3. Does 9 weeks of participation in the cross-age peer mentoring program change students' reading achievement, as measured by the STAR reading test?
4. Does 9 weeks of participation in the cross-age peer mentoring program change students' motivation to read as measured by the Motivation to Read Profile?

Review of the Literature

A review of literature from peer reviewed educational journals outlines research on teaching, reading and peer mentoring programs to include cross-age and same-age programs including many different age groups, populations, and subject areas. For this review of literature, I used online scholarly search engines, scholarly peer reviewed journals, and the Walden University to search for literature related to increased reading achievement and cross-age peer mentoring programs. Search engines that I used include Education Research Complete, ERIC, and ProQuest Central. Search terms include peer mentoring, cross-age and same age peer mentoring, increased reading achievement, benefits to mentors and mentees, increases in reading and motivation to read, history of mentoring, mentoring to increase academic achievement, and the achievement gap. Search terms for the section three review of literature include professional develop, mentoring, and increased reading achievement.

This review of the literature demonstrates the role of motivation in academic development with a focus on reading, identifies the benefits associated with peer mentoring programs, and justifies the use of a cross-age, reading-focused peer mentoring program for this study. When teachers understand how people learn, it positively impacts student learning. Also, students experience greater achievement when they understand how they learn (Askell-Williams, Lawson, & Skrzypiec, 2011).

Theoretical Framework

The theoretical framework that addresses the study is scaffolding and the work of constructivist Vygotsky. The Zone of Proximal Development (ZPD) “was understood by

Vygotsky to describe the current or actual level of development of the learner and the next level attainable through the use of mediating semiotic and environmental tools and capable about or peer facilitation" (Shabani, Khatib, & Ebadi, 2010, p. 238). Vygotsky believed "that learning should be matched in some manner with the child's developmental level" (Vygotsky, 1978, p. 32). Vygotsky discussed development regarding young children and the differences between their learning before entering school school learning (Vygotsky, 1978). Santora, Mason, and Sheahan (2013) used the Zone of Proximal Development of Vygotsky when discussing their science based mentoring program as it lends itself to mentoring. Santora, Mason, and Sheahan (2013) used the work of Lev Vygotsky and the ZPD as the theoretical framework for their study on mentoring. According to Cole and Cole (2001) and Kozulin (2003; as cited in Santora, Mason, and Sheahan 2013), the ZPD is defined as the difference between what a student can do with support and what they can do without. In opposition to standardized tests that measures how a student performs independently; Vygotsky's theory of ZPD compared a student's ability to work independently to how they can perform with the assistance of someone more skilled. Support of teachers, mentors, parents, peers, and others with a higher skill set can support students in building understanding. In this model career professional development was provided through a mentoring model. The basis for this study was that junior and senior members of an organization can learn from one another. In this model experts, upper-level trainees, mid-level trainees, and lower-level trainees provide professional development within the workplace using the mentoring model (Santora, Mason, & Sheahan, 2013).

Scaffolding breaks the learning into parts and provides support, in this case, a mentor, so that students can be successful with content that otherwise would be too challenging to achieve without support (Santora, Mason, & Sheahan, 2013). This is not to say that the same results could not be generated with adult support; however, given the constraints of most schools one-on-one adult support is not available for struggling readers. Student mentors can fill the role of a more advanced and capable individual in the area of reading to support their mentees to increased reading achievement. "Interactions with more advanced and capable individuals" (Nes Ferrara, 2005, p. 216) can support students to increased development in an area. According to theory, students can be moved from their current level of achievement to the next level through peer facilitation. The mentoring program will allow students to be supported while reaching the next level of performance without becoming frustrated. This could ultimately lead to reducing the achievement gap between White and minority students as gains in achievement will be more attainable.

The focus of this study was on a mentoring program that provided scaffolding to support increased student achievement. Scaffolding has been used to successfully improve student ability. Wu and Looi (2012) investigated the use of prompts to promote students to reflect when they acted as tutors to a computer-generated tutee. Using the learning-by-teaching concept, the computer-generated tutee allowed students to practice their tutoring skills through active teaching and reflection. The computer-generated tutee was interactive and responded like a real tutee. Through prompts from the computer-generated agent, students were successful in learning by teaching concepts. It was

determined that the overall use of prompts was beneficial and scaffolded students to be more reflective when the tutors and computer generated tutee worked together (Wu & Looi, 2012). While actual tutees were not used, the computer-generated agent responded to student prompts as if they were real tutees. This scaffolded student-tutoring skills and allowed students to learn content through teaching. The support from the computer-generated agent made this possible.

Benko (2012) studied the use of scaffolding to support writing development in adolescents. Much as scaffolding acts as a temporary support for a building under construction, scaffolding in the classroom is a temporary support for students to complete a challenging task or learn a new concept. One scaffold often found in writing instruction is the use of the five paragraph essay. The use of the five paragraph essay serves as a tool to advanced writing development. The use of the five paragraph essay in writing instruction helps students learn to organize their writing. This serves as the basis to increase complexity of the writing tasks after students have mastered this format. When scaffolding is used correctly in the classroom students can take ownership of their learning once they have mastered concepts through the support provided (Benko, 2012).

Askell-Williams et al. (2011) studied the cognitive and metacognitive strategy use of early adolescents and found that there was a significant need for improvement. The researchers collaborated with teachers to scaffold by explicitly providing instruction in the areas in need of improvement. As a result, teachers were able to incorporate new information into content area lesson plans; because scaffolding was used to support

students as they were learning new strategies. It is recommended that support is given to students and teachers in this area (Askell-Williams et al., 2011).

History of Mentoring

Packard (2003) defined mentoring as the relationship between a more skilled person, the mentor, and a less skilled person, the mentee. Donaldson, Ensher, and Grant-Vallone (2000; as cited in Packard, 2003) explains that the word mentor refers to a guide in Greek mythology. Mentoring is a research-based strategy that has been effectively used to improve both academics and social skills for several decades. Researchers on mentoring over the past 40 years have documented the benefits of the evidence-based strategy (Bowman-Perrot et al., 2013). According to Stamps (2005), "Mentoring has been important since the dawn of time but, recently, has been noteworthy as a powerful tool in fostering the personal and professional growth of our nation's youth" (p. 40). Khosla (2013), noted that throughout history mentors have been significant in serving as role models, teaching, and helping others develop their skills. This strategy has been used both within and outside of the educational system.

Effects of Mentoring on Mentee Academic Progress

It is important to be a skilled communicator to be a successful mentor who can have an impact on the learning of the mentee. To effectively mentor another individual, a person must be able to communicate clearly with them on their level. Palincsar and Brown (1986, as cited in Nelson-Royes, 2013), stated that "In an educational setting, the purpose of tutoring is to make needed provisions for students to attain necessary skills for academic success" (p. 48). Peer-tutoring/mentoring, both same age and cross-age can be

successfully increasing academic performance (Dufrene et al., 2010). Dufrene et al. focused on four middle school students who were receiving Tier II Response to Intervention strategies with a focus on fluency. Students receiving fluency intervention were paired with a peer tutor with a focus on increasing the student's oral reading rate when reading instructional passages. A multiple baseline design was utilized to measure the impact their time with a peer tutor had on reading fluency. A significant increase in reading rate was seen after the implementation of the peer-tutoring program (Dufrene et al., 2010).

Topping, Miller, Thurston, McGavock, and Conlin (2011) looked at both same-age and cross-age peer tutoring with an emphasis on reading in schools in Scotland. Topping et al. used the paired reading technique. Tutors and tutees participating in this study selected their reading materials. Tutors were required to select materials that were above the independent reading level of the tutee. While in pairs, students read and discussed the books and an emphasis was placed on ensuring that the tutee understood the content of the book. Results of the study showed students of low socio-economic status, girls, and students with lower reading levels made more significant reading gains than other participants. On the long-term evaluation of the study, a significant impact was seen in cross-age but not in same-age peer tutoring conditions (Topping et al., 2011).

Van Keer and Vanderlinde (2010) studied third and sixth-grade students in a program that included explicit instruction on reading strategies and cross-age peer tutoring. Thirty-nine teachers and 762 elementary school students were involved with the study. Van Keer and Vanderlinde focused on increasing student awareness of reading

strategies and reading comprehension skills. The purpose of the study was to determine if using explicit reading instruction and cross-age type of peer tutoring would improve student reading achievement. Van Keer and Vanderlinde (2010) determined that there was a considerable increase in reading strategy awareness in the third grade students who were involved in the program. Van Keer and Vanderlinde also found a significant positive impact on both third and sixth-grade students in overall reading strategy use.

For a difference perspective, Wawrzynski et al. (2011) looked at peer tutoring at the university level. It was determined that undergraduate students had the largest impact on improvement in their peers (Wawrzynski et al., 2011). Significant improvement was seen in both attitude and behavior of the undergraduate students. Through this study had an academic focus, tutors and tutees were encouraged to work together to have honest conversations about healthy lifestyle choices. As a result of the study, the tutors became respected leaders on the campus. Results demonstrated how particularly at the college level, students can work together to make increases in areas other than academics. In this case, the tutors acted as academic support for the tutees but also helped them to become acclimated to college life and avoid destructive behaviors by encouraging healthy lifestyle choices.

Hill, Francesca, and Giles (2010) studied medical students who were engaged in peer assisted learning with the first year students being the tutees and the third year students as the tutors. The mentees were taught clinical skills from their peers in a student lead program. Hill et al. gathered the perspectives of the students, tutors, and the coordinator, which helped the researcher to understand the value of the program.

Information obtained from one of the tutees showed that before beginning the program, she did not believe she could learn from other students and was afraid that she would be given wrong information. However, the experience for her was very beneficial. This study was deemed successful and significant learning gains were seen. It was determined that tutees learned more from their peer tutors than they typically do from their professors. It was also determined that the cause of this was that the first year students were more open to the information when it was presented by their peers (Hill et al., 2010).

In a similar study, Robinson and Niemer (2010) developed a Peer Mentor Tutor Program (PMTP) in response to the lack of retention of nursing students in a school. Students who were earning a low C average in their early semester classes were considered at risk for failing courses later in their program. The program was designed to increase retention and academic success of the nursing students. Ninety-seven students in jeopardy of failing courses later in their program participated in the first year. These students were placed in tutoring groups that included the at-risk students and peer mentor-tutors. Groups meet weekly for tutoring and mentoring on campus for two hours. Summaries of the group meetings and attendance records were kept and submitted to the faculty advisor. One faculty advisor was given a lighter teaching load for the semester to oversee the project. The mentor-tutors were also nursing students but had received grades of A or B in their beginning-level courses and wished to participate in the program. Students who were not included in the study were divided into two groups, a control group made up of students who qualified for the study but did not have a desire to

participate and another group of students who did not qualify for the study. The researchers compared outcomes for all three groups to make determinations about the effectiveness of the mentoring program. The objective of the mentoring program was to boost retention of nursing students with a focus on retention of nursing students during the first two semesters (Robinson & Niemer, 2010).

Eighty percent of participants completed the program. Of the students that were program completers seven students earned a grade of A, 46 earned a grade of B, and 36 earned a grade of C in their courses that received support from the PMTP. Eight students involved in the study were unsuccessful. Test scores throughout the year indicated that mentees received higher scores than the control group. In all their courses throughout the year, the mentees scored marginally or significantly higher than the control group (Robinson & Niemer, 2010)

In a similar study Snowden and Hardy (2012), inquired whether a peer mentoring program might have a positive impact on academic success of mentees and mentors enrolled in an undergraduate social health and welfare course in North England. The goal of the study was to conclude if the peer mentoring program would increase retention and performance on assessments of the students involved. The development of the program was based on the principles from a previous study that found senior students could be successful in supporting junior students in higher education (Snowden & Hardy, 2012). First-year students were the mentees while third-year students were the mentors. First and third-year students were notified of the study and were selected by volunteering to be involved in the study. Mentors supported the mentees while each mentor received support

from a member of the academic team. Each mentor and mentee were given a half day of training to prepare them for their role. A mentor and mentee were matched, paired remained matched for a year (Snowden & Hardy, 2012). Data for this case study were collected through semi structured interviews, questionnaires, reflective journals, student assessment, and student surveys.

The most significant affect was found in an increase in assessment data for mentees and mentors. Interviews revealed that the mentees believed they were positively affected by support from the student mentor. Mentees commented that their mentors helped to keep them motivated and support them throughout the course (Snowden & Hardy, 2013).

Lingo (2014) paired four sixth-grade students with mild disabilities with four high school students in a fluency focused peer tutoring program. High school tutors implemented *Great Leaps Reading* (Campbell, 1998, as cited in Lingo, 2014). High school tutors received training in the reading program before the start of the 15-minute tutoring sessions. The sessions included repeated timed reading, immediate feedback provided by the tutors, and time for the sixth-grade students to track their reading fluency (Lingo, 2014). Fluency is an essential element of reading, because when students read fluently they become stronger readers. A lack of fluency interferes with comprehension as students are decoding words, which takes away from the meaning of the text. As a product of participation in the tutoring program and use of this reading program, all four participants demonstrated gains in fluency (Lingo, 2014).

The literature reviewed above may support the assumption that peer mentoring and tutoring programs can increase academic skills. The examples above demonstrate the versatility of peer mentoring and tutoring programs. Mentoring and tutoring programs can increase academic success in both cross and same age situations as well as from young children to college students. While there are several reading based examples, the literature also demonstrates that peer mentoring and tutoring can be successful in many academic areas. The research, by Lingo (2014) supported the notion that sixth-grade participants in the reading-focused, cross-age peer mentoring program are likely to demonstrate increased reading achievement after working with their high school mentor across 9 weeks.

Effect on Mentee and Mentees Self-Esteem

Miller, Topping, and Thurston (2010) analyzed the impact peer tutoring could have on reading achievement and subsequently on the self-esteem of the participants in both same-age and cross-age peer tutoring situations. Miller et al. focused on the effects paired reading strategy had on the self-esteem of the participants. Students ranging from 10-11 years old, from four schools, were selected randomly to participate in one of the two groups of either same-age or cross-age peer tutoring for 15 weeks. Significant gains in self-esteem were seen in both same-age and cross-age peer tutoring situations. Gains were also seen in regards to self-worth in the cross-age peer tutoring situations (Miller et al., 2010).

Self-efficacy contributes to motivation and learning (Seawall & St. George, 2000, cited in Kelly & Decker, 2009). Self-efficacy is defined as what a person perceives as

their ability to complete a task (Kelly & Decker, 2009). According to Wolters and Pintrich (1998; as cited in Kelly & Decker, 2009), there is a significant link between academic achievement and self-efficacy "because efficacious students are more metacognitive, which in turn leads to better performance" (Wolters & Pintrich, 1998, p. 468). Students who have a lack of self-efficacy often avoid tasks which lead to lack of engagement and failure (Bandura, 1997; Linnenbrink & Pintrich, 2003, cited in Kelly & Decker, 2009). Students who believe that they are poor readers often avoid reading which does not support development in reading ability. Emotions have the capacity to control cognitive function as it can either shut it down or activate it (Soureshjani & Naseri, 2011). Poor self-esteem and the way a student feels about their ability to read could have an impact on their reading proficiency.

Though most researchers focused primarily on the outcomes of the mentees with little data provided about the benefits of the mentors, Karcher (2009) provided a unique perspective. Karcher collected data to identify if there were rises in academic connectedness and self-esteem in high school students who were placed in the role of cross-age peer mentors. Data were collected to determine if there were fall to spring changes in the mentors involved in the study and compared this data with that of their peers who were not participating in the study. High school mentors ranged from ninth to 12^{th}-grade with the majority of mentors from 10^{th} and 11^{th} grade. The mentors were paired with fourth and fifth-grade mentees.

Prior to and following the 15 week mentoring sessions were complete The Hemingway: Measure of Adolescent Connectedness was used to determine whether

mentors experienced an increase in connectedness. The Self-Esteem Questionnaire was also administered to the mentors as a pre and post assessment used to identify if a rise in self-esteem was experienced by mentors. Mentors experiences significant increases were seen in both areas as compared to their peers who were not included in the study (Karcher, 2009).

Jordan (2012) studied first-year students in an all-girls secondary school in South-East Ireland through a cross-age tutoring program to determine if mentoring was an effective method of raising the stand of literacy. The goal of the program was to increase literacy and self-esteem. Low-achieving/at-risk first-year students were targeted for the program based on their reading scores and recommendation of their English teachers. Transition students were students in the year between junior and senior cycle were being prepared to be more independent in their learning. Tutors and tutees used the paired reading strategy, under the direction of a teacher. According to Warrington and George (2014) paired reading is when two students read together. In most cases paired reading pairs a younger and older student or same age students who are at different reading levels. The younger or less experienced reader selects the books. In paired reading the older or more experienced reader is encouraged to praise the younger or less experienced reader and to talk about the book that is being read (Warrington & George, 2014). Participants stated the biggest benefit of the paired reading strategy was related to literacy and social development (Jordan, 2012). The tutors reported that benefits included the opportunity to help others, an increase in confidence and personal reading skills, the opportunity to be a leader the following year, improved time management skills, and

improved patience. Following the program the tutees were surveyed and reported that they benefited socially as well as academically and believed that they experienced significant improvement in reading skills.

MacDonald (2010) examined the use of the paired reading strategy to increase reading achievement. This study spanned three years and took place in a small secondary school in Scotland. The purpose of the MacDonald study was to identify whether the use of the paired reading strategy and a phonic program would increase reading achievement in ten first level (S1) students in secondary school who were identified as having significant reading deficiencies. In Scotland, S1 students range in age from eleven to thirteen. In the first year of the study, the S1 students read with a partner who was a stronger reader. Words that were not pronounced correctly or were unknown were charted and practiced. In the second year of the study, students participated in a structured phonic program. In the third year of the study, students used the paired reading strategy only at home and were given practice in breaking down more complex words. MacDonald (2010) noted improvement of reading accuracy in all of the S1 students involved in the study. All of the students involved felt that the program helped them to improve their reading ability (MacDonald, 2010).

Nes Ferrara (2005) determined that increased reading fluency could lead to increased self-efficacy. Nes Ferrara followed an 11-week intervention program with a focus on improving reading fluency. Fluency was recorded weekly for participants, and the Reader Self-Perception Scale was administered three times throughout the study. The study used a Vygotskian approach in pairing a more fluent reader with a less fluent

reader. Pairs participated in intervention sessions using the paired reading strategy. The analysis from the study focuses on the experiences of one twelve-year-old student named Sally. She began the study as a shy student lacking engagement and fluency. As her fluency rate started to rise so did her engagement and confidence level. While her Reader Self-Perception Scale did not show gains, the researchers' observations and conversations with Sally indicated that she had made significant gains in the area of self-efficacy. Increases in her fluency rate were documented (Nes Ferrara, 2005).

The literature demonstrates that there is a connection between participation in peer mentoring and tutoring programs and increased self-esteem. Studies show that such programs can support student transitions in schools and support their acclimation in new school environments. The literature also supports the notion that both mentors and mentees often experience increased self-esteem following participation in peer mentoring and tutoring programs.

Effects of Mentoring on Reading Identities, Attitudes About Reading, and Motivation to Read

Malloy et al. (2013) developed the Motivation to Read Profile (MRP). Malloy and Gambell are professors in the Eugene T. Moore School of Education, Clemson University, Marinak is a professor in the School of Education and Human Services, Mount St. Mary's University, and Mazzoni is an independent literacy consultant in Elkridge, Maryland. They identified the relationship between having students engaged in literacy activities and increased reading ability and wanted to develop a tool to measure student motivation to read. Malloy et al.'s (2013) research indicated that there was a

connection between motivation to read and academic success in the area of reading. Malloy et al. (2003), stated, “Students who are engaged have their eyes on what they are doing, are ardently attending to the teacher’s read-aloud, or are in reflective repose as they read independently” (p. 273). Students who are motivated to read often delve deeper into the text, fully participate in literacy instruction, and often share what they are reading with their peers, this leads to deeper literary engagement and increased reading ability (Malloy et al., 2013).

Motivating students is a top concern for educators. Teachers are primarily concerned with motivating students to read and creating interest in reading (O’Flahavan, Gambrell, Guthrie, Stahl, & Alvermann, 1992, cited in Gambrell, Palmer, Codling, & Mazzoni, 1996). According to Gambrell, Palmer, Codling, and Mazzoni (1996) students who are highly motivated often create their own opportunities for reading. Motivation is defined by Glynn et al. (2009; as cited in Cetin-Dindar, 2015) as “the internal state that arouses, directs, and sustains students’ behavior towards achieving certain goals” (Glynn et. Al., 2009 as cited in Cetin-Dindar, 2015, p. 238). Students who are motivated to read, read for many reasons to include satisfaction, curiosity, and involvement. Also students who believe they are keen readers often score higher on reading assessments compared to their peers who do not hold these beliefs (Paris & Oka, 1986; Schunk, 1985, cited in Gambrell, Palmer, Codling, & Mazzoni, 1996). Students who read more because they are motivated to read have stronger reading skills because they developed these skills through practice. This demonstrates a connection between motivation to read and reading achievement (Gambrell, Palmer, Codling, & Mazzoni, 1996).

Students who read below grade level in middle school often lack the motivation to read and are self-conscious about their lack of reading ability. According to Enriquez (2011), "Reading identities are the accumulation of beliefs, characterizations and official documentation of what students can and are willing to do while reading printed texts" (p. 91). Enriquez's qualitative study looked at the perceptions of two eighth grade struggling readers Omar and Raquel. Though very different, the students in the study both demonstrated self-consciousness about reading below grade level (Enriquez, 2011).

Fisher and Frey (2012) offered a different perspective on motivation to read with a focus on motivating boys to read. Research indicates that motivating boys to read reaches beyond locating texts with a male protagonist or offering boys graphic novels. One hundred fifteen ninth-grade students were interviewed to determine their views on what mattered to them in their English classes. This article addresses the gender gap in reading evidenced in research. This article focuses on three boys who offer different perspectives on their experiences of reading. Fisher and Frey (2012), noted the students valued having a purpose for reading, a space conducive to independent reading, and choice about what was read (Fisher & Frey, 2012).

On average, 31% of students in fourth grade and 28% of eighth grade students read at a proficient level (Lee et al., 2007). The majority of students in fourth grade and eighth grade do not demonstrate strong grade level reading proficiency (Melekoglu, 2011). There is a correlation between the motivation to read and reading ability. Motivation to read is an influential factor in reading proficiency (Sideridis & Scanlon, 2006). Sideridis and Scanlon (2006) researched the impact motivation to read could have

on student reading gains. According to Melekoglu (2011) students who demonstrate low motivation in most cases have poor performance on reading tasks. When students are motivated to read they often read more. According to Cambria and Guthrie (2002) students are motivated to read for one or all three of these factors; interest, dedication, and confidence. They may enjoy reading, believe reading is important, or read because they know that they are a strong reader or more than one of these reasons (Cambria & Guthrie, 2002). Students that are motivated to read also respond better to reading intervention program provided for struggling readers (Melekoglue, 2011). Additionally, Sideridis and Kaplan (2011) studied the link between success and persistence. They determined that students displayed more persistence on a task when they experienced success. Displaying persistence could be linked to engagement and motivation (Sideridis & Kaplan, 2011).

Melekoglu (2011) conducted a study with middle and high school students both with and without learning disabilities who were identified as struggling readers. Melekoglu researched the impact of how having the motivation to read affected the reading gains of thirteen students with disabilities and twenty-five students without disabilities from two middle schools and one high school. The READ 180 program, a structured, research-based reading program designed specifically for students with reading challenges, was used to provide explicit reading instruction daily for 18 weeks to participants. The READ 180 program was delivered to students by teachers trained in the program. Reading achievement was measured by the Scholastic Reading Inventory and motivation to read was measured by the Adolescent Motivation to Read Survey.

Implementation of the program and administration of the reading assessment was given by READ 180 teachers within the middle and high schools where the study took place. All students demonstrated significant learning gains and an increase in motivation to read for students without disabilities (Melekoglu, 2011).

Schiefele, Schaffner, Moller, and Wigfield (2012) conducted a review of literature that discussed the different dimensions of reading motivation related to reading behavior and competence. Schiefele, Scaffner, Moller, and Wigfield (2012) stated that motivation could have a significantly larger impact on students' processes and products of learning above other factors. There is an effect of intrinsic reading motivation on student reading behavior and competence (Schiefele, Schaffner, Moller, & Wigfield, 2012). All academic areas require students to be competent readers to read the materials and process new information; therefore, reading comprehension is an important factor in student achievement. Schiefele, Scaffner, Moller, and Wigfield (2012) gathered research primarily from a psychological perspective from 1990-2011 for this review. Schiefiele, Schaffner, Moller, and Winfield, (2012) confirmed that intrinsic, not extrinsic reading motivation makes a difference in reading behavior and competence.

Conradi, Jang, Bryant, Craft, and McKenna (2013) conducted a classroom survey with 4,491 sixth through eighth grade students in twenty-three states and the District of Columbia to examine the attitudes adolescents have toward reading. Conradi, Jang, Bryant, Craft, and McKenna (2013) determined a need for this study after working with middle and high school teachers and determining that motivating adolescents to read was a challenge for teachers. The authors wanted to discover why reading is often a low

priority for adolescents. Conradi, Jang, Bryant, Craft, and McKenna (2013) documented that the attitudes of students towards reading decreases as they advance throughout their education. There were several factors determined to cause this decline to include a student's perception of themselves and reading identity as well as if they value reading. The Survey of Adolescent Reading Attitudes was used for this study (Conradi, Jang, Bryant, Craft, & McKenna, 2013).

Schaffner, Schiefele, and Ulferts (2013) conducted a study that examined the connection among how much time students spent reading, the students' motivation to read, and their reading comprehension. The study determined that there was a link between intrinsic and extrinsic motivation and the amount the students read as well as their comprehension (Schaffner, Schiefele, & Ulferts, 2013).

Hall (2012) examined the reading identities of students and tried to determine if reading identities could be rewritten. The author met an eighth grade student who was a struggling reader and had a negative reading identity. Reading identify is how capable someone feels they are in comprehending texts. The author engaged students in discussions about to improve their reading identities. Reading identity was influenced by the students, their peers, and teachers. The study showed students who identify as being a poor reader will not want to read and will lose interest in reading. Students revealed that self-selected reading materials led to making them want to read and that in school they often only read because they had to not because they had a desire to. Data were gathered for this study using a short questionnaire in addition to discussions with students (Hall, 2012).

Kelley and Decker, (2009) explored motivation to read of sixth-, seventh-, and eighth grade students in Central Florida. A modified version of the Motivation to Read Profile (MRP) was used as a data collection tool for this study. The MRP was administered to students during their language arts classes. Motivation to read, self-concept, and the value placed on reading were measured for more than 1,000 sixth-, seventh-, and eighth grade students. Kelley and Decker sought to measure levels of student motivation to read. The goal of the study was to draw conclusions about the decline in reading scores among adolescents. Female students had a slightly higher motivation to read than male students. Even though a correlation between motivation to read and FCAT scores was not made, it was also determined that both FCAT scores and motivation decreased as grades became higher. Sixth-grade motivation to read was significantly higher than that of eighth graders (Kelley and Decker, 2009).

Mucherah and Yoder (2008) explored reading motivation, and its relationship to student standardized test scores. Over three hundred sixth and eighth grade middle school students were involved in this study. It was determined as in other studies that students who had confidence in their reading ability read more challenging materials and scored better on reading assessments than their peers who did not feel this way about their reading ability (Mucherah & Yoder, 2008).

Brinda (2011) focused on gathering information directly from students about what would make the difference for them in valuing the process of reading and enjoying books assigned in school. They determined that students often struggle with reading when they advance from elementary to middle school as the texts become harder to read. High

school students and pre-service teachers were interviewed to gather information for this study. Both the high school students and pre-service teachers confirmed that their reading struggles and negative feelings towards reading began around fourth, fifth, and sixth-grade which is consistent with what the literature says. The literacy ladder was introduced to students and made a significant impact on their reading ability and attitudes towards reading. The ladder supports students in becoming readers. As in other studies, this one also determined that providing students with time and space for independent reading was crucial to their reading improvement (Brinda, 2011).

Ivey and Johnston (2013) examined the value of self-selected reading materials by adolescent readers. In this study, the perceptions of seventy-one engaged adolescent readers were measured as the school year was ending. The students received reading instruction through the use of "self-selected, self-paced reading of compelling young adult literature" (Ivey & Johnston, 2013, p. 255). Students were interviewed towards the end of the school year to establish their perceptions about self-selected reading materials. Data were also collected throughout the study through biweekly observations, informal discussions with students, and video/audio documentation of student-initiated book discussions to determine the impact self-selected reading materials had on student reading achievement. At the end of the year, students and teachers were interviewed to determine the impact of the study. Results of this study found that young adults who self-selected reading materials engaged in reading (Ivey & Johnston, 2013).

Morgan and Wagner (2013) also examined the benefits of using self-selected reading materials. In this study, a high school teacher implemented a three-week long

self-selected reading unit. The goal was to expose his sophomore students with the experience of reading just to read. Students were given mini lessons after reading their self-selected reading materials and then met with the teacher. Students kept journals throughout the unit. The teacher was unsure of the study as he was concerned that students would not obtain the skills they needed through self-selected literature. After the study, he determined that more control over student reading was given through self-selection. He felt that he was still able to teach the necessary skills just in a different format. He continued to offer opportunities for student choice throughout the year (Morgan & Wagner, 2013).

Based on the literature it can be concluded that there is a significant link between motivation to read and the ability to read. A number of different studies structured in various ways using different populations determined that this link exists. If students are motivated they will read more challenging texts and be engaged in reading instruction. As a result, this will increase student reading achievement. In the study sixth-grade participants were given the Motivation to Read Profile as a pre and post-assessment to determine if improvements were identified following participation in the reading-focused, cross-age peer mentoring program. Increases were demonstrated on the post assessments.

This literature review examines studies about mentoring programs with a focus on increased reading ability and motivation to read. This relates to the study as the focus is a cross-age peer mentoring program and the impact participation in the program had on reading achievement and motivation to read of the sixth-grade mentees. Students and educators can benefit from the data derived from this study as reading achievement is a

problem at the local, state, and national level that can be addressed through mentoring programs.

Implications

Based on the data from the study additional cross-age peer tutoring programs may be implemented using the study as a model to increase reading achievement for struggling readers. Using the data from the study a three-day professional development workshop will be designed. The professional development project can be provided to teachers and administrators in the district who wish to implement a cross-age peer mentoring program in their schools. Professional development training will focus on the research behind peer mentoring programs, the results of the study, and implementation details. Additionally, school teams will have the opportunity to work together during the three days to design a program to meet the instructional needs of students.

Professional development materials, including electronic and print resources, are presented in Appendix A. Training materials can be made available to educators outside the county who are interested in peer mentoring programs, similar to the one presented in the study.

Summary

Research by Jordan (2012) and Lingo (2014) indicated that peer mentoring can be an effective way to increase student achievement in reading. Given the local problem of lack of reading achievement for sixth-grade students a cross-age peer mentoring program was implemented at a small sixth through twelfth grade educational facility in the Florida Keys. Sixth-grade students who were identified as reading below grade level by a score

of 1 or 2 on the fifth-grade FCAT were paired with ninth-grade students with at least a 3.0-grade point average and a score of 3, 4, or 5 on the FCAT. Pairs of students met two times weekly for 9 weeks and participated in a cross-age peer mentoring program using the paired reading strategy. Using pre and post assessments reading achievement was measured to determine if growth occurred following participation in the program. Sixth-grade participant motivation to read was measured through the utilization of the Motivation to Read Profile, and their perceptions of growth in reading ability and motivation to read were gathered through interviews. Sixth-grade students overall perceptions of participation in the program during interviews and interactions with mentees and mentors were recorded through observations on the Observational Protocol collection sheet during the mentoring sessions. A mixed methods case study was used for the study.

Section 2: The Methodology

Introduction

Research is defined by Merriam (2009) as an investigation into a topic in a logical order. Merriam explained that in qualitative research, the researcher works through an inductive process to gather data needed to build theories and concepts. Through the use of interviews and observations, larger themes emerged from the data collected (Merriam, 2009). The basis of this study was the reading achievement and motivation to read scores for sixth-grade students reading below grade level before and following participation in a cross-age peer mentoring program. In addition, during the study, data were collected during observations of the interactions between the mentors and their mentees as they participated in the cross-age peer mentoring. After participation in the program, I interviewed sixth-grade students to determine their perception of their participation in the program. Stake (1995) noted that in qualitative research, emphasis is placed on interpretation. Using observations and other data sources, researchers can draw conclusions (Stake, 1995). I used a mixed-methods research approach to address the research questions. In this section, I will describe this study's design, sampling, data collection, and data analysis procedures.

Through the use of a mixed-methods approach, "there is more insight to be gained from the combination of both qualitative and quantitative research than either form by itself" (Creswell, 2009, p. 203). Through the collection of qualitative and quantitative data, it was possible to determine whether an increase in reading scores was evident for the sixth-grade participants through comparison of reading data before and after

participation in the reading program. Through interviews, I identified that sixth-grade students noted growth in reading ability and motivation to read. I was able to capture student perceptions of their thoughts and feelings about reading with a high school mentor and increases in reading ability and motivation to read through interviews. Through interviews, I determined that the sixth-grade mentees believed that the mentors were helpful in their reading development and believed that they had become more proficient readers. Through observations during the mentoring sessions recorded on the Observational Protocol collection sheet, I was able to gain a better understanding of the effectiveness of the program based on student interactions. I was able to observe how mentors and mentees interacted with one another and how this changed with time as they became more comfortable with one another. Making notes during the observations allowed me to review mentor and mentee actions and interactions and make determinations about what qualities contributes to effective mentoring.

Yin (2014) defined a *case study* as a study that "investigates a contemporary phenomenon ("the case") in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident" (p. 16). A case study mixed-methods approach was used for this study to allow me to gather both qualitative and quantitative data to study the mentoring program in depth. According to Lodico, Spaulding, and Voegtle (2010), "Case studies typically focus on small groups or individuals within a group and document that group's or individual's experiences in a particular setting" (p. 15). In this study, I examined a small group (sixth-grade students involved in the study) and their experiences. Ninth-grade students were involved in the

study as tutors, but data were not collected on this group. I documented the experiences of this group and students within it in the particular setting of a reading-focused, cross-age peer mentoring program. This was a case study because it had a mixed- methods approach and were used to examine possible change in reading test scores and motivation to read of the sixth-grade students in addition to their perceptions of growth in reading and motivation to read.

Initially, a pretest and posttest research design was considered for this study. This design was considered because the reading scores for the sixth-grade participants before and following the study were compared to determine possible reading gains. However, I determined that it was too limited to generate the necessary data to answer the research questions. A change in reading pre and posttest scores would determine whether reading gains were made; however, this would not identify the perceptions of the participants regarding the study. An increase in reading and motivation to read scores would also not determine whether sixth-grade motivation to read increased through participation in the cross-age peer mentoring program.

In a case study, "the 'case' may be a single individual, several individuals separately or in a group, a program, events, or activities" (Creswell, 2009, p. 465). In this case study, the case was a reading based cross-age peer mentoring program. I conducted a case study to determine the effectiveness of the program. A case study was the most suitable research design for this study for many reasons. A case study enables a researcher to study a program in depth (Creswell, 2009). In a case study, "the researcher seeks to develop an in-depth understanding of the case by collecting multiple forms of

data" (Creswell, 2012, p. 465). This study included a strong relationship between descriptive analysis and inferential judgment. Self-critical examination of credibility and validity on the part of the researcher played a significant role in the study. The potential limitations became a necessary strength of this research method. In this study, deeper understanding of the case were derived from a comparison of sixth-grade participant STAR data, Motivation to Read Profile scores, observations during the program, and interviews with sixth-grade participants following the program.

In a case study boundaries must be determined to fence in what will be studied (Merriam, 2009, p. 40). In this study, the boundary was the mentoring program. The outcomes of the mentoring program are the case study. This study was confined to the six mentees and six mentors involved in the program. According to Merriam, "A case study is an in-depth description and analysis of a bounded system" (p. 41). The study occurred during the school day, it was bounded as it was physically separated from the general population and held in a quiet environment in one of the buildings on campus. Having the program on campus allowed the program to be assessable to students but also allowed me to conduct it without interruptions.

Sponsorship of the research study was granted by both the former principal of the school where the research occurred, and the former reading and Language Arts district director. Support of the study was also granted by the new principal of the school where the research occurred and the new reading and Language Arts district coordinator. Due to this sponsorship, I was allowed access to the fifth-grade FCAT scores and given the

ability administer the pre and post STAR reading test to sixth-grade study participants. See the data use agreement in Appendix C.

The students were made available to me to participate in the study during elective classes; the principal and elective teachers made this possible. Sixth-grade students were used as they were not my students. Following the study, students were made available during the school day for interviews. A substitute teacher was provided twice per week for the 9 weeks during the mentoring program period so that I was available to facilitate and observe the sessions. In addition, a substitute teacher was provided so that I was available to conduct participant recruitment and student interviews during the school day.

Both the school principal and the district's reading and language arts coordinator provided support for the mentoring program and the project. They granted permission for study to take place on the school site, made the students available to participate in the mentoring program, made the researcher available for the mentoring sessions by providing a substitute teacher, and made data available for participant selection. The sponsorship of the school and the district also provided credibility when seeking authorization from parents and guardians for their minor students to participate in the study. Parents provided written consent and students provided written assent before data collection. The International Review Board granted permission before the start of the study.

Setting and Sample

Sampling for this study was purposeful. Creswell (2012) defines purposeful sampling as when "researchers intentionally select individuals and sites to learn or

understand the central phenomenon" (Creswell, 2012, p. 206). For this study both the selection of the school site and the participants were purposeful. The sample size was twelve students, six mentors and six mentees. Sixth-grade students reading below grade level as determined by a fifth-grade reading FCAT score of a Level 1 or 2 were identified as potential mentees. The parents of qualifying students were contacted regarding the program. Parents were informed that if they gave permission for their sixth-grader to be involved in the study that they would attend the mentor sessions instead of the physical education classes twice per week for 9 weeks. Six parents gave permission for their sixth-grade students to be involved.

Ninth-grade students who had a 3.0-grade point average and had scored a 3, 4, or 5 on the last reading FCAT that they took were identified to be potential mentors. Ninth-grade students who met these criteria and were in the leadership class during the period of the day that the program took place were given an informational presentation about the program. Following the presentation, interested ninth-grade students were interviewed to determine their interest and commitment to serve as a mentor. A focus was placed on communication skills as one study found strong communication skills are necessary for mentoring students to become successful tutors (Nelson-Royes, 2013). It was important to interview potential mentors to determine a possible fit for involvement as a mentor. Kissau and Tosky King (2014), noted the importance of placing an emphasis on and understanding the characteristics of effective mentors. Following the interviews, the six high school mentors were selected.

Written parent permission was not required to be a participant in the mentoring program as it occurred during the school day. Following mentoring program participant selection of both mentors and mentees study participants were recruited from that group. Written parent consent was required for participation in the study as all participants were under 18 years of age, informed student assent was also necessary to participate in data collection. All students selected to be mentors or mentees in the mentoring program received parent consent and granted informed assent to be a study participant. After mentoring program participants had been selected by the school, I issued parent consent forms to inform parents of the study and gain permission for data collection.

Parents gave permission for each of the six mentors and six mentees to participate in the mentoring program and to be interviewed. Students could decide to take part in the mentoring program and not the study, however, in this case, all of the students chose to be involved in both the mentoring and interview parts of the study. Parents granted permission for all of the students recruited as participants for the mentoring program to be part of the study.

Measures for Ethical Protection or Participants

The project entails no threat to human subject violations. This study and the data collected associated with it was approved by Walden University's IRB Committee. The approval number from the IRB is 04-09-15-0077843. Additionally, strict controls were built into data collection and analysis to maintain researcher credibility and avoid intrusion of theoretical or personal bias. The sixth-grade participants were not known to the researcher before beginning the study. The researcher was a seventh grade Language

Arts teacher and therefore, did not have contact prior to the study with sixth-grade participants. Additionally, during the study the researcher held no authority over the participants as she was not their teacher and did not issue grades to them. All student names were removed from reading, and motivation to read assessments and interview data. Student numbers were used when data were discussed instead of names.

Prior to the first mentoring session mentors were trained in the paired reading strategy, questioning strategies, the use the dialogue journal, and other strategies for working with struggling readers. Mentors were also taught to wait for a period of time to let their mentee try to sound out words before providing the correct word. Mentors were also trained in relationship building strategies and given the format for the mentoring sessions. During the mentoring sessions, I observed and recorded notes about the interactions between mentors and mentees. Each student had parental consent in writing before participation in the study. In accordance with IRB guidelines to protect the participants in the study, a counselor was available during the mentoring sessions in the event any of the participants were upset about being considered a below level reader. None of the participants required the counselor's intervention.

The final sample for this study was diverse and reflected the student demographic at Mustang Middle/High School. Table One and Table Two below outline the demographics of the sixth-grade and high school mentoring participants. Table One demonstrates the makeup of the sixth-grade participants (see Table 1), and Table Two illustrates the makeup of the high school participants (see Table 2). The tables indicate the gender and ethnicity of the mentees and mentors included in the study. Additionally,

the tables include if students are enrolled in the Exceptional Student Education program (ESE) to include gifted and/or the ELL program. The tables also include students receiving free and reduced lunch to indicate low income. Additionally, beginning reading grade level equivalency (GE) is noted for each sixth-grade participant.

Table 1

Sixth-Grade Participant Demographics

ID	Gender	Ethnicity	Pre-GE	ESE	ELL	Free/reduced lunch
Mentee 1	Male	Hispanic	2.5	No	Yes	Yes
Mentee 2	Male	White	3.4	Yes	No	Yes
Mentee 3	Female	White	4.2	No	No	Yes
Mentee 4	Female	White	5	No	No	No
Mentee 5	Female	Hispanic	4.3	No	Yes	Yes
Mentee 6	Male	Hispanic	2.9	Yes	No	Yes

This table demonstrates demographics of the sixth-grade participants. The pre-GE or reading grade level equivalency before participation in the reading-focused cross-age peer mentoring program is noted for each student. In the results section their ending GE, following involvement in the program with a comparison to evaluate growth is noted. Student one is currently enrolled in ELL classes and receiving direct services while student five is still considered ELL but is on consult, in all mainstreamed classes and only receives extended time on assessments as an accommodation. All students noted as ESE are in mainstream classes with their non-ESE peers and receive different levels of support and accommodations in those classes. None of the students involved in the study are self-contained. The next table reviews the demographics of the high school participants.

Table 2

High School Participant Demographics

ID	Gender	Ethnicity	ESE	ELL	Free/reduced lunch	Reading FCAT	GPA
Mentor 1	Male	White	Gifted	No	Yes	3	3.11
Mentor 2	Male	White	Gifted	No	No	5	4.00
Mentor 3	Female	Hispanic	No	Exited	Yes	3	3.88
Mentor 4	Female	Hispanic	No	No	Yes	4	4.00
Mentor 5	Female	Hispanic	No	No	Yes	5	3.31
Mentor 6	Female	Hispanic	No	No	Yes	3	3.66

The table above shows the demographics of the high school student participants that served as mentors in the study. All of the mentors were ninth-grade students, had a grade point average of 3.0 or greater, and scored a 3, 4, or 5 on the last FCAT that they took indicating on or above grade level reading ability. All of the mentors were leaders within the school, three were class officers, and all were part of the leadership class and involved in other school activities. Student number six was part of the ELL program in elementary school but has exited the program and no longer receives any services or accommodations from the program. The ethnic makeup of study participants reflects the demographics of Mustang Middle/High School, 46.99% White and 43.37% Hispanic, Marine County School District, 2013).

Instrumentation and Materials

Sponsorship of the study by the school and school district was granted and enabled the researcher to have access to the students for the study for one period twice a week for 9 weeks during the school day. Students participated during physical education

and leadership electives so that they were not missing core content time. The ninth-grade students were made available for one period before the study for mentor training. During the training, the trainer provided preparatory instruction to help the mentors understand the serious intention of their participation in the program. The intent was to strengthen their sensitivity to the significant role they could play in enhancing the younger students' appreciation for learning without being judgmental or intimidating. The sixth-grade students were made available for two periods before to the study for orientation. During this session, a relationship was established between the researcher and the participants, the pre-STAR reading and Motivation to Read Profile was administered, and books were selected. Following the study, the school made the students available for individual interviews and post assessments.

The instrument for quantitative data was originally the sixth-grade reading FCAT and Florida Assessment in Reading (FAIR) scores. However, the state of Florida no longer administered the FCAT beginning in the 2014-2015 school year. As a result of the state testing shift Marine County School District began using STAR as the measurement for progress monitoring administered to all students three times per year. STAR reading is an adaptive computer-based assessment produced by Renaissance Learning that dynamically adjusts are students respond to the questions. STAR reading is highly rated and fully supported as a measure for screening and progress monitoring by the United States Department of Education's National Center on Response to Intervention. Three different models were used to estimate the reliability of STAR reading, split-half, generic, and test-re-test. Renaissance Learning (2013) conducted hundreds of validity

studies on the STAR reading instrument. Validity data is continually being collected on this instrument (Renaissance Learning, 2013).

STAR reading was used as the measurement for pre and post reading scores for this study. This assessment was able to be administered by the researcher immediately before and following the mentoring program. The STAR was administered to sixth-grade participants before and immediately following the 9-week mentoring program. The grade level equivalent score and ZPD range were given for each student. Comparisons between the grade level equivalent and scale score before and following the study were used to determine if an increase in reading achievement was made by sixth-grade participants. This assessment was used as a baseline before beginning the study. The ZPD range provided student participants a guide to select the book that they read with their mentor for the mentoring program. The scale score and grade level equivalent scores following the program enabled the researcher to determine if an increase in reading achievement was made.

The Motivation to Read Profile (Gambrell, Palmer, Codling, & Mazzoni, 1996) was also administered as a pre and post assessment. Permission was obtained to use the Motivation to Read Profile. The MRP is made up of two parts, self-concept of a reader with a focus on a student's perception of their reading ability and reading performance as related to their peers and value of reading with a focus on gathering information about the value students place on reading and related tasks. Through field testing, the involvement of teachers and other reading experts, and many revisions to the measurement the reliability and validity of the MRP has been proven. Additionally, to safeguard against a

student marking the same point value for each question, some answer choices are listed positive to least positive while others answer choices are listed least positive to most positive. This means that for each question the first answer choice is not always the most positive response. The MRP was administered as a pre and post assessment of sixth-grade mentoring program participant motivation to read.

Qualitative data were collected through observations and interviews. I observed the mentors and mentees interacting and reading together during the mentoring sessions. I recorded notes on the Observational Protocol collection sheet (Appendix A). Observations were recorded of the six pairs during the eighteen reading sessions. Following the mentoring program sixth-grade participants were interviewed. The Observational Protocol and interview questions were produced by the researcher and approved by IRB. The purpose of the observations was to determine how mentors and mentees interacted with one another. The purpose of the interviews was to determine the sixth-grade participants' thoughts and feelings related to their involved in the mentoring program. Raw qualitative and quantitative data is available by request from the researcher.

Data Collection Strategies

Quantitative and qualitative data were collected sequentially. Quantitative data were collected through the STAR that was administered twice as a pre and post assessment of reading ability. A comparison was made between STAR scores of participants before and following the 9 week mentoring program to determine if reading growth occurred. The mentoring program began immediately following administration of

the STAR with a second administration immediately following the last mentoring session. The Motivation to Read Profile was administered twice to sixth-grade participants as a pre and post assessment. Throughout the study, qualitative data were collected through observation notes taken during the paired reading sessions. Observations focused on interactions between mentors and mentees during the reading sessions. Observations were recorded on the Observational Protocol collection sheet (see Appendix A). Following the study, I conducted interviews with the sixth-grade participants to provide context for understanding the observation data and quantitative data. The purpose of the study was to determine if a cross-age peer mentoring program would improve sixth-graders' reading achievement and motivation to read. During the interview sixth-grade participants were asked if they read more outside of school if they felt more confident reading aloud in class, and if they felt that their reading ability had improved following participation in the mentoring program. They were also asked about their overall experience reading with a high school mentor. While the STAR and MRP assessments allowed me to determine if growth in reading ability and motivation to read had improved, the interviewed allowed me to gather the perceptions of the sixth-grade participants about potential growth in these areas. Interviews addressed the potential increase in motivation to read and overall perceptions of the program for the sixth-grade participants.

Qualitative data were collected through observation notes recorded during the mentoring sessions and interviews with sixth-grade participants. Following the 9 week mentoring program sixth-grade mentees were asked their perceptions of the mentoring

program. Questions included asking students about their feelings about comprehension and increases in reading ability following the program. They were also asked about their feelings related to reading with a high school mentor. They were asked if they enjoy reading more, feel more confident reading, and are more comfortable reading aloud in a classroom following participation in the mentoring program.

Data Analysis

Thematic analysis was used to determine common themes among the qualitative analysis. Data were analyzed from the sixth-grade participant post-program interviews and the observations from the eighteen mentoring sessions that met twice a week for 9 weeks, recorded on the Observational Protocol collection sheet. Common themes were determined by both sets of data. Common segments from observations and interviews were identified, marked by color, and then placed in a category under a theme. The themes for the interviews were determined by the six questions. The six questions naturally fell into four different categories or themes. Data from the interviews was analyzed for examples within each theme and to determine relationships between the qualitative and quantitative data. The focus of the observations during the mentoring sessions was on interactions between mentors and mentees. During data analysis, four common themes were noted and marked by color within the transcript of the interviews and observation notes. Then inferences could be made referencing the interview and observation data and the sixth-grade participant STAR reading and Motivation to Read Profile pre and post scores.

Statistical Package for the Social Science (SPSS) software was used to run descriptive statistics of the STAR reading and Motivation to Read Profile test scores before and after the intervention. From this information tables and figures were created to better illustrate the findings.

Limitations

One potential limitation or weakness of this study was the use of an alternative reading assessment. With the new state assessment comparison, data from fifth to sixth-grade was unavailable and the same measurement was not able to be used. Increases in sixth-grade reading achievement in the cross-age peer mentoring program was measured using the STAR. This assessment provided a pre and post reading assessment. Ideally, the FCAT could have been used to make a comparison between the fifth and sixth-grade reading scores; however, this assessment is no longer being used in Florida. One advantage to using STAR instead of FCAT is a controlled time period. STAR was able to be administered to sixth-grade participants immediately prior and following the 9 week cross-age peer mentoring program. The FCAT is administered once during the school year, other factors could have contributed to an increase in reading achievement outside the mentoring program.

Data Analysis Results

A mixed methods approach was used in the data collection in this study. Both qualitative and quantitative data were collected to address the problem and the research questions. The problem that prompted this study was that only forty percent of sixth-grade students scored proficient in reading on the Florida Comprehensive Assessment

Test (FCAT) at Mustang Middle/High School in Marine County School District. Between 2012 and 2014 40% of the sixth-grade students scored a level one or two on the reading FCAT, a score of three signifies reading proficiency or reading at grade level. Before participating in the cross-age reading-focused peer mentoring program, sixth-grade students completed a pre-assessment of the reading STAR and the Motivation to Read Profile. I conducted observations with a focus on interactions between mentees and mentors during the mentoring sessions. Following the eighteen mentoring sessions, sixth-grade students completed post assessments of the reading STAR and the Motivation to Read Profile so that comparisons could be made. Additionally, following participation in the mentoring sessions I conducted interviews with six sixth-grade participants about their perceptions of personal growth in reading and motivation to read after participation in the mentoring program. Data were not collected for high school mentors.

Qualitative Findings

Qualitative data were collected through interviews with sixth-grade participants following the reading-focused cross-age peer mentoring. Study participants were sixth-grade (mentees) and ninth-grade (mentors), however, aside from observations of the mentoring sessions; I only conducted interviews with sixth-grade students. The interviews were designed to collect data on sixth-grade mentee views about their growth in reading, motivation to read, and overall experience of being a participant in the cross-age peer mentoring program. Additionally, I conducted observations during the eighteen mentoring sessions that met twice each week for 9 weeks. I conducted the observations to determine a possible relationship between mentors and mentees interactions and potential

increases in reading proficiency and motivation to read of sixth-grade participants. The observational protocol is in Appendix A. Common themes emerged from each set of data. Table three lists the themes for both the interview and observation themes.

Table 3

Interview and Observation Themes

Interview themes	Observation themes
1. Thoughts and feelings about reading with a mentor 2. How the mentoring program impacted feelings about reading 3. Reading confidence 4. Increased reading time to include reading for enjoyment	1. Relationship building 2. Interactions 3. Questioning 4. Level of engagement 5. Making reading relevant to life

Interviews

Following participation in the eighteen mentoring sessions over 9 weeks, the six sixth-grade mentees were interviewed. During the interviews, sixth-grade students were asked six questions to determine their perceptions of their experience in the program. Students were asked their thoughts and feelings about working with a high school mentor, their perceived growth in reading, and possible increases in reading confidence and reading enjoyment. Four themes emerged from the interview data. Themes included thoughts and feelings about reading with a mentor, how participating in the mentoring program played a role in their feelings about reading, reading confidence, and increased reading time to include reading for enjoyment. Within the interview data, I used different

colored highlighters to separate the different themes. Once the data was color coded I was able to conduct a thematic analysis of the interview data. As the data was analyzed the four themes started to emerge. Student responses fell into one of the four identified themes.

Thoughts and Feelings About Reading with a Mentor

This theme emerged from sixth-grade participants' views about their experiences with the high school reading mentor. When sixth-grade students were asked to describe their thoughts and feelings about reading with a high school mentor three of the six participants mentioned that at first they were nervous but later enjoyed the experience after getting to know their mentors. Mentee 5 responded "At first I was nervous because she was bigger than me, but I liked reading with her after getting to know her". Mentee 6, who was also initially nervous, stated that, "it was fun reading and talking about it". Similarly, Mentee 1 observed that, "I liked reading with someone older than me as neither of my parents speak English and my older brother doesn't have time to read with me". All six participants came to feel that reading with a high school student was fun, that they learned something about reading from their mentor, and they liked the opportunity to not only read with someone but to have a chance to discuss what they had read.

When asked about their overall experience of involvement in the mentoring program three of the six participants said that it was a new experience, that they had not previously had an opportunity to be part of a similar program and were glad that they were part of it. All six participants explained that overall it was a good experience.

Mentee 6 said, “It was a lot of fun. I was glad [to be] involved”. When students were asked if they believed that reading with a high school mentor improved their reading ability, all participants said that following their involvement in the program they felt that they were stronger readers. Mentee 6 said, “When I was reading with [the mentor] every day I got a little better”. Mentee 3 said, “After hearing her read good I started reading better and sounding the words out more easily”. Student interview responses were consistent with increases on the post assessments of STAR reading and the Motivation to Read Profile. Students expressed that they believed they had experienced increases in reading ability and were more motivated to read following participation in the mentoring program. The post STAR and Motivation to Read Profile scores reflected this belief as increases were seen on both assessments. These results are discussed in the quantitative findings section.

How the Mentoring Program Affected Feelings about Reading

This theme was based on mentee perceptions about reading in general following their participation in the reading mentoring program. All of the six sixth-grade participants said that after the mentoring program they enjoyed reading more than before. Mentee 5 said, “Reading with another person that gets that I sometimes make mistakes improved the way I see reading”. Mentee 3 said, “I like reading more than I did before”. Mentee 2 said, “I now volunteer to read aloud more now”.

Reading Confidence

This theme involved student views about how they became more confident about reading aloud in class after participation in the mentoring program. Five of the six

participants said that they felt more comfortable reading aloud in class than they had prior to reading with a mentor for 9 weeks in the cross-age peer mentoring program. Literature supports these findings. Cross-age peer mentoring programs have the potential to increase competence and confidence (Karcher, Davidson, Rhodes, & Herrera, 2010). It was a challenge to get sixth-grade participants to elaborate or explain why they felt increased confidence reading aloud in class following participation in the mentoring program. Mentee 5 noted, "I'm not as afraid of reading aloud in class now". Mentee 4 stated, "I'm not nervous about reading aloud in class anymore". However, Mentee 3 said that even after participating in the mentor program, "I'm still not confident reading aloud in class".

Increased Reading Time to Include Reading for Enjoyment

This theme was based on student views about increased interest and enjoyment in reading following participation in the program which involved reading unassigned texts on their time outside of school. Five of the six sixth-grade participants said that they read more outside of school than they did prior to participating in the mentoring program. Mentee 3 said, "I enjoy reading more now, sometimes I read to my brother before bed". Mentee 5 responded that, "Now I read more and enjoy reading more. I understand books can be interesting".

Observations

I conducted observations of the sixth-grade students reading together with ninth-grade mentors during the 18 mentoring sessions of the peer mentoring program. Sessions met twice each week for 9 weeks. The focus of the observations was to record the interactions between the mentors and mentees. The Observational Protocol collection

sheet was used during observations. Each pair was observed during every session. During the observations I recorded notes about the actions and interactions between the mentors and mentees, which included questioning by mentors, quotes from mentors and mentees, and the process used as they took turns reading. By the third session, students were used to being observed and no longer stopped reading and looked up when the researcher came to their area. Students continued to read and interact with each other while I recorded observations. While reviewing the observation notes five themes emerged related to interactions among mentors and mentees.

The five themes included: relationship building, interactions, questioning, level of engagement, and making reading relevant to life. Relationship building during the sessions included mentors and mentees interacting with each other. During the observations the interactions recorded included modeling strong reading strategies, allowing wait time, and word correction. Throughout the reading sessions, I also observed mentors asking questions to check for comprehension and mentees responses to words they did not know. Recordings of observations for mentees involved how they displayed interest in the reading assigned for the session. Mentors asked questions orally throughout the sessions and answered questions that mentees asked in the dialogue journals at the end of each session. Engagement was noted when the mentor maintained interest and supported their mentee to remain on task throughout the sessions. The mentor mentee reading sessions were intended to make reading relevant for students by connecting the books to events in their lives.

Items related to each theme were highlighted in different colors so that I could conduct a thematic analysis and determine effective qualities of mentors and mentoring programs. During thematic analysis, I made notes marking possible quotes and items for later reference in addition to sorting the codes and themes by color.

The purpose of analyzing data is to gain a deeper understanding of the data (Creswell, 2009). After collecting the data I read through all the data generated from the interviews and observations to gain a better understanding of sixth-grade participant perceptions and interactions between the mentors and mentees during the mentoring sessions. During data analysis, I conducted open coding of the data from the interviews or observations. While computer programs are available I chose to code the data manually so that I could better review the data. This involved generating categories from the data (Creswell, 2009). Coding is when the data is arranged into chunks before meaning can be brought to the information (Creswell, 2009). I divided the data into sections and labeled it with in vivo terms or the actual terms used by the participants (Creswell, 2009). I then re-read through all of the data from the interviews and the observations and made a list of topics. I grouped topics to narrow down the categories in both the interview and observation data. These categories then became the themes that were used in the narrative to describe the findings. Tables and figures were also included in the findings to make them more understandable. Comparisons were able to be made between the observation and the interview data to determine commonalities and connections. Additionally, comparisons were able to be made between the interview and observation data and the

data from the STAR reading and Motivation to Read Profile to determine possible connections and to help answer the research questions.

After coding the observation notes taken during the mentoring sessions I determined that each of the mentors participated in some form of relationship building with their mentees. This included getting to know them, their interests, and any commonalities. All of the mentors allowed wait time for student responses instead of immediately correctly unknown or mispronounced words. After providing wait time mentors corrected students when self-correction did not occur. All of the six mentors interacted with their mentees in a way that demonstrated interest and warmth which included leaning over the book, smiling, and following along as the mentee was reading. Mentors asked questions about what was being read both verbally as comprehension checks throughout the sessions and at the end of each session through dialogue journals. Mentors maintained personal engagement and the engagement of their mentees during the sessions by remaining on task and redirecting their mentees when needed. While all of the mentors did these things, mentors 1, 3, 4, and 5 did these things with more fidelity and effort than mentors 2 and 6. This included asking higher level questions more frequently during the sessions, and helping students sound out unknown words before providing the correction. Additionally, they remained engaged and made an effort to keep their mentees engaged throughout the sessions. Mentors 1, 3, 4, and 5 displayed empathy and interest working with their mentee and with reading in general. These interactions included leaning in towards the book and the mentee, smiling, offering praise and encouragement, and remaining present during the reading. Mentors 1, 3, 4, and 5 also

spent more time on relationship building during the first few sessions than the other three mentors did. Mentors 1, 3, 4, and 5 made a consistent effort to make reading relevant to the lives of their sixth-grade mentees and model from them how to be a strong reader. The mentees working with mentors 1, 3, 4, and 5 had higher increases in STAR reading and Motivation to Read Profile scores. While all of the sixth-grade participants made gains in both areas, the four mentors mentioned above had mentees who made the greatest amount of gains in both areas.

Relationship Building

Relationship building involved mentors getting to know their mentees during the first few sessions and sharing anything about themselves especially if they happened to have something in common. Items related to relationship building were all highlighted in one color throughout the observation notes for later reference during thematic analysis. I noted that all mentors participated in some form of relationship building with their mentees during the beginning sessions and displayed empathy. Additionally, mentors who displayed empathy leaned in towards the book and mentee, followed along while the mentee was reading, and calmly corrected mistakes during the reading sessions.

One example of relationship building involved a discussion that took place at the first session between mentor 3 and mentee 3 about their shared interest in softball. They discussed the positions that they each played and how long they had each been playing. Also, during the first session mentor 1 and mentee 1 were observed reading together appearing to be comfortable with one another. A shared respect was observed numerous times as it was noted often that mentors and mentees were fairly sharing the amount of

reading. During the second session, mentor 4 was observed correcting a word while warmly placing her hand on the mentee's shoulder as she was starting to get frustrated. Mentee 1 became frustrated over trying to read challenging names. Mentor 1 stepped in and gave him a strategy to help. Mentor 1 said, "When I'm reading and come across a name I don't know how to say, I just put a familiar name in its place like Joe, so I can continue reading". During one of the sessions mentee 5 was observed giving her mentee the opportunity to sound out words and self-correct before correcting unfamiliar words. Mentor 1, in particular, praised mentees on a regular basis. He was once observed saying "there you go" and another time "good job" while patting his mentee on the back. Mentor 6 was often seen smiling while she was correcting unfamiliar words for her mentee. During another session mentee 3 lost her place and started to become upset, which prompted the mentor to smile and calmly point to the right place.

Interactions

Interactions between mentors and mentees typically involved modeling strong reading strategies, allowing wait time, correcting students when self-correction was not possible, and displaying interest. Items pertaining to interactions were highlighted in one color throughout the observation throughout the observation notes and later referenced during the thematic analysis. An interaction that took mentors the most time to master was providing wait time. Three to five seconds of think time is recommended. "Think time" is an essential element in instruction especially when the goal is higher levels of thinking (Tobin, 1987 as cited by Keene, 2014, p. 68). Mentors were quick to want to correct their mentee when a word was unknown or mispronounced. It took several

sessions for most of the mentors to be able to be comfortable providing wait time and allowing their mentee to first try sounding out the word on their own before correcting them.

During the first session mentor 2 was observed modeling how to keep place while reading by moving his finger under the words as he read. Also, during this same session mentor 1 was observed helping their mentee sound out an unfamiliar word by breaking it into parts. During every session mentors 1, 2, 3, 4, 5, and 6 were observed modeling reading fluently and reading with intonation while reading with their mentees. During one session mentee 1 was observed reading very quickly and not paying attention to punctuation. His mentor reminded him to pause when he came to a period and explained to him that this would allow him to slow down and understand what he was reading. During the last six sessions mentees 1, 2, 3, 4, 5, and 6 were observed self-correcting and sounding out words more often instead of relying on their mentors to correct them. Mentor 2 was observed during more than one session being very conversational when explaining things related to the story to his mentee.

Questioning

Another theme that emerged while observing the interactions between mentors and mentees was questioning. Ninth-grade mentors asked questions about what was being read both verbally during the sessions and through dialogue journals at the end of each session. Mentees also asked questions throughout the sessions about words that the mentees did not know and to clarify something that was being read. Several of the items in this area also fell under the theme of making reading relevant to life as that was a focus

of many of the questions. Items related to questioning were highlighted in one color throughout the observation notes and later referenced during thematic analysis. Mentors asked questions about the story that was being read to include comprehension questions to check for understanding and critical thinking questions such as comparison questions to require the mentees to use their higher order thinking skills.

Prior to the first mentoring session ninth-grade mentors were trained to use dialogue journals. Graves (2014) defines dialogue journals as an exchange in writing between two people, one more experienced than the other one. In this study the written exchange was between a more experienced student mentor and mentee. Each mentor was assigned a composition book to use for this purpose, dialogue journals were stored in a secure location by the researcher following each session. In most cases dialogue journals are used between students and teachers, however, in this case they were used between mentors and mentees. Werderich (2010) indicated that students should construct their own meaning from a text without assuming there was one correct interpretation. Responding to the text in this manner allowed students to make literature relevant to their lives (Werderich, 2010). Through the use of dialogue journals students were able to reflect on their reading and therefore, construct meaning from the text.

There are many structures to dialogue journals, for this study mentors wrote two questions and one personal comment related to the portion of the text read with the mentee for each session. The sixth-grade mentee then entered answers for the two questions in the dialogue journal as a comprehension check and responded to the

comment usually with a comment of their own. This allowed for multiple perspectives on the same text.

During the first session mentee 2 was observed asking his mentor about something he had read for clarification. During every session mentors 1, 2, 3, 4, 5, 6 were observed asking questions during the sessions to check for understanding before moving on. During one session mentor 1 asked a question to check for understanding and could tell the mentee was confused, so he asked two follow-up questions to make sure the mentee understood before moving on. I often observed that a question asked by a mentor would turn into a brief discussion relating the book to something else that had been reading or a real life situation before resuming to read. In one session mentor 2 asked, "so what has been going on over the last several pages"? When he did not get a response, he asked "where are they" as a follow-up question to prompt the mentee. A discussion then occurred about the characters and what had taken place while being at school. During another session mentor 1 asked, "Do you know what a loophole is"? As it was a term in the book. When there was no response from the mentee, he went on to explain what the word meant before resuming the reading. During another session mentor 6 asked, "What team did he have to join this summer"? This interaction helped to check for understanding which was further clarified by a brief discussion before continuing to read. At the end of every session mentors would write two questions and one comment they had about the reading in their dialogue journal, and the mentee would answer the question and respond to the comment. The mentors were taught to do this exercise during their training prior to the first mentoring session.

Level of Engagement

The level of engagement referred to both mentor and mentee being observed as focused, interested, and being on task. “Classroom engagement, defined as ‘active, goal-directed, flexible, constructive, persistent, focused, emotionally positive interactions with the social and physical environments’” (Skinner, Furrer, Marchand, & Kindermann, 2008, p. 766 as cited in Marchand & Furrer, 2014, p. 661). Engagement refers to participating in academic tasks and being present while doing so (Matchand & Furrer, 2014). According to Matchand & Furrer (2014) engagement refers to participating in academic tasks and being self-reflectively present while doing so. It also refers to the mentor maintaining their engagement and that of their mentee during a session. This included leaning into the book, following along, and laughing when something in the story was funny. Items related to engagement were all highlighted in one color throughout the observation notes and later referenced during thematic analysis.

During session one mentee 2 exclaimed, “I’m glad I learned that new word”. During every session mentors 1, 2, 3, 4, 5, and 6 and mentees 1, 2, 3, 4, 5, and 6 were observed leaning over the book, taking turns reading, and following along with their fingers. During most sessions, mentors and mentees were observed focused on the book and the discussion they were having about it. After the third session in most cases, students remained engaged when the researcher entered their area and continued reading or having a discussion without looking up. During one session mentee 1 was particularly antsy, the mentor continued to get his focus back to the reading and the discussion throughout the session. Often time mentors and mentees would select a book that

contained humor and during several sessions when they came across something humorous in the text they would laugh.

Making Reading Relevant to Life

According to Bean (2002) students are losing interest in recreational reading, because many of the books that they have access to in school are outdated and they cannot relate to. It is critical for educators to find books that students connect with and provide classroom activities that allow adolescents to make reading relevant to their lives (Bean, 2002). Mentors 1 and 4 made a point to connect the content of the books they were reading and reading, in general, to real life experiences. This was not observed as regularly as the four other themes as it was not done by every mentor. It was important to note as it is an effective strategy often used by teachers. The items associated with this theme were highlighted in one color throughout the observation notes and later referenced during thematic analysis. Other mentors also did this, but it was not observed as frequently as with mentors 1 and 4.

During the first session, a horoscope was mentioned in the book that mentor 2 and his mentee were reading. The mentee continued reading right past the word. The mentor stopped him and said, “Do you know what a horoscope is”? When the mentee said he did not, the mentor said, “Do you know the placemat at the Chinese restaurant that has the pig, horse, rabbit on it”? The mentor continued to connect the Chinese calendar to a horoscope that typically predicts one’s future (for example, who you should or will marry). This was one example of a real life connection to the book that was being read. Another example was when mentor 1 was explaining how the text in the story was

written in future tense. He explained that is had not happened yet, but will happen in the future. He said, “for example I will go to football practice after school today”. Knowing the mentee was also a football player this connection was relevant. During another session as students were getting settled before starting to read mentor 1 mentioned to his mentee that girls like boys that are good readers. They both laughed about it but at the end of the session the mentee brought it back up. He said, “Do girls really like boys that can read good”? It made reading relevant to a sixth-grade boy that saw a girl liking you as a very important even if he did not see reading in the same light. During another session mentor 4 wanted her mentee to realize the time period their book was set in. She said “it’s not modern, and not from when your mom was younger but probably more like when your grandmother was a little girl.”

Qualitative data were collected through interviews with sixth-grade participants following the mentoring program and observations during the mentoring sessions. Four themes emerged from the interview data. These included thoughts and feelings about reading with a mentor, how the mentoring program impacted feelings about reading, reading confidence and increased reading time to include reading for enjoyment. Five themes emerged from the observation data. These include relationship building, interactions, questioning, level of engagement, and making reading relevant to life. I observed the interactions between mentees and mentors during the reading sessions to determine the qualities that would make a mentoring program effective. I interviewed the sixth-grade participants following the mentoring program to gather their thoughts and feelings on participation in the program.

Quantitative Findings

Gains in reading and motivation to read were demonstrated by each of the six sixth-grade participants. The six sixth-grade participants demonstrated gains in grade level reading ability ranging from seven months to one year and six-months between the pre and post administration of the STAR assessment (see Table 4). There were 9 weeks between the pre and post STAR reading test administration. According to Renaissance Learning (2014), the makers of the STAR reading assessment students demonstrate gains in reading at different rates and stronger readers advance at faster rates. Based on the STAR reading assessment it is estimated that students demonstrate 0.9 or nine months of gains in a school year (Renaissance Learning, 2014). A sixth-grade student reading at grade level at the end of the school year would have a STAR reading score of 6.9 (sixth-grade, nine month) or greater. The sixth-grade students at Mustang Middle/High School excluding the six participants made 0.66 and including the six participants made 0.68 (approximately seven months) of reading gains. This measurement was taken from the second to the third administration of STAR reading, October to May or seven months. The six sixth-grade student participants made an average reading gain of 1.3 or one year three months of reading gains during the nine-week mentoring program. This means that as a whole the sixth-grade students at Mustang Middle/High School made approximately seven months in learning gains in seven months while the six sixth-graders included in the mentoring program made an average of one year, three months of learning gains in 9 weeks. This is important to note as the gains made by the students involved in the mentoring program were greater than the gains of those not involved in the program.

Prior to participation in the peer mentoring program the grade level equivalency mean of the sixth-grade participants was 3.7 (third grade, seventh month), following the mentoring program the grade level equivalency mean of the sixth-grade participants was 5.0 (fifth-grade). Additional descriptive statistics were generated to display other changes in STAR pre and post data (see Table 7). A histogram displays the side by side grade level equivalency pre and post STAR scores for each participant (see Figure1).

The Florida Comprehension Assessment Test (FCAT) has now been replaced by the FSA as the state assessment in several content areas. The change occurred after this since this study was originally developed. Since spring of 2015 was the first time that the change was implemented fifth-grade FCAT reading scores were used to identify potential sixth-grade participants. It is important to note that Renaissance Learning (2012) conducted a study to generate FCAT and STAR estimated comparison scores. Based on this comparison three of the participants would have been projected to score a level three had they taken the FCAT this school year (see Table 5). An FCAT level three would indicate that these three students would be considered reading at grade level.

The six sixth-grade participants demonstrated gains in motivation to read between the pre and post administration of the Motivation to Read Profile (see Table 6). Mean scores indicated changes in self-concept as a reader, value of reading, and overall motivation to read survey. Prior to the mentoring program the mean self-concept as a reader was 25.50 (out of a possible 40 points), following it was 28.83. Prior to the mentoring program the mean value of reading score was 26.67 (out of a possible 40 points), following it was 28.83. Prior to the mentoring program the mean overall survey

score was 52.83 (out of a possible 80 points), following it was 57.67. Additional descriptive statistics were generated to display other changes in the Motivation to Read Profile pre and post data (see Table 8).

Table four below lists the pre and post STAR reading scores for the six sixth-grade participants. Included in the table is the grade equivalency and scale score for each student. Student one started with a pre GE of 2.5, or second grade five months and the post-GE is 4.1, or fourth grade one month. This indicates that reading gains were made, but the student is still reading below grade level.

Table 4

Student Pre- and Post-STAR G) and SS Reading Scores

ID	Pre-GE	Post-GE	Pre-SS	Post-SS
Student 1	2.5	4.1	275	458
Student 2	3.4	4.3	391	483
Student 3	4.2	5.8	467	645
Student 4	5.0	6.4	546	711
Student 5	4.3	5.8	482	644
Student 6	2.9	3.6	341	419

Based on the pre and post- Grade Equivalency (GE) and Scale Score (SS) above it can be determined that all six sixth-grade participants made reading gains. Displaying the pre and post test results in one chart allows for comparisons to be made. Based on the pre and post-GE scores in the table above I have identified a relationship between mentors 1, 3, 4, and 5 that were identified through observations as strong mentors and reading gains in their mentees. As indicated in table four student 1 had a pre-GE of 2.5 and a post-GE

of 4.1, this indicates a one year and six month reading gain during the nine-week mentoring program. Student 3 had a pre-GE of 4.2 and a post GE of 5.8, also indicating a one year and six month gain in reading during the program. Student 4 had a pre-GE of 5.0 and post GE of 6.4 indicating one year and four months of reading gains during the program. At the end of the school year, 6.9 would be considered at grade level, therefore, following the program student four scored just five months below grade level. Student 5 had a pre-GE of 4.3 and post-GE of 5.8 indicating one year and five months of reading gains were obtained during the program. Typically, one year of reading gains is anticipated during a school year. Throughout the nine-week mentoring program, sixth-grade participants made gains that in some cases surpassed a year's worth of reading gains and in other cases put students on track to make more than a year's worth of gains.

Students were selected for participation in the study based on their fifth-grade FCAT reading score. Six grade students who scored at level one or two on their fifth-grade FCAT indicating that they were reading below grade level were invited to participate in the mentoring program. During the 2014-2015 school year, the state stopped administering the FCAT and replaced it with the FSA. Renaissance Learning has created an FCAT estimation based on STAR reading scores. The table below indicates the fifth-grade FCAT reading score for each sixth-grade participant and their estimated sixth-grade FCAT reading score based on their STAR reading score following the mentoring program.

Table 5

5th Grade FCAT Reading Score 6th Grade Estimation Based on STAR Score

Student ID	5th Grade FCAT	6th Grade FCAT Estimation
Student 1	1	1
Student 2	2	2
Student 3	2	3
Student 4	2	3
Student 5	2	3
Student 6	1	1

A score of three is considered reading at grade level on the FCAT. If the FCAT were still being administered according to the STAR reading score comparison, it is estimated that three of the six sixth-grade participants would score at level three. This indicates that students 3, 4, and 5 would now be considered reading at grade level.

Table Six shows the pre and post Motivation to Read Profile scores for the six sixth-grade participants. There are a possible forty points for both the self-concept and reading value sections and a possible eighty points for the full survey. Pre and post scores are listed for each section of the profile and each student.

Table 6

Motivation to Read Profile Pre and Post Scores

Student ID	Pre Reader Self Concept	Post Reader Self Concept	Pre Reading Value	Post Reading Value	Pre Full Survey	Post Full Survey
Student 1	24	25	25	31	49	56
Student 2	25	28	22	28	47	56
Student 3	21	26	31	31	56	57
Student 4	30	34	27	27	57	61
Student 5	28	30	30	30	58	60
Student 6	25	30	25	26	50	56

Table Six displays data which indicates that each student mentee made gains or remained the same in the areas of reader self-concept, value of reading, and on the overall reading profile, which indicated significant improvement on the Motivation to Read Profile. Student 1, 2, 3, 4, 5, and 6 all demonstrated gains in self-concept or how they saw themselves as readers. Student 1, 2, and 6 demonstrated gains in the value they placed on reading. All of the sixth-grade participants showed an increase on of full MRP survey.

Table seven shows the descriptive statistics for the STAR reading data. The pre and post scale score and grade level are noted. In addition, overall gains can be determined for each grade level as the pre mean was 3.7 and post was 5.0.

Table 7

Descriptive Statistics STAR Reading Data

		Pre_Grade_Level	Pre_Scale_Score	Post_Grade_Level	Post_Scale_Score
N	Valid	6	6	6	6
	Missing	0	0	0	0
Mean		3.717	417.00	5.000	560.00
Median		3.800	429.00	5.050	563.50
Mode		2.5[a]	275[a]	5.8	419[a]
Std. Deviation		.9453	99.982	1.1402	121.075
Variance		.894	9996.400	1.300	14659.200
Range		2.5	271	2.8	292
Minimum		2.5	275	3.6	419
Maximum		5.0	546	6.4	711
Sum		22.3	2502	30.0	3360

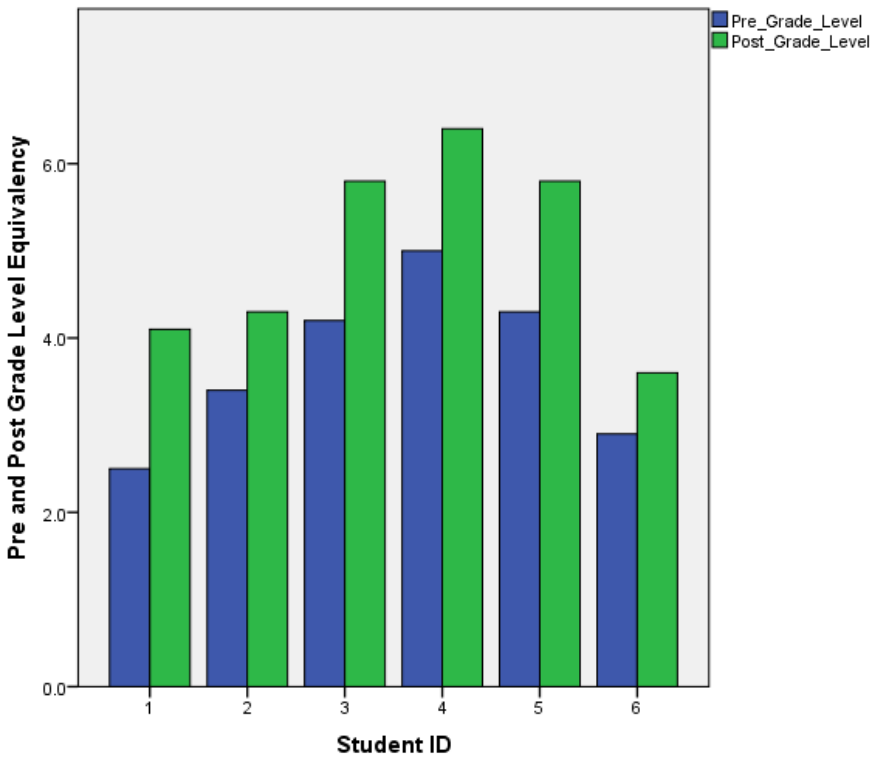
[a] Multiple modes exist. The smallest value is shown.

The table above indicates significant gains among the six sixth-grade participants. The pre and post data can be compared to determine growth. While the mean post GE of 5.0 or fifth-grade is still below grade level it shows a significant increase from the pre-GE mean of 3.7 or third grade seventh month.

Figure one is a histogram demonstrating grade level equivalency for each sixth-grade student involved in the study. The blue in their grade level equivalency pre reading score and the green is their post reading score.

Figure 1

Histogram STAR Grade Level Equivalency Reading Scores by Student



It is evident from the figure above that each student made gains in reading grade level equivalency. While all of the sixth-grade participants made reading gains, this figure indicates that students 1, 3, 4, and 5, who had mentors identified as strong during the observations, made the most significant gains.

Table eight displays the descriptive statistics for the Motivation to Read Profile. Descriptive statistics for the pre and post self-concept as a reader, value of reading, and overall profile for all six participants are provided below.

Table 8

Descriptive Statistics Motivation to Read Profile

		Pre_Self_Concept_as_a_reader	Pre_Value_of_Reading	Pre_Full_Survey	Post_Self_Concept_as_a_Reader	Post_Value_of_Reading	Post_Full_Survey
N	Valid	6	6	6	6	6	6
	Missing	0	0	0	0	0	0
Mean		25.50	26.67	52.83	28.83	28.83	57.67
Median		25.00	26.00	53.00	29.00	29.00	56.50
Mode		25	25	47[a]	30	31	56
Std. Deviation		3.146	3.386	4.708	3.251	2.137	2.251
Variance		9.900	11.467	22.167	10.567	4.567	5.067
Range		9	9	11	9	5	5
Minimum		21	22	47	25	26	56
Maximum		30	31	58	34	31	61
Sum		153	160	317	173	173	346

a. Multiple modes exist. The smallest value is shown

From the table above it can be concluded that there were gains in mean in all three areas. While some participants remained the same in one or more areas, overall improvement was indicated in all categories of the profile.

The problem that this study was based on was the low number of sixth-grade students scoring proficiently on the Florida Comprehensive Assessment Test (FCAT) in Marine County Schools and specifically at Mustang Middle/High School.

This study was designed to answer both quantitative and qualitative research questions.

The qualitative research questions that guided this research were:

1. What are sixth-grade student mentee perceptions of growth in reading ability and motivation to read following participation in the cross-age peer mentoring program?
2. How will the interactions among mentors and mentees demonstrate the effectiveness of the cross-age peer mentoring program?

Quantitative research questions that guided this research were:

3. Does 9 weeks of participation in the cross-age peer mentoring program change students' reading achievement, as measured by the STAR reading test?
4. Does 9 weeks of participation in the cross-age peer mentoring program change students' motivation to read as measured by the Motivation to Read Profile?

Pre and post STAR reading and Motivation to Read Profile scores have been presented for the sixth-grade participants. Additionally, using descriptive statistical analysis, comparison between the pre and post scores was made. "Research has

demonstrated that peer tutoring has a positive impact on academic outcomes" (Chau Leung, 2014, p. 558). A positive impact on reading achievement was demonstrated through an increase in reading scores following participation in the cross-age peer mentoring program.

The Project

Based on the results of the research study, a three-day professional development workshop was designed to assist teachers in implementing the cross-age reading-focused peer mentoring program. Additionally, the opportunity for school teams to work collaboratively to create mentoring models that would work for their school sites was built into the training. "Teacher preparedness is linked to student achievement" (Bayar, 2014) therefore, the goal of the professional development project was to develop a mentoring program that had the potential to impact student achievement.

Administrators and teachers in elementary, middle, and high schools throughout the district will be asked to assemble a peer mentoring team of teachers and administrators to attend the training. Throughout the training, the teams will learn about this study and how to implement a peer mentoring program in their school. Time will be provided for teams to work collaboratively to identify a need and design a peer mentoring program using their unique student demographics to fill this need.

Section 3: The Project

Introduction

The problem that prompted this study was that approximately 10% of sixth-grade students in Marine County School District were reading below grade level. The purpose of the study was to determine whether a cross-age peer mentoring program would improve sixth-graders' reading achievement and motivation to read. The data from this study informed the project, a 3-day professional development workshop for teachers and administrators interested in implementing mentoring programs at their schools.

According to Cave and Brown (2010), one of the factors that can have the strongest effect on student achievement is teacher quality. The focus of their study was on a partnership between a university and charter school. The goal of their study was to determine whether a professional development school collaboration project could contribute to increased mathematics achievement for elementary students. Based on lack of preparation of preservice teachers and math achievement of elementary school students, Cave and Brown developed a professional development/training curriculum and material for teachers and administrators.

Based on the research on peer mentoring and the results from the reading-focused cross-age peer mentoring program in one of the Marine County middle/high schools, peer mentoring may be an effective way to increase student achievement using district resources. The purpose of my research was to determine whether a cross-age peer mentoring program would improve sixth-graders' reading achievement and motivation to read. Based on the findings from my research, I developed a professional development

project The purpose of the professional development training project was to inform participants about the research on peer mentoring programs and the potential benefits of a reading-focused cross-age peer mentoring program to improve student achievement.

During the 3-day professional development workshop, I will present information from the local study and peer-reviewed research about the benefits of peer mentoring. After I present information about the cross-age peer mentoring program from the study, each team of teachers and administrators will collaborate to plan a peer mentoring program for their school. The purpose for the professional development will be for teams to leave the training with a basic plan for implementing a mentoring program for their school. Within the district, there are public and charter schools ranging from prekindergarten to fifth-grade, prekindergarten to eighth grade, sixth through 12th-grade, and ninth through 12th-grade. Each area of the county has unique challenges and needs, given the grade ranges within each school, their needs, and challenges it would be most efficient for school teams to create their plans. Two of the components identified in effective professional development are a match to a need existing and the school and opportunities for active participation (Bayar, 2014). By personalizing the training based on individual needs of each school team and allowing time for active collaboration this training will address those two components.

Description and Goals

The objectives of the professional development training project are to inform participants about the research on peer mentoring programs and the potential benefits of a reading-focused cross-age peer mentoring program to improve student achievement. The

professional development project begins with a 3-day training program that includes school site teams of participants from schools in the school district where the original study was conducted. Training participants will (a) learn more about mentoring programs including the benefits and different types, (b) hear from the researcher and student mentors and mentees about the program in the local school, and (c) have the opportunity to work on school site teams to plan a program to support a need within their school using peer mentoring. The goals of the training are to educate the teachers and administrators who participate about the different types of mentoring programs. Other goals are to provide teachers and administrators with the opportunity to collaborate in school teams to develop a mentoring program that will meet the needs of their students and to provide support during and following implementation of their mentoring programs. As a result of the training, schools will develop mentoring school site teams to implement and monitor their programs.

Ultimately, it would be a goal to provide similar training to school teams outside the school district to promote peer mentoring as a recognized research based strategy in reading instruction and intervention. This would be a customized professional development training; research indicates that when this is done instead of using an existing program, there can be "major impact on student achievement, motivation, and engagement" (Kennedy, 2010, p. 386). Increased student achievement is the overall goal of this professional development training.

Rationale

Sparks and Hirsh (1997; Sparks 2005, as cited in Moore, Kochan, Kraska, & Reams, 2011) discovered that "effective professional development is an essential element in promoting significant change in school leaders' practices, teachers' instructional practices and student learning" (Sparks & Hirsh 1997; Sparks 2005, as cited in Moore, Kochan, Kraska, & Reams, 2011, p. 66). The purpose of a professional development project is to change administrator and teacher practice to promote increased student achievement in reading. However, the training may also demonstrate how the mentoring model developed can be adapted to improve student achievement in other content areas. The original problem that prompted the study was the lack of reading achievement of sixth-grade students at one middle/high school and within other schools across one school district. Data analysis is section two demonstrated that through the reading-focused cross-age peer mentoring program that student reading achievement and motivation to read increased, additionally, sixth-grade students had positive experiences reading with a high school mentor and felt more confident about their reading abilities. The data also revealed that characteristics of the mentors had a significant impact on a number of gains experienced by sixth-grade mentees. Based on the research on peer mentoring and findings from the local study, a professional development program appears to be the most appropriate method of continuing to address the lack of reading achievement and could potentially have an impact on teacher practice and student achievement.

Review of Literature

This review of literature from peer-reviewed educational journals outlines the research on professional develop activities' impact on educators and student learning, and teacher collaboration among several different populations and subject areas with a focus on increased reading achievement and peer mentoring program. This review of the literature focuses on the role of professional development for increasing teacher effectiveness, describes the benefits of peer mentoring programs for both educators and students, and rationalizes the benefits of time for teacher collaboration. To validate the importance of professional development, it must be recognized that teachers have a significant role in providing learning experiences for students that result in student achievement (Barlow, Frick, Barker, and Phelps, 2014).

Literacy Coaching as Professional Development

Literacy coaches provide ongoing professional development to teachers in large group workshops, small group and one-on-one meetings, and through modeling strategies in classrooms (L'Allier, Elish-Piper, & Bean, 2010). Additionally, literacy coaches may research reading strategies for teachers, assess students, and work one-on-one or in small groups to support students' reading development, the goal is teacher ongoing professional development in literacy and increased student achievement (L'Allier, Elish-Piper, & Bean, 2010).

Providing literacy coaches in districts in within individual schools is one way that teachers and students are being supported with ongoing reading-focused professional development. Each school in Marine County School District now has access to a literacy

coach. These literacy coaches will be incorporated into this professional development project. Some of the schools may wish to include their literary coach on their mentoring site team to support planning and implementation of their programs. Others may not wish to have their literacy coaches attend the training but may include when in supporting implementation if their mentoring programs at their schools. Additionally, the literacy coaches can support the researcher/trainer at their school sites during the initial implementation process and to provide ongoing monitoring of the programs.

Professional Development for Reading Achievement

The Collaborative Language and Literacy Instruction Project (CLLIP) is a professional development project that was designed to support teachers and increase student achievement (Porche, Pallante, & Snow, 2012). Through this project elementary teachers were provided ongoing professional development through coaching in the alphabetic principle, phonemic awareness, fluency, and vocabulary instruction Following initial professional development, support for teachers was ongoing through coaching. When compared to a matched group students whose teachers were involved in CLLIP had greater literacy outcomes then their peers that were not (Porche, Pallante, & Snow, 2012). Similar to this study, the school site teams that attend the peer mentoring professional development training program will receive ongoing support after the training. This will include support during and following the initial implementation both on site by the literacy coach and through site visits with the researcher/trainer. As mentioned in the study above this ongoing support could lead to greater student outcomes.

A study conducted by Vaughn and Coleman (2004) studied the impact of teachers mentoring one another to increase reading instructional practices. During year one six teachers were taught the targeted literacy strategy. During year two of the study these six teachers mentored another six teachers in this literacy strategy. They coached, modeled, and provided feedback to the teacher that they were mentoring while the new strategy was being acquired. All teachers involved noted that they were more stratified with this type of professional development than more professional styles of professional development (Vaughn & Coleman, 2004).

Teacher and Principal Perceptions of Professional Development

Morewood, Ankrum, and Bean (2010) conducted individual interviews to gain a better grasp of teachers' perceptions of professional development. In the interviews, Morewood, Ankrum, and Bean (2010) asked questions about the influence that teachers felt professional development had on their knowledge of content, pedagogy, and curriculum. Interview results indicated that teachers felt that professional development had an impact in all three of these areas (Morewood, Ankrum, & Bean, 2010).

Levenson and Gal (2013) examined possible changes in one teacher's awareness, practice, and self-efficacy in regards to teaching mathematically talented students following professional development at a university in Israel. The basis for this case study was that students are often taught math in mixed ability classrooms and often the needs of the gifted students are not met in this setting. The focus of the training was to raise awareness for gifted students in the mathematics classroom, increase teacher knowledge of mathematics and teaching mathematics to gifted students, raise teacher self-efficacy in

how they feel about teaching math to gifted students, and to combine theory and practice in the training sessions. Several teachers were involved in the professional development. However, one teacher named Rona was included in the case study. In a questionnaire following participation in the professional development sessions Rona indicated that she experienced changes in awareness, practice, and self-efficacy in regards to teaching mathematically gifted students after her professional development experience (Levenson & Gal, 2013).

Alabama Torchbearer Schools are high-poverty, high-performing schools. Moore, Kochan, Kraska, and Reames (2011) examined the perceptions of Torchbearer school principals regarding professional development compared to those of principals of schools that were not identified as Torchbearer or lower performing schools in the area. This study mainly looked at perceptions of the principals in regards to how process, content, and context of the National Staff Development Council Standards (NSDC) were implemented in their schools. A focus was placed on the differences in perceptions of principals in the higher and lower performing schools. The researchers conducted an ANOVA to examine the differences. It was perceived that the principals in the Torchbearer, higher performing schools perceived higher levels of implementation of NSDC standards than those principals of lower performing schools (Moore, Kochan, Kraska, and Reames, 2011). This study connects to the professional development training project as the perceptions of the school administrators in regards to the training will be critical. Participation in the peer mentoring professional development training project is

voluntary and based on the desire of the school administrators to send a school site team to the training, therefore, their perceptions will impact that decision.

Often professional development is used to provide teacher training in new strategies or ways of thinking to impact teaching practices. Singer, Lotter, Feller, and Gates (2011) investigated the impact that professional development on teaching through inquiry would have on teaching practice. The study sought to determine if after the professional development middle school science teachers would implement inquiry-based practices into their classrooms. Reformed Teaching Observation Protocol (RTOP) scores following the professional development showed a significant change. It was determined that teachers were able to transfer what was learned in the training into classroom practices. While this study examined a science strategy there is a connection between this study and the peer mentoring professional development training program. In this study there was a follow-up conducted to determine if the teachers that attended the training implemented the training into their classroom practice. Following the peer mentoring professional development training program there will be follow-up visits by the school literacy coach and the researcher/trainer to ensure that mentoring programs are being implemented with fidelity and that ongoing monitoring and support is provided.

It is important to take into account teachers' perspectives on professional development and their practice to design professional development opportunities that will have an impact on student achievement.

Benefits of Professional Development for Teachers and Students

Kennedy (2010), a teacher-educator partnered with a high-poverty school to address the problem of lack of literacy achievement among students through professional development. A group of teachers worked collaboratively to determine solutions. Following small group collaboration, the entire teaching staff met where professional development with a focus on literacy was delivered. The goal of the professional development was to increase teachers' content knowledge in literacy skills (Kennedy, 2010). Following this meeting, intervention began with the first grade students. Students that participated in the intervention had significant increases in reading, writing, and spelling in comparison to what would be expected based on their pretest scores.

Fletcher, Grimley, Greenwood, and Parkhill (2013) conducted a four-year case study that examined the impact of school environment change on reading achievement. One low socio-economic, multicultural, at risk school was the site for this case study. A literacy expert was appointed to work at this school site. Following the four-year case study, it was determined that gains in student reading achievement had been made. Several factors were determined to have made this change. The factors credited with the most significant impact were the appointment of the literacy expert, collaboration among school leadership, increased and ongoing professional development provided to teachers, and the use of reading data to inform the development of instruction (Fletcher, Grimley, Greenwood, & Parkhill, 2013). Throughout the professional development training, project participants will be encouraged to use student data to determine placement in their mentoring programs, they will be encouraged to continue collaboration with one another

and their administrators following the training, and the trainer will be visiting sites to conduct follow-up support and professional development during implementation. During the peer mentoring professional development training project participants will be presented with the importance of using student data to inform these decisions.

Since 2000, the government has invested close to one billion dollars in funding to provide Teaching American History (TAH) grants to provide professional development to educators. A focus of providing this professional development was to improve the teaching of American history to students in elementary and secondary schools. De La Paz, Malkus, Monte-Sano, and Montanaro (2011) conducted a study to explore the relationship between classroom activities and student performance. Students in fifth, eighth, and eleventh grade were exposed to document-based questioning, student written responses were reviewed, additionally, the researchers conducted a qualitative analysis of teachers' activities. From these data relationships between the two were explored. It was determined that fifth- and 11th-grade students with teachers that were involved for at least 30 hours of training and collaborative activities showed improvement in their writing. It was also found that students that made increases in achievement had teachers that throughout the year provided activities that exposed students to primary documents (De La Paz et al., 2011).

Singer, Lotter, Feller, and Gates (2011) indicated that there is a relationship between quality professional development provided to teachers and increases in student achievement. Providing professional development opportunities is a way to promote change in classroom practices Through facilitation of change in classroom practice,

student achievement can be impacted. While the examples provided are varied in setting, grade level, and circumstances in each case professional development provided to teachers proved to have an impact on student achievement.

Benefits of Teacher Collaboration

Professional Learning Communities (PLCs) are groups of teachers working together for a common purpose and in many cases to solve a problem within their educational settings. Teague and Anfara (2012) conducted research on PLCs. In his research, he examined the benefits of PLCs and collaboration among teachers. It was discovered that successful schools share common characteristics of: "supportive working conductions, shared values and goals, collaboration among teachers and administrators, and a focus on student learning" (Teague & Anfara, 2012, p. 59).

Merenbloom and Kalina (2015) conducted additional research that supported the use of PLCs and common planning team among educators. This research also found the value of collaboration to improve teaching practice and have an impact on student achievement. Common planning time during the school day provides opportunities that otherwise are often not present in schools. When this happens, teachers have the ability to work in teams to create interdisciplinary and multidisciplinary lessons to enhance student learning experiences (Merenbloom & Kalina, 2015).

From this literature, the value of time for teacher collaboration is evidenced. Time for collaboration can have an impact on teacher practice and student achievement.

Research on Professional Development

Smyth (2013) conducted a systematic review to determine the best professional development for teachers of culturally diverse populations. It was determined that there are few studies that examine professional development and the impact on the change in teacher practice and student achievement. Qualitative, quantitative, and mixed method studies were included in this review. While some studies were found, there was a lack of commonality to draw conclusions about the best type of training for teachers working with diverse populations. It was concluded that more research was needed on this topic. Diverse populations, how they were involved in my study, and the diverse population of the school site where the original study took place will be discussed during the professional development training project.

A new focus is providing professional development opportunities for pre-service teachers. Bayar (2014) sought to determine the components that made professional development opportunities effective for educators and pre-service teachers. It was determined the effective professional development include "a match to existing teacher need, a match to existing school needs, teacher involvement in design/planning of professional development activities, active participation opportunities, long term engagement, and high quality instructors" (Bayar, 2014, p. 219).

Several studies (Levenson & Gal, 2013; Barlow, Frick, Barker & Phelps, 2014; Singer, Lotter, Feller & Gates, 2011) that indicated that professional development opportunities can have an effect on teacher perception of specific strategies for educating diverse populations. Two studies (Kennedy, 2010; Cave & Brown, 2010) determined that

effective professional development activities can have a positive impact on teacher practice and student achievement. With this project, it is important that the professional development is effective to lead to change in teaching practice and strategy implementation and an impact on student achievement. If other educators embrace the concept of peer mentoring programs and the benefits to student achievement a huge impact can be made in the district, state, and beyond in many content areas and with students of many age groups. Due to the importance of this project and possible impact the components determined by Bayar (2014) as being effective parts of professional development opportunities will be implemented in this training session.

Project Description

The principal of each public and charter school in Marine County School District will be contacted about the peer mentoring professional development opportunity for teachers and administrators. Each principal who is interested in having their school involved in the training will be asked to assemble a peer mentoring team of at least one administrator and two teachers. Two teachers will be requested for the team since peer mentoring is a partnership between students in two grade levels that in most cases would require two teachers. Smaller schools or schools wishing to implement a same-age peer mentoring program would be permitted to send one teacher instead of two. Some schools may wish to include a counselor, teacher's aide, additional teachers, or additional school personnel on their team.

Once the team is assembled, the entire team will attend the three-day peer mentoring training at Mustang Middle/High School. This school site is ideal as it was the

site of the local study and is located in the Middle Keys assemble to schools in the Upper, Lower, and Middle Keys. The majority of the district meetings and professional development opportunities are provided at this site. The training will be held in the media center as it is conducive to both a presentation and collaborative group work. Training will take place for three consecutive days 9:00 AM to 3:30 PM. A 9:00 AM start time is necessary as school teams may need to travel up to one and a half hours to the training site depending on their location within the district.

At the beginning of the training I will administer a pre assessment to allow me to better understand the starting knowledge the participants have on peer mentoring. During the training I will present information about different types of peer mentoring programs to include examples of each. The focus of the presentation will be on how peer mentoring programs can be used to increase student achievement. I will also present the design, implementation, and results from the local study that focused on improved reading achievement. I will address lessons that were learned and things that I would do differently in design and implementation a second time.

On day two mentors and mentees from the local study will present their perspectives to include their overall experience as a participant in the reading-focused cross-age peer mentoring program. They will present any changes that they noticed in themselves throughout the program, components of the program that they liked, and what they would change about it. Following their presentations they will be available to answer questions of the training participants. These presentations will be voluntary and mentors

and mentees will prepare their presentations in an after school session prior to the training under the direction of the researcher.

I will provide time each day for site teams to collaborate to plan their mentoring programs. The collaboration time will be following presentations on specific topics as to maximize the time working in site teams. On day one teams will collaborate thirty minutes before lunch to brainstorm and discuss a possible problem within their school that could be addressed using a mentoring program and thirty minutes following lunch to determine the best mentoring structure for their school site based on student demographic and need. On day two an hour and a half will be provided for collaboration. Site teams will work on their plans to include further development of their program with a focus on the need to be addressed, structure, and implementation details. On day three site teams will have three hours, an hour and a half before lunch and an hour and a half after to collaborate. The focus of collaboration on day three will be to leave the training with a plan for implementation. This includes program structure, student selection, determination of teachers and other personnel to be involved, and other implementation details. During this time I will be available to support the design of these programs answering questions and offering suggestions.

Potential Resources and Existing Supports

The school principal where the original study took place and where the training would occur is an existing support for the study and the training. She supported and oversaw the study and has said that she would support this professional development opportunity by allowing it to be held on her campus. She would also serve as a link to

other principals during principal meetings and to district administrators to gather additional support for the training. Having the support of the school principal is critical as the school site would be needed for the training as it is centrally located within the district. The support of district administrators is also important as it will provide credibility for school administrators to want to assemble school sites to send to the training. Support from district administrators will also be necessary for securing the availability of teachers to attend the training as substitute teachers will be necessary to the classes of teachers attending the 3-day training. There will be no training fee for participants to attend the training, this is often noted as a barrier for teachers attending professional development (Drage, 2010), no participant fee is a benefit in this case.

One potential resource available due to the placement of the training at the school site where the study occurred is the possibility of student speakers. Student speakers can be a powerful tool when delivering a message to a group of educators. Some of the high school mentors and sixth-grade mentees may be asked to speak about their involvement in the mentoring program. Aside from the research, and researcher insights, this would provide training attendees the opportunity to hear a first-hand account from participants and ask questions. These insights could be valuable in each team designing a mentoring program for their school sites.

Another potential support is a requirement by the district that all teachers join and actively participate in a professional learning community (PLC) each school year. PLCs are educators "working collaboratively in ongoing processes of collaborative inquiry" (DuFour, DuFour & Eaker, 2008, p. 14) with a focus on increased student achievement.

Teachers have a choice based on their needs and interests which PLC they form or join. Peer mentoring school site teams could easily be transformed into PLCs the following school year. This would allow teachers allotted time during the school week to continue focusing on the development and implementation of their peer mentoring programs during the allotted weekly PLC time instead of adding something else for teachers to do.

Potential Barriers

One barrier associated with providing professional development is designing training that will meet the needs and interest teachers while remaining within the small professional development budgets of most districts (Drage, 2010). In this case the trainer would be the researcher; therefore, there would not be a cost to the district for the trainer or travel for the trainer. There would be a minimal cost associated with this training as teachers attending would need to be paid for three days that they would be out of their classrooms and substitute teachers would need to be paid to provide coverage in the absence of teachers attending the training. Also, under the teacher contract travel stipends may be necessary for teachers traveling from the Upper and Lower Keys. Costs associated with training could be one barrier. With school district support, it could be possible for this training to be an asset worthy of the cost. Another barrier could be school buy-in. If school administrators support the training and form cohesive teams, then the value will be seen by teams. District support could also help provide value to the need for this training.

Proposal for Implementation and Timetable

The first step in implementation would be to meet with district administrators. While support from the Reading and Language Arts Coordinator is helpful, additional district support would be needed to make a training of this scope possible. Also, before implementation the district would need to make a commitment to provide paid days for teachers to attend the training, substitute teachers to cover classes, and travel stipends in accordance to the teacher contract. It would then be important to meet with the principal at the host school to discuss the logistics of building use for the training.

Before implementation of the peer mentoring professional development training the administrators of each school within the district will be notified and invited to send a team of teachers. The benefits of the training will be advertised. When speaking with the administrators, the focus would be on the individualization of this training and the potential impact it could have in meeting a need at their school site. During the training school site teams will have time to collaborate and plan an individualized mentoring program and implementation plan that will meet the needs of their students. School sites that decide to participate would then form their teams to attend the training. Training would occur at the school site where the study occurred centrally located in the middle of the school district. Training would be for three consecutive days, 9:00 am to 3:30 pm. A 9:00 am start time would allow travel time for teachers attending from the Upper and Lower Keys.

The training would include a combination of instruction presented by the trainer and opportunities provided to work collaboratively in school teams to develop their peer

mentoring programs. Day one would include introductions of site teams, pre-assessments to determine knowledge of participants in regards to peer mentoring, and a presentation of peer mentoring in the research and different structures of peer mentoring programs. Additionally, day one would also include a presentation of the local peer mentoring study, an opportunity for discussion within site teams to begin brainstorming possible program structure and need to be addressed, and time for reflection and questions. Day two will include a brief review from day one, initial thoughts about school site programs shared with the whole group, presentation by select mentors and mentees from local study to include time for questions, an opportunity for site team collaboration to plan programs, and time for questions and reflection. Day three will focus on site team collaboration with a brief review of day two, site teams sharing out with the whole group, collaborative work, post-assessments, and time for questions and reflections. A ninety-minute lunch will be provided each day of the training as this is the district standard for professional development days as per the teacher contract. See the hour-by-hour training timetable for each training day in Appendix A. See the training PowerPoint by clicking the cover slide in Appendix A for training details.

Roles and Responsibilities of the Student Researcher and Others

I will design, organize, and implement the peer mentoring professional development. This will include coordinating with the district, interested school principals, and host school principal. The three-day training will be facilitated by the student researcher. In meeting with district administrators, I will determine a contact person that will ensure that teacher days, substitute teachers, travel stipends, and other district related

needs are taken care of. The school principal at the host site will either choose to handle logistics or appoint someone to do so. The responsibility of this person will be to ensure that the training space is reserved, the technology needed would be provided, and any other training site needs are met.

Project Evaluation Plan

It is important to evaluate professional development based on the impact it will have on student learning instead of just asking teachers what their feelings of the training were (Kelleher, 2003). The effectiveness of the professional development training will be measured three ways. Participants will take an assessment of their knowledge of peer mentoring before and following training to measure any increases in content knowledge. Following the training participants will complete a survey responding to questions about possible implementation of a peer mentoring program at their school site. The last measurement will be observations. Once school sites have the opportunity to implement their peer mentoring programs I will conduct observations of programs in action using and observation protocol. Observations will focus on the structure of the programs and interactions among mentees and mentors. See Appendix A for the three measurement tools.

Implications Including Social Change

The three day professional development project on cross-age peer mentoring includes opportunities for teachers to work collaboratively to develop a cross-age peer mentoring program for their school and may have implications for social change. When implemented the professional development project may encourage teachers to plan and

implement a cross-age peer mentoring program for their school that will have the potential for positive outcomes for student achievement.

Local Community

Positive change was evident in the six sixth-grade students that had the opportunity to participate in the study at one middle/high school within one school district. By identifying peer mentoring teams at additional school sites within the district and providing training and opportunity for collaborative work additional positive change is possible. Following the training, teams will have the knowledge and opportunity to implement peer mentoring programs within their schools using their demographics to meet the needs at their school sites. As a result, there will be additional opportunities for increased student achievement at each of the involved schools within the school district.

Far-Reaching

Fletcher, Grimley, Greenwood, and Parkhill (2013), studied low reading achievement among students in an intermediate school. Following implementation of professional development on reading strategies, student reading data being utilized to inform instruction based on reading progress and student need, and teacher support in the new reading strategies student reading achievement improved (Fletcher, Grimley, Greenwood, & Parkhill, 2013). Based on this research study a well-planned professional development training about peer mentoring, time for collaboration to develop programs, and ongoing support during implementation from the training facilitator could have a possible impact on reading achievement. The results of this study and this professional development training have the potential for far-reaching impact. The original goal of the

study was to improve sixth-grade student reading achievement. Given the results of the study and the research supporting success with improvement in other content areas, the professional development training has been development. This training will initially be implemented in one school district, however, has potential to have other training sessions developed modeling the original one provided throughout the state and even beyond. The more teachers and administrators that are exposed to the research about peer mentoring, the study that occurred at one school and its results, and provided time to work collaboratively to implement similar programs within the school the more potential there will be for positive change in student achievement.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

The original problem that prompted this study was the high number of sixth-grade students who were not scoring proficient in reading on the FCAT at a school and district in Florida. The purpose of the study was to determine whether a cross-age peer mentoring program would improve sixth-graders' reading achievement and motivation to read. The findings from the study informed the development of a professional development program for teachers and administrators.

The professional development project developed from the research findings is designed to present an overview of the cross-age mentoring program in reading from the study and current research on cross-age mentoring. The training was created to target teachers and administrators within the district where I conducted the original study with an emphasis on participation by teams of teachers and administrators from each school. Time for team collaboration was built into the professional development training sessions for a team of teachers and administrators to design one or more peer mentoring programs for their school.

The project includes assessment tools, an hour-by-hour training schedule, a PowerPoint presentation with information about forming school, and district partnerships to access resources and support for the implementation of a peer mentoring program. The local district administrators and teachers have demonstrated strong support for this project. Among other indicators of support, I was invited to present the findings from this

study to all of the reading coaches and principals in the district during the 2015–2016 school year.

Benefits of the project could include increased student achievement. Teachers and administrators will leave the training will a plan for implementation of a peer mentoring program of their school site to meet the needs of their students. Teachers will leave the training with a tentative plan and the knowledge about the benefits of peer mentoring reading for implementation at their school site. Time for the majority of the planning is scheduled into the training. In addition, the district has the potential to become an example for other districts in creatively addressing the needs of students and increasing student achievement.

One limitation of the project is that teachers would be required to be away from their classrooms for three days to attend the training. In addition, it would be critical for school site teams to remain focused and organized following the training. The goal of the training is for school site teams to learn the benefits of mentoring programs, review different models, and to development a model that will meet the needs of the students at their school site. For this to be possible, school site teams must continue working together following the training. This can often be a limitation as teachers and administrators have busy schedules and may find it difficult to find time to meet.

Recommendations for Remediation of Limitations

To eliminate time out of the classroom for teachers and away from the school site for administrators, at least 1 of the days may be planned on a district professional development day. This would limit the amount of time away from students to attend the

training. If teachers use the peer mentoring school site team to fulfill their district required professional learning community (PLC) requirement, then meeting to plan implementation and follow-up of the mentoring program will not require an additional meeting. In addition, once teachers and administrators implement a successful peer mentoring program and begin to see student results, there may be motivation to continue with the program.

Recommendation for Alternative Approaches

The original problem that prompted this study was approximate forty percent of sixth-grade students who were not scoring proficient in reading on the Florida Comprehensive Assessment Test (FCAT) at a school and district in Florida. Another way of stating this would be to focus on the students that were scoring proficiently instead of the students that were not. Instead of stating that approximately forty percent of the sixth-grade students within the targeted school and district were not scoring proficiently it could be stated that only sixty percent were scoring proficiently on the state reading assessment. One method of increasing content area proficiency and this case specifically in reading are peer mentoring programs. The study examines one reading-focused cross-age peer mentoring program and the impact it had on the reading and motivation to read scores of six sixth-grade students.

Prior to the study, a mentoring program did not exist on the campus where the reading-focused cross-age peer mentoring program study was conducted. The study set the basis for a program that could be built upon and through professional development be implemented in other schools within the district. One thing that teachers could do

differently with similar programs in the future that may impact student success would be mentor selection. Karcher, Davidson, Rhodes, and Herrera (2010), determined that when mentors possessed certain characteristics to include strong communication skills they made more effective mentors (Karcher, Davidson, Rhodes, & Herrera, 2010). Another element to the program that could be done differently would be mentor training. While mentors were trained prior to the first session, the training was not as in depth as it could have been. Gotian (2016), determined that mentoring was a learned skill and training was needed to prepare mentors to serve in this role. Additionally, ongoing training was necessary to ensure that mentors were not placing judgment on their mentees and continued to improve their listening skills (Gotian, 2016). Mentor selection and training are two ways that the original program could be approved and expanded upon to further increase student outcomes.

While peer mentoring is one way to increase student reading achievement, there are numerous other methods to do this. Some examples of strategies for improving reading achievement from the literature are using science-related informational texts and structured responses (Stephens, 2010), developing more effective learning environments (Fletcher, Grimley, Greenwood, & Parkhill, 2013), and integrating technology applications into reading instruction (Cheung & Slavin, 2013).

Stephens (2010) examined the effect of reading science based materials aloud two students for twelve weeks on reading comprehension of participants. Fourth grade students identified as low socio-economic status were exposed to fifteen to twenty-minute read-alouds of science-based materials considered high interest two to three days

per week. Teachers then lead students in brief discussions of the readings, additionally, students provided written responses. Following involvement in the program, it was determined that there were increases in reading comprehension and an increase in the amount of time teachers were providing teacher-directed reading instruction (Stephens, 2010). A high-interest science-based reading approach is one additional way to increase student reading achievement as evidenced in this study.

Fletcher, Grimley, Greenwood, and Parkhill (2013) conducted a four-year case study that examined the impact of school environment change on reading achievement. One low socio-economic, multicultural, at risk school was the site for this case study. A literacy expert was appointed to work at this school site. Following the four-year case study, it was determined that gains in student reading achievement had been made. Several factors were determined to have made this change. The factors credited with the most significant impact were the appointment of the literacy expert, collaboration among school leadership, increased and ongoing professional development provided to teachers, and the use of reading data to inform the development of instruction (Fletcher, Grimley, Greenwood, & Parkhill, 2013). This case study demonstrates another method of increasing reading achievement among students.

Cheung and Slavin (2013) conducted a review of studies that explored the possible impact of the use of technology applications on reading achievement. The review examined twenty studies including approximately seven thousand first through sixth-grade students. The students included in these studies were identified as struggling readers. It was determined that a positive but small impact was seen in the reading ability

of students exposed to tutorial based reading technology applications (Cheung & Slavin, 2013). Integrating reading-focused technology into the curriculum is another method of increasing student reading achievement.

Scholarship, Project Development, Leadership, and Change

Through the research, implementation of the study, and project development I experienced personal learning and growth as a scholar, practitioner, and project designer. Reading and improving student reading achievement is something that I am very passionate about. The theoretical framework that served as the basis for this study was the work of Lev Vygotsky and the concepts of scaffolding and the zone of primal development. These two concepts lent themselves to serve as an effective lens for a study on a reading-focused cross-age peer mentoring program. The purpose of the scaffolding strategy is to support the commitment of students throughout the process of learning (Valkenburg, 2010). For the purposes of this study mentees were engaged by their mentor in the reading process. They received necessary scaffolds or supports (Valkenburg, 2010) to be able to read and comprehend self-selected books one level above their independent reading level. Scaffolding is a common guided reading strategy used to support students especially when exposing students to more complex texts (Reynolds & Goodwin, 2016). Through the use of scaffolding struggling readers were able to experience high success during reading experiences. Struggling readers like strong readers need to experience success during reading experiences (Allington, 2011). As a result of participation in the mentoring program sixth-grade participants made gains in reading and motivation to read. These results informed the development of the project, a three day peer mentoring

professional development program designed for teachers and administrators within the school district where the original study was conducted. Throughout the training the theoretical framework of scaffolding will also be applied. Training participants will be supported through the use of scaffolding by the trainer while developing their peer mentoring programs and implementation plans.

Approximately forty-percent of the sixth-grade students within the target school and across the district were not reading at grade level prior to this study. According to Enriquez (2011), students who read below grade level in middle school often lack the motivation to read and are self-conscious about their lack of reading ability (Enriquez, 2011). Additionally, Mucheraht and Yoder (2008) determined that students that had confidence in their ability to read more challenging material often scored better on reading assessments than their peers that did not feel as confident in their abilities (Mucheraht &Yoder, 2008). Therefore, it is important to address the lack of reading achievement. I found several studies (Topping, Miller, Thurston, McGavock, & Conlin, 2011; Van Keer & Vanderlinde, 2010; Lingo, 2014; and Wawrzynski et al., 2011) that supported the use of peer mentoring and specifically cross-age peer mentoring to support increases in academic performance in several content areas.

Through writing the proposal and developing the study I had the opportunity move from being a teacher to being a scholar and practitioner. Having the opportunity to not only develop a study but also to implement it had a significant impact on me as a scholar and practitioner. I had the ability to see the research in action through the implementation of the reading-focused cross-age peer mentoring program. Data produced

from the study was evidence that as much of the literature stated that mentoring programs can have a significant impact on student achievement. As noted in section three I realized that the data derived from a reading-focused cross-age peer mentoring program in one school in a small island community could be turned into a professional development workshop to have a large impact on social change. Through research and application, I feel that I have become an authority on peer mentoring. Originally my study was proposed to focus on outcomes of both sixth-grade and high school participants; however, through the process it was narrowed to focus on the sixth-graders. I have learned that given the focus of this study there are additional opportunities for follow-up research to include possible outcomes for high school mentors. The IRB application process was frustrating, however, necessary. Through the process of approval, I learned the importance of participant protection, study alignment, and protection from researcher bias.

Through the development of the peer mentoring focused professional development training, I grew as a project developer. This was the first time that I have had the opportunity to develop a project of this scale and within this much depth. I feel confident that after completing the process of developing this workshop that I have the necessary knowledge and skills to not only develop other projects but also to implement them.

Reflection on the Importance of the Work

According to Grossen (1997) as cited in Shearer Lingo (2014), "Despite a variety of interventions implemented in general and special education classrooms, many students continue to have reading difficulties" (p. 53). While much effort has been placed on reading instruction and remediation for struggling readers the school, district, state, and national statistics continues to demonstrate a lack of grade level reading achievement among students. According to the NAEP scores, only approximately one third of students in the United States are reading proficiently or above the proficient level (Rampey, Dion, & Donahue, 2009, as cited in Allington, 2011). This indicates that one third of students in the United States read at the basic level and one third read below the basic level (Rampey, Dion, & Donahue, 2009, as cited in Allington, 2011). This work is important because it demonstrates how a minimal to no cost strategy integrated within the school day can not only increase reading ability but also motivation to read among students involved. It is important to include high-success texts of interest (Allington, 2011) and self-selected reading materials (Guthrie & Humenick, 2004; Linsay, 2010, as cited in Allington, 2011) in programs for struggling readers in order to see increases in reading ability. Furthermore peer mentoring is a versatile strategy, as the studies in the literature review details it can be used across content areas to increase academics and social ability, same age and cross-age (Topping, Miller, Thurston, McGavock, & Conlin, 2011) programs can be implemented, programs can be developed for any grade level (Van Keer & Vanderlinde 2010 and Hill, Francesca, & Giles, 2010), and it can be integrated during the school day or incorporated into an after school program.

In addition to the study and results being important, the project developed from the study results also has the potential for far-reaching positive impact. Given the versatility of peer mentoring programs the professional development training developed could be delivered not only within the district it was designed for but also throughout the state or beyond. The combination of instruction and collaboration may allow school site teams to become more knowledgeable about the benefits of peer mentoring programs and provide an opportunity for teams of teachers to collaborate to develop a basic plan for program implementation at their school sites. This work has provided a basis for increases in student achievement in one school.

Implications, Applications, and Directions for Future Research

This study and project have the potential for positive social change. When students become stronger readers, they can perform better in all of their classes as they will have complete access to course materials. In the state of Florida students are required to pass the tenth grade state exam, now the FSA reading test before graduation to receive a standard diploma and the benefits that one presents. Increased reading achievement for struggling readers will increase their overall learning experience and provide an increase in opportunities both in school in the form of additional electives and experiences and after graduation with a standard diploma. Throughout the study through observations and the interviews following the mentoring program, sixth-grade struggling readers expressed a positive change in their feelings about reading and motivation to read more outside of school. They reported they enjoyed being part of the mentoring program, following the program they read more outside of school and were more comfortable reading aloud in

class, and throughout the program were engaged in reading tasks. Additionally, their scores on the Motivation to Read Profile increased following participation in the program.

Also, mentor characteristics can impact mentee outcomes (Karcher, Davidson, Rhodes, & Herrera, 2010). This was evidenced in the study as mentees whom had mentors with certain characteristics demonstrated greater grains on the STAR reading assessment and Motivation to Read Profile than their peers that had mentors that did not hold these characteristics. Having this information can impact how mentors are selected and therefore, promote increased achievement. The professional development training that was developed may have the potential to promote positive social change in possible reading interventions provided for students not reading at grade level beyond one school and one district as it promotes a model that had success and could lead to the development of numerous other programs to support increase student learning.

Recommendations for practice would include implementing a larger scale reading-focused cross-age peer mentoring program within the school of the original study. Also, the researcher could meet with district principals to encourage the implementation of similar programs within their schools to further support struggling readers. Recommendations for future research would include a study that focuses on the benefits of the mentors as the literature indicates possible increases in self-esteem and other characteristics after serving as a mentor. Other researchers and I could conduct additional research using different age groups, same-age structures, and large sample

sizes. Research is this area could provide additional support for the benefits of peer mentoring programs.

Conclusion

Peer mentoring is an educational strategy that provides students with additional opportunities for practice with basic skills with potential for improved academic performance (Shearer Lingo, 2014). The reading-focused cross-age peer mentoring program outlined in the study demonstrates how student reading achievement and motivation to read can be improved. Results from the study demonstrated an increase in reading ability, an increase in motivation to read, and a change in thought by sixth-grade struggling readers. Given these positive results a three day professional development training project for district teachers and administrators was developed. A focus of this professional development training project is for participants to learn more about mentoring and have time to collaborate to develop mentoring programs for their schools. The goal for these programs is that they will be implemented in the schools within the district and lead to increased student achievement. This program has the potential to be reproduced to meet the needs of schools with varied demographics within the district, state, and beyond using the model developed to promote increased student achievement and positive social change.

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Appendix A: The Project

Introduction

The original problem that prompted this study was the high number of sixth-grade students who were not scoring proficient in reading on the Florida Comprehensive Assessment Test (FCAT) at a school and district in Florida. Approximately 10% of sixth-grade students in Marine County School District were reading below grade level. The purpose of the study was to determine if a cross-age peer mentoring program would improve sixth-graders' reading achievement and motivation to read. The data from this study informed the project; a three day professional development workshop for teachers and administrators who are interested in implementing mentoring programs at their schools. Data from the study indicated that participation in a cross-age peer mentoring program may increase students' reading achievement and motivation to read. Training materials include the PowerPoint presentation, a timeline, and assessments. Materials should be provided to any group of educators interested in learning more about peer mentoring programs or implementing similar programs at their school site.

Program Goals, Outcomes, and Objectives

Program Goals

A. To educate teachers and administrators about different types of mentoring programs
B. To inform teachers and administrators about the research on mentoring and the local study that I conducted at one school within the district

C. To provide teachers and administrators with the necessary skills to implement a mentoring program at their school site
D. To provide teachers and administrators with the opportunity to collaborate in school teams to develop a mentoring program that will meet the needs of their students
E. To provide support to teachers and educators during and following implementation of their mentoring programs
F. To establish a mentoring focused team at each school site within the school district.

Program Outcomes

A. Teachers and administrators will demonstrate an understanding of effective mentoring programs by designing a program to meet the needs of their learners at their school site
B. Teachers and administrators will demonstrate the skills necessary to implement a peer mentoring program by implementing a program at their school site
C. Teachers and administrators will work in school site teams to identify a need within their school that could be supported through a mentoring program, develop one based on their school demographic, and implement the program
D. The school site team will support one another in the development and implementation of the program

Program Objectives

A. As a result of the introduction to mentoring, teachers and administrators will be able to identify a school need that could be supported through a mentoring program, develop a program, and implement the program

B. As a result of hearing about the local study from the researcher and high school mentors involved, teachers and administrators will be able to develop programs that will meet the needs of both the mentors and mentees involved

C. As a result of the collaborative planning time spent working in school site teams during the training, teachers and administrators will leave the training ready to implement their program

D. As a result of mentoring programs developed during the training, revised, and implemented increases of student achievement in the targeted academic or social area may be evident

Training Time Line

Day 1 9:00am-3:30pm	Day 2 9:00am-3:30pm	Day 3 9:00am-3:30pm
Opening Session – 9:00-10:00am • Introductions (meet each site team) • Pre assessment to gather baseline data on knowledge of participants in regard to peer mentoring	**Opening Session 9:00-10:00am** • Brief review of day one • Each site team will share their initial thoughts for need to be addressed and structure used for a mentoring	**Opening Session 9:00-10:00am** • Brief review of day two student presentations • Addition

• KWLH (know, want to know, learned, how) complete the K and W to provide information to direct training towards the needs of attendees individually, in site teams, and then share out among the entire group	program within their site with the group • Opportunity for participants to generate questions for local study mentors and mentees	al questions and answers • Each team will share their initial plan with the group
Peer Mentoring in Research 10:00-11:30am • Presentation of research on peer mentoring to include benefits on mentees and mentors, possible structures of programs, and how different content areas both academic and behavioral can be addressed through peer mentoring • View video – Youth Media: Student Reporting Lab "Peer Mentors Rock" – an example how a need was addressed in one high school using peer mentoring - https://www.youtube.com/watch?v=Za6-_9YU44Y	**Presentation from Local Study Mentors and Mentees 10:00-11:30am** • Select mentors and mentees involved in the local study will share their perspectives to include their overall experience, any changes their noticed in themselves throughout the program, components they liked about the program, and what they would change about it • Questions and answers from training participants and students • Debrief – written	**Site Team Collaboration 10:00-11:30am** • Continue site team collaboration to focus on implementation including student selection, logistics, teachers and personnel involved, and mentor training with trainer support

• Brief discussion within school site teams to begin brainstorming a need within their schools that could be addressed using peer mentoring • Presentation of different structures of peer mentoring (cross-age, same-age)	reflection/notes independently, discussion/sharing within site teams, share out with group	
Lunch **11:30-1:00pm** (District standard for professional development)	**Lunch** **11:30-1:00pm** (District standard for professional development)	**Lunch** **11:30-1:00pm** (District standard for professional development)
Peer Mentoring Local Study **1:00-3:00pm** • Presentation of local study including need (problem) addressed, student selection, orientation and pre assessments for mentees and orientation and training for mentors, implementation, post assessment, results • Questions and discussion • Discussion within school site teams to determine best structure based on school demographic	**Site Team Collaboration** **1:00-3:00pm** • Site teams will work collaboratively with trainer support to further develop their peer mentoring program to include need to be addressed, structure, and implementation details	**Site Team Collaboration** **1:00-2:30pm** • Continue site team collaboration to focus on leaving with a complete plan for implementation with trainer support

and need for a mentoring program		
Closing **3:00-3:30pm** • Additional questions/answers and reflection on day one of training • Add to whole group KWLH chart L and H (learned and how (method or resource) it was learned)	**Closing** **3:00-3:30pm** • Additional questions/answers and reflection/clarification on day two of training • Add to whole group KWLH chart L and H (learned and how (method or resource) it was learned)	**Closing** **2:30-3:30pm** • Additional questions/answers and reflection/clarification of entire training • Complete KWLH chart as a group • Each site will share their peer mentoring program designs with the group • Post assessment

Pre Assessment Peer Mentoring Training

Directions: Please respond to each statement below using the response key below, circle your response.

SA: Strongly agree

A: Agree

N: Neutral

D: Disagree

SD: Strongly Disagree

1. I am familiar with peer mentoring and the effects that it can have on student achievement.

   SA A N D SD

2. I believe implementing a peer mentoring program at my school site is feasible.

   SA A N D SD

3. I believe that there is a need within my school site that could be addressed with a peer mentoring program.

   SA A N D SD

4. I have the knowledge and skills necessary to implement a peer mentoring program at my school site.

   SA A N D SD

Post Assessment Peer Mentoring Training

Directions: Please respond to each statement below using the response key below, circle your response. Answer the response questions regarding your training experience.

SA: Strongly agree
A: Agree
N: Neutral
D: Disagree
SD: Strongly Disagree

1. I am familiar with peer mentoring and the effects that it can have on student achievement.

   SA A N D SD

2. I believe implementing a peer mentoring program at my school site is feasible.

   SA A N D SD

3. I believe that there is a need within my school site that could be addressed with a peer mentoring program.

   SA A N D SD

4. I have the knowledge and skills necessary to implement a peer mentoring program at my school site.

   SA A N D SD

5. Briefly describe the peer mentoring program that your school site team developed.
6. Briefly describe any changes in your beliefs about peer mentoring and how you believe it will impact student achievement at your school site.
7. Describe your overall perceptions on the value of the peer mentoring training.

Peer Mentoring Observational Protocol

Description of the setting of the tutorial sessions

- Physical (features)
- Student arrangement
- Mentoring program structure

Thementees/mentors

- Actions/activities
- Conversations
- Interactions between students

Recording Sheet

Date and time of observation:

School site:

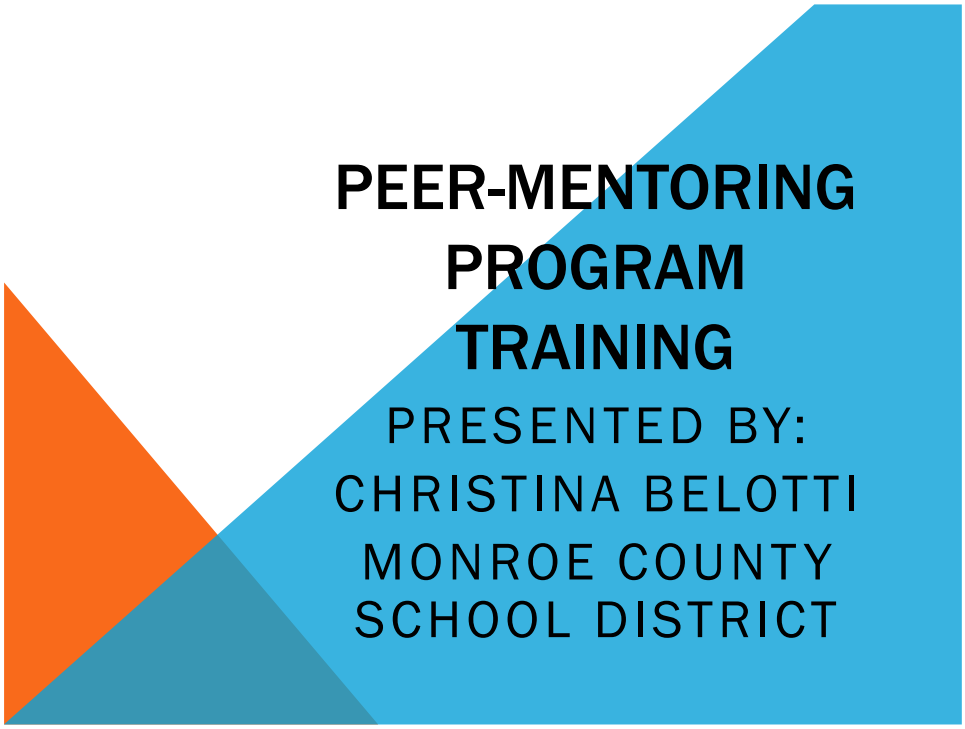
Setting/student arrangement:

Participants:

Observer:

Participant(s)	Comments	Actions/Interactions

Peer Tutoring Training PowerPoint Link



What is next?

During the 2016-20l7 year I will present the findings from this study and the concept of the professional development workshop to all of the public and charter school reading coaches and principals in the county. The goal of these presentations is that reading coaches and principals in schools throughout the school district will see the value of peer mentoring programs for increasing reading achievement and student motivation to read. If the sixth-grade students involved in the nine-week study demonstrated seven months to over a year of reading gains, a semester or year-long program may even have an even greater impact. This research document has potential for additional research and for direct impact on student learning locally and on a larger scale. This document and the study detailed here could lead me to additional research in regards to peer mentoring. I would like to study the impact participation in a reading-focused cross-age peer mentoring program could have on the mentors, the literature indicates it could be significant. Articles based on research addressing the benefits to mentors and the benefits to both mentees and mentors in same-age programs and using different dynamics of students could be a result of this research document. The original study examined a mentoring program between sixth-grade students reading below grade level and high achieving ninth-grade students, additional studies could explore programs with both mentors and mentees as below grade level readers. Additionally, other researchers could conduct additional studies with other content areas as the focus instead of reading. The workshop developed could be adapted to meet the needs and time constraints of individual schools and school districts. A mentor training model could also be developed

to train mentors with consistency. This research document, the study, the professional development workshop with materials, and additional research and articles by me and other practitioners has potential to enhance the practices of teaching and effective reading development for students reading below grade level.