Reader Role Models: How Cross-Age Tutoring Can Help Second and Sixth Graders Improve Their Reading Skills

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READER ROLE MODELS: HOW CROSS-AGE TUTORING CAN HELP SECOND AND SIXTH GRADERS IMPROVE THEIR READING SKILLS

by
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A capstone submitted in partial fulfillment of the requirements for the degree of a Master of Arts in Teaching

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Special thanks to my wife, Jennifer, without whom I would never have been able to pursue my true calling as a teacher. Also to my daughters, Elizabeth and Katherine, who gave me a good idea that I could actually relate to children.
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CHAPTER ONE

Introduction

In today’s world of education, with increased emphasis on students’ proficiency in standardized tests, schools are focusing more and more on their reading programs in the primary grades. Many educators believe that children’s early reading skills are the basis for all their subsequent academic achievements.

With this urgent need to improve the reading skills of younger students in mind, my central question is: “How does a reading intervention program at an urban charter school taught by sixth grade students to second grade students, commonly known as cross-age tutoring, affect the reading test scores of both groups?”

Many experts agree on the need for early intervention for struggling readers. The fear is that these readers, if they do not receive any assistance, will continue to fall further behind their peers, to the point where they will never be able to catch up. This thinking has led to various reading intervention programs being developed and implemented into schools throughout the country, with varying levels of success.

As a second grade teacher, I have become familiar with many of these reading intervention programs. The reality is that a certain amount of recurring time is needed for them to work successfully with each individual student. For both teachers and students, time in the classroom is limited, meaning these intervention programs don’t get the amount of time needed to be fully successful. As I began thinking about this conundrum, I wondered if there might be a scenario where struggling second grade
readers received additional help they needed while sixth grade students gained learning benefits as well.

In this chapter, I will give a general background on what led me to research and develop a cross-age tutoring program involving sixth and second graders at my school, along with studying its results. First, I will detail what led me to change careers into teaching in the first place. Then, I will examine how important reading has been throughout my life so far. Finally, I will show how the limitations of my own training as a reading teacher led me to seek out ways to better teach students how to read. One of the ways I’ve discovered is called cross-age tutoring.

Teaching as a Calling

There is a moment I will remember for the rest of my life. It was near the end of my first year of teaching. I was watching one of my young students as she happily read to me, her finger tracking the words along the page. Suddenly I realized that this same student had come into my classroom the previous fall not knowing all of her letters or their sounds. That I had somehow been a part of this miracle called reading made me realize why I had been called to be a teacher.

Before Teaching

The road less traveled. It is hard to believe the events in my life that have led me to become a second grade teacher. If my current self could somehow travel back in time to 2007 and let my past self know that, in the time since, I will have been a second grade teacher for the past five years, I’m sure I would never believe it. I have come to
realize one of the main factors that has led me down this path is how much I value teaching reading to young students.

Back in 2007, I was a sales manager working for a large Fortune 100 corporation. I had decided it was past time for a change. Other than a nice paycheck, I saw little value in the work I was doing. At first, I simply thought I would find work at a different large corporation that was more aligned with my values. Fortunately, I’ve never been the type of person who “burns his bridges” and be completely done with something. Instead of telling my manager “I’m quitting your company so I can go to work for a better company” which may have resulted in hurt feelings, I decided instead to go with “I’m quitting your company to get a teaching license and become a teacher.” At first, it was just something to say to avoid uncomfortable questions, but the more I talked about becoming a teacher, the more sense it made to me.

Teaching had always been highly rated in my interest inventories. Even now, I can remember the excitement of my sophomore year high school English teacher upon seeing “teacher” at the number one spot on the interest survey we had taken. At the time, I didn’t have the heart to tell her I had no intention of pursuing that career. Over 20 years later, I wonder if she was smiling somewhere as I enrolled in Hamline’s Master of Teaching program.

Intermediate bound. As I began my teaching studies, I had no intention of focusing on the primary grades. I registered for the elementary school program with a middle school language arts addition because my undergraduate degree aligned best with that. I had every intention of teaching in the intermediate grades, or maybe even middle
school. Given that this was roughly the age of my own children at the time, it was an age group with which I felt I could relate.

_Fate intervenes._ Then along came the random chance that is student teaching. I was placed with a first grade mentor at an urban school in a fairly upscale neighborhood. My first thought before I even walked through the door was that I was going to throw myself into it 100 percent and make the most out of it, even though it wasn’t a grade level I would probably ever teach again.

Then something amazing happened. I really enjoyed myself teaching first grade and have memories that I will cherish for the rest of my life. I learned that teaching the younger grades is one of the most important jobs in the world, particularly helping them learn how to read. It allowed me to live out the values I felt were lacking in my previous job.

Most important of all, I was told I was good at it. My advisor, who had been an elementary school principal herself, was always trying to convince me that I should continue teaching the primary grades after I initially told her that I was really looking more toward the intermediate grades. Given my fairly unique status as an older male primary grade teacher, she would to say to me, I would probably get a lot of interviews from principals looking to diversify their pool of potential candidates. She was absolutely right!

I was offered and accepted my first teaching job in the first grade at a charter school in north Minneapolis before I had even finished my student teaching assignment.
The first year of teaching. My first year of teaching was every bit as difficult as anyone can imagine at an urban school. In spite of all the behavior challenges, I continued to stay positive and be inspired by teaching. It was here where I had my moment of revelation with the young reader.

In reflecting upon that moment, I began to ask myself some serious questions. If I had taught this young student how to read, what exactly had I done? Was it simply the direct instruction program I followed that taught her how to read, or did I have more of a role to play? Could I teach all students how to read?

Despite all of my struggles through that first year, I was convinced that I wanted to continue helping students learn how to read.

Importance of Reading

One of the main reasons I look forward to every Monday morning as a teacher is the opportunity to develop my students into better readers. I consider it my primary job as a teacher.

Reading has had a remarkable impact on my own life. As a young boy, my family and I traveled around the United States extensively. Even now, my parents always joke about how my nose would always be stuck in a book while the beautiful scenery passed me by just outside the car window.

My first career after college was as a news editor for a small town newspaper. While that job obviously involved a lot of writing, there was also fair amount of reading required as well. I would need to scan various local and statewide papers for interesting story angles.
Later, I worked as a newspaper researcher, where the entire job involved reading major newspapers and inputting relevant data in order to search for our clients’ names and topics. Thanks to this job, I can tell my second graders that being able to read well literally earned me money and put food on my table.

Even as a sales manager, my skills as a reader helped me significantly. My reading ability meant that I could quickly scan and determine the worth of hundreds of emails I might receive in just a few days’ time.

**After the First Year**

In a series of events I still can’t believe, I was asked to come in and teach second grade at a different elementary charter school in downtown St. Paul, one that was much closer to my home. A teaching friend had recently changed positions and suggested my name as someone who might be a good fit for her previous class. I have been working there ever since. I definitely have found my teaching niche in second grade, a level where students are really developing and expanding their reading skills.

Reading is very important to me and I hope that comes through to my students every day. The big question then becomes what is the best way to teach it?

**Reading Program**

The school where I teach is a K-6 Charter School located in St. Paul serving almost 300 urban students from various cultures and ethnicities. The majority of students are African American, but it also has a significant Hmong student population and a growing number of Karen (an ethnic group from Myanmar, formerly known as
Burma) students. Students come from a struggling socio-economic background, and there is currently a 99.6% free and reduced lunch rate at the school.

Although scores on the Minnesota Comprehensive Assessment (MCA) have been well below the state average, the scores of the students at the school have been steadily improving over the past four years. Due to its poor MCA scores, the school has been designated as a Focus School by the State Department of Education, allowing it to receive assistance from a Regional Center for Excellence.

For reading, the school has adopted a Guided Reading approach. This means that students are officially benchmarked by their reading levels three times a year (October, January, May) and placed into small groups with similar reading levels for differentiated instruction within the classroom. The school also uses what is called Response-To-Intervention, or RTI, model. A student’s scores, either in benchmarking or other standardized tests may designate them for assistance from other sources.

My classroom. Many of my students need extra assistance if they are going to succeed in education, particularly when it comes to their reading and literacy skills. Despite working in a charter school and having a smaller class size than a typical public school teacher, I am still limited in my ability to work with these students one-on-one due to the number needing help and the time constraints involved. Helping to fill in and work on reading interventions with these challenged students are a host of other instructors and helpers. These include a Title 1 Teacher, English Language Learner Teachers, Special Education Teachers, Paraprofessionals and Buddy Readers from the community.
During the 2014-2015 school year, I was designated as the Lead Teacher at Urban Academy, which involves evaluating and coaching the teaching staff. It was as I observed other teachers in action that I realized we were all experiencing the same difficulties of too many students needing assistance and not enough time for all of them.

**Educational experience.** For as much as I have come to cherish reading, my own training in literacy had significant gaps and did not properly prepare me for what I have experienced as a teacher. During the class, we had limited student contact, only working directly with students once a week for 45 minutes. Even worse to my mind, this student instruction was in a small group setting, which actually meant eight students in my particular case. My subsequent experience has shown me that eight students is generally too many for small group instruction, particularly for struggling readers.

During our college class, we received adequate phonics training, but nothing regarding phonemic awareness, fluency, vocabulary, comprehension, or other important reading skills. Most importantly, we had no real guidance on what to teach our young students in our limited time with them. Looking back, I doubt if any of my eight students learned very much from these sessions.

As I began thinking about these shortcomings, I wondered if I could develop a meaningful literacy training program; one that would benefit my own second grade students in addition to those that would be tutoring them. My initial thought was to
focus on a teachers-in-training program at a local college. Unfortunately, I felt this involved too many factors that I would not be able to control.

Learning By Teaching

I began looking within our own school for potential tutors. In talking with our sixth grade teacher, she wanted to make reading more meaningful for some of her readers. I wondered if we could join forces.

My idea was to create a program called reader role models, where the sixth grade students tutor my second graders in their reading. Every week, I could work with the sixth graders regarding reading instruction. We would go over different readings about different theories on reading instruction. They would then use this knowledge to select appropriate reading materials and activities and work with my second graders daily.

I hope both second grade and sixth grade students benefit from reader role models, not only from improvement in computerized reading test scores, but also from a sense of accomplishing something important. That is the same feeling I had as a first year teacher watching my student as she happily read her book out loud.

Summary

As I began to research this idea, I discovered it wasn’t all that new or revolutionary. As Seneca the Younger wrote in a letter back in 65 A.D.: *docendo discimus* (latin for “by teaching we are learning”). In the 1930s, Lev Vygosty, the famed educational psychologist, also said “The one who does the talking, does the learning.”

Best of all, this learning by teaching method fits well within my school’s own culture of learning. As our school director tells us at every orientation before the start
of a new school year, “Never do for a child what a child can do for themselves.”

Hopefully, our children can teach other children how to be better readers, becoming better readers themselves, and ultimately answering the question: “How does a reading intervention program at an urban charter school taught by sixth grade students to first grade students, commonly known as cross-age tutoring, affect the reading test scores of both groups?”

Chapter Two Preview

In Chapter Two, I will be looking into the research that has been done about cross-age tutoring. Developing a program that takes classroom time away from both second and sixth grade students may seem like a risky proposition. I will show how research has not only established a serious need for such a program, but how cross-age tutoring has been successful in improving the reading ability of both sets of students in many cases. There has also been research into the necessary elements for the success of both cross-age and regular reading tutoring programs which will be detailed in the coming chapter. Finally, assessing if a cross-age tutoring program is successful in improving its participants’ reading skills will be researched, particularly examining the NWEA MAP Reading Test so commonly taken by students throughout the country.
CHAPTER TWO

Literature Review

Chapter Introduction

The teaching system known as “cross-age tutoring” has likely been around since ancient times. One can easily imagine primitive humans showing their younger siblings and other companions how to make a fire, hunt for animals, or gather edible berries and roots. Over 150 years ago, older students teaching younger students was the way of life in the one room schoolhouse on the American prairie. Yet it is a practice that is underutilized in more modern times (Hedin, 1987)

The central question of my capstone is: “How does a reading intervention program at an urban charter school taught by sixth grade students to second grade students, commonly known as cross-age tutoring, affect the reading test scores of both groups?” In this chapter, I will research current literature to first establish the necessity for a cross-age tutoring program; then review effective early grade reading interventions that focus on one-on-one tutoring in particular as it relates to cross-age tutoring; next develop my own version of cross-age tutoring based on other successful models that have been implemented; and finally analyze my proposed testing mechanism to show if this cross-age tutoring program was successful at improving reading skills for both second grade and sixth grade students.

Necessity of Early Grade Readers

For nearly 40 years, there have been studies showing the importance of students reading ability in the early grades (Lloyd, 1978). However, recent long term studies
(Lesnick et al, 2010; Hernandez, 2011) along with major legislative initiatives like the No Child Left Behind Act (2001) and Race to the Top (2009), have caused educators across the country to refocus and implement research-based strategies to improve the reading skills of their youngest students.

More than three decades ago, researchers began to focus their efforts on students’ ability to read by the third grade and its effect on their academic skills later in life (Lloyd, 1978). Third grade was designated as a critical juncture for students to be able to read at grade level. The theory behind this designation is that students switch from “learning to read” to “reading to learn” at this grade level (Lesnick et al, 2010). After the third grade, much of student’s subsequent education is delivered from their ability to read. A student with poor reading skills, therefore, will not learn as well as their fellow classmates and continue to fall further and further behind (Hernandez, 2011).

**Reading test data.** Most reading scores on the National Assessment of Educational Progress (NAEP), the largest continuing assessment given to students across the nation, have been slowly rising. This assessment has been given to students across the United States every year since 1971 (NAEP, 2012).

This increase in reading scores is particularly true for the fourth grade students, the youngest grade tested, who have taken the NAEP. Despite these yearly increases, however, the 2012 NAEP showed only 34 percent of American fourth graders were designated at or above a “Proficient” level in reading, while 67 percent reached at least the “Basic” level (NAEP, 2012). This meant that 33 percent of American fourth grade
students taking this test are not able to read at even a “Basic” level, which includes identifying key details and information from a given text (NAEP, 2012).

**Long term studies.** If the fact that 33 percent of students are unable to read at a “Basic” level wasn’t concern enough, a long-term study has further raised a major red flag regarding struggling readers and their potential futures. Using the NAEP designation of “Proficient” for fourth grade readers, researchers correlated graduation rates in a long term study. They discovered that one in six students who are not reading at a “Proficient” level by the end of their third grade failed to graduate from high school on time (Lesnick et al, 2010). This was four times greater than the rate for students who achieved the “Proficient” rating on the NAEP by their fourth grade year (Lesnick et al, 2010).

The implications of early poor reading skills go even beyond high school graduation rates. While no direct correlation has been discovered between educational attainment and arrest and incarceration rates, the U.S. Bureau of Justice reported that 59 percent of federal inmates and 75 percent of inmates in state prisons did not complete high school (Harlow, 2003). Additionally, these numbers of incarcerated individuals without a high school diploma has increased over time (Harlow, 2003). It was estimated that high school dropouts are 3.5 times more likely than high school graduates to be arrested at some point in their life (Alliance for Excellent Education, 2003).

It is important to note that pointing a finger at poor reading skills in the early grades as a major societal problem in education may be too simplistic and certainly ignores
complex, larger cultural factors that greatly contribute to overall academic difficulties, such as poverty and race.

For example, one study found that only 2% of white students who had not experienced poverty and were “Proficient” on the NAEP by their fourth grade year failed to graduate by age 19. That percentage increased to 4% for those who were only reading at a “Basic” level in the fourth grade, and up to 12% for those reading at “Below Basic” level (Lesnick et al, 2010).

While that increase alone was fairly notable, when race was factored into the study’s calculations, the likelihood of failing to graduate from high school on time increased exponentially. Only 3% of black students who tested “Proficient” on their NAEP test in the fourth grade failed to graduate from high school by age 19. This was only 1 percentage point different from their white counterparts. Of those that were “Below Basic” reading level, however, 18% failed to graduate from high school on time. This is 6 percentage points greater than their white counterparts. Hispanic students in the study fared even worse. Only 5% of Hispanic students who tested “Proficient” failed to graduate from high school on time. Of those Hispanic students who tested “Below Basic” on the reading exam in their fourth grade, 24% failed to graduate from high school on time, which was double the percentage of white students (Lesnick et al, 2010).

Factoring poverty into the graduation rates produced even more staggering increases. For white students, 27% of those who had experienced poverty and tested “Below Basic” failed to graduate high school on time. For black students who had
experienced poverty and tested “Below Basic,” it was 35%, and for Hispanic student who had experienced poverty and tested “Below Basic,” it was 40% (Lesnick et al, 2010).

Summarizing the long term study, eliminating poor reading skills at a young age significantly reduces high school graduation failures even when accounting for racial disparities and poverty (Lesnick et al, 2010).

Legislative initiatives. If the numbers linking poor reading skills in the early grades to high school graduation failures aren’t an urgent call for better reading skills by the end of the third grade in and of themselves, federal and state legislation over the past decade has also mandated a greater emphasis on early reading ability. Shortly after taking office in 2001, President George Bush announced his “No Child Left Behind” (NCLB) framework for national educational reform. President Bush was committed to ensuring every student could read by the end of third grade (NCLB, 2002).

Less than a year later, the NCLB was passed as legislation and enacted into law. Several components of this bill directly impacted early reading programs. One of the primary components of NLCB required that every state to annually test the reading ability of students starting in their third grade and continuing through the eighth grade, with at least one year of high school tested as well. With individual states setting proficiency levels, schools are held accountable through these assessments, potentially resulting in the closure of underperforming schools. (NCLB, 2002).
**Early Grade Reading Emphasis**

In addition to its assessment and accountability components, NCLB also put a strong emphasis on reading, particularly in the younger grades. Included in NCLB was an increase in the Reading First Initiative. This provided grants to states for screening and assessment of students in Kindergarten to the third grade to identify those who are at risk of poor reading skills. Also in the Reading First Initiative, additional training to teachers in proven, research-based reading programs and instruction was funded (NCLB, 2001).

Despite numerous calls for reform and changes to the NCLB since its authorization, President Barack Obama has consistently supported the early literacy component of the bill. In his most recent “Blueprint for Reform,” President Obama called for continuing grants that fund high quality, research-based literacy instruction for Kindergartners through twelve graders. In fact, this document increased accountability measures by detailing and defining corrective actions, up to closing, for those schools underperforming on their annual assessment (Blueprint for Reform, 2014).

**Effective Early Grade Reading Interventions**

With the sense of urgency that mandated laws have created, educators from across the United States have sought out research-based instruction strategies that improve young students’ reading skills. These skills were detailed by the National Reading Panel (NRP) in their 2000 report to the U.S. Congress. In the report, the NRP called for a balanced literacy approach to reading instruction. The core skills identified were
phonemic awareness, phonics instruction, fluency, guided oral reading, independent silent reading, comprehension and vocabulary instruction (NRP, 2000).

**One-on-one tutoring.** With its wide ranging skill set, the NRP specifically mentioned one-on-one tutoring as an effective means to help students lacking these reading skills. In advocating for systematic phonics instruction, for example, the NRP warned against a “one size fits all” approach, particularly since in the early grade levels, children bring a wide variety of reading skill levels into the schools. Rather than a fixed schedule of phonics lessons, a teacher must be prepared to diagnose and meet the individual needs of every student (NRP, 2000). One-on-one tutoring certainly provides for this distinct instruction. It is a core component of Minnesota Reading Corps, for example, which assists early grade students in their reading skills.

One-on-one tutoring is defined as a person who has some special training guiding and assisting a single student in learning a specific task, all under the supervision of a teacher (Bloom, 1975). Tutoring is typically provided for those students who need extra help or those students who have difficulty learning by more traditional methods (Medway et al, 1980).

**Skill range difference.** In addition to all of the different learning styles of students in reading, teachers also face skill levels which, on average, range more than five grade levels (Jenkins et al, 1982). Because of this wide ranging reality, where students need instruction almost on an individual basis, studies have shown one of the most effective methods in improving reading performance for those students who continue to experience difficulties was one-on-one tutoring (Slavin et al, 2011). Studies
comparing one-on-one tutoring with small group or full classroom instruction have
cavored the one-on-one approach (Pinnel et al, 1994; Schwartz, 2008; Harvey, 2011).
Even students known as “treatment resisters,” which consisted of those kindergartners
designated as at-risk due to their poor reading development despite small group
intervention, improved their reading ability significantly with one-on-one tutoring in
their first grade (Scanlon et al, 2005).

Incomplete solution. While one-on-one tutoring is often seen as the best method for
reading remediation, it does not always guarantee improved learning. Other factors,
such as poor instruction, overly focused activities, and inappropriate learning
materials, can actually produce worse results than regular classroom instruction
(Shanahan, 1998).

It is also important to note that many of the gains noted in one-on-one tutoring
studies may be overrated due to favorable comparisons of the gains made by low-
achieving students with the gains made by higher achieving students (Shanahan,
1998).

Elements of Success

Successful one-on-one tutoring programs feature many of the same accepted
methods as other successful reading intervention programs. These recurring elements
are sustained time, engaged instructors, leveled readings, and immediate feedback.

Sustained time. Most research supports sustained and frequent sessions for reading
intervention programs. Most of the successful programs were done several times a
week. Pikulski (1989) recommended daily interventions of 20-45 minutes each, while Coyne et al (2004) did 10-30 minute sessions a few times a week.

Engaged instructors. Although many reading intervention programs use commercial models where the actual instruction is already detailed, the presence of an effective and enthusiastic instructor would still seem to be a key component. Pikulski (1989) for example, recommends the use of involved and active teachers who strongly believe in their student’s ability to succeed, set high but achievable goals, and can modify the intervention when necessary. Mathes et al (2005) studied two different reading intervention programs, one involving very set and pre-determined instructions while another allowed more flexibility. While both interventions were shown to be effective, the adaptable strategy allowing more instructor input showed slightly better results (Mathes et al, 2005).

In one particular study involving cross age tutors, those instructors that stressed comprehension and interpretation showed the greatest gains in learning. These instructors also combined scaffolding and modeling of other reading skills to match their tutee’s skills (Juel, 1996).

Leveled readings. Most reading intervention programs feature reading from texts that are leveled to a particular student’s individual reading ability. The overall strategy of leveled reading is to allow students to have success reading at their particular level, but the content and frequency of the texts are often changed with different programs. Pikulski (1989) recommended introducing new reading material at a fast pace. One of reading intervention programs studied by Mathes et al (2005) involved mastering a
particular text before moving on to another, while the other presented a new text every session. Still, many intervention programs give struggling readers as many different and complete texts in context as possible.

**Immediate feedback.** Most reading intervention programs involve frequent assessments with immediate feedback. The most common assessment feedback loop involves the instructor correcting the student and the student repeating the correction. There are many other assessments conducted in reading intervention programs. The one minute reading drill, for example, is a common occurrence throughout many programs (Harvey, 2011). These frequent assessments are designed to alert a teacher about individual learning difficulties and encourage the teacher to provide additional instruction.

Rapid assessment is another program which tests a student’s reading comprehension two to four times a week and monitors his or her reading level (Yeh, 2010). In one meta-analysis of many research studies across the country, this rapid assessment program produced significantly higher cost-effective results than computer-assisted instruction, longer school days, and class size reduction (Yeh, 2010).

All four of these common elements of successful reading intervention programs (sustained time, engaged instructors, leveled readings and immediate feedback) can be implemented through one-on-one tutoring.

**Other positive effects.** One-on-one tutoring has shown many definite and positive effects on those students who are being tutored with little to no detrimental aspects
(Cohen et al, 1982). Students who have been tutored scored better on assessments than their peers and have a better attitude about the subject matter they are being tutored on (Cohen et al, 1982). Tutoring also has very little effect on a student’s self-esteem (Cohen et al, 1982). While structured tutoring programs produced the best academic results, even unstructured programs have had a positive effect (Cohen et al, 1982).

One-on-one tutoring can provide psychological benefits as well as academic ones. Students who are tutored do not need to compare themselves unfavorable with faster learners, for example (Gaustad, 1993). They also receive extra attention and emotional support, which may be lacking in their own household (Gaustad, 1993).

For profit motives. While the bulk of the research would seem to favor one-on-one tutoring, it is important to note that many of these studies are funded at least in part by companies and researchers who have developed their own for-profit instructional strategies, many involving one-on-one tutoring. This may cause the research to be conducted and presented in a manner that is favorable to a particular outcome (Ravitch, 2010).

Other reading models. Also, most one-on-one tutoring studied in the research involved significant phonetic and phonemic instruction, where students decode letter sounds and blends. While early focus on these two areas has proven to be effective, it is not the only method to achieve high reading aptitude.

The Waldorf Education System, developed by Rudolf Steiner in the early 1900s and used in schools around the world, works on a very different model of reading instruction. Spoken rather than written language is developed first in this method
(Burnett, 2007). Students in a Waldorf school often don’t start decoding written text until their third grade year (Burnett, 2007). Yet, Waldorf Schools have continued to produce some of the highest academically proficient students in the world. (Burnett, 2007).

Since one-on-one tutoring has had such research-based success, many schools are looking at ways it can be implemented. A regular classroom teacher providing one-on-one tutoring is unusual (Scanlon et al, 2011). Instead, tutoring is generally done by specialized teachers, paid paraprofessionals, parents, community volunteers or even computers (Bloom, 1975). Unfortunately for schools with low socio-economic populations, these types of one-on-one tutors may be limited due to a variety of life circumstances (Davenport et al, 2004). One way to help this situation is by having students who are three or more years older trained to tutor younger struggling readers. This instructional strategy is known as “cross-age tutoring” (Lippitt, 1975).

**Cross-Age Tutoring**

Successful cross-age tutoring programs have been around for 40 years. A teacher shortage in the ‘60s caused a resurgence of the practice (Cohen, 1993). Examples included: the Willamette High School Peer Tutoring Program, where older high school students sit in on their peers classes and assist them during class activities, all for academic credit; the Coca-Cola Valued Youth Program, where low-achieving Hispanic middle school students are recruited to tutor at-risk Hispanic elementary students; and the Companion Reading Program, developed by a Brigham Young University Professor for kindergarten through third grade students, who take turns
acting as tutor and tutee during their daily routines (Cohen, 1993). In a meta-analysis of research across the country, cross-age tutoring was seen as a cost effective method of improving academic scores, rating above other programs such as computer assisted instruction, longer school days, and additional teacher training (Cruz, 2010).

**Tutor proficiency.** While it may be assumed that students are not as proficient as adults in tutoring younger students, several experts have made the opposite case (Allen, 1976). Students have certain advantages over adults in teaching their peers because they may better understand them and their academic challenges (Allen, 1976). One study found that third and sixth graders were more accurate than their teachers in reading nonverbal behavior regarding their peer’s understanding (Allen, 1976). In addition, being closer in age helped cross-age tutors present the material in a more easily understood manner. Cross-age tutors presented a better model for their younger peers, showing them how to focus their attention, organize their thoughts, develop their work habits, and ask pertinent questions. This was particularly true if the cross-age tutor was of the same ethnic or social background (Cohen, 1986).

The academic and social benefits were not restricted just to the students being tutored in a cross-age tutoring program either. Numerous studies found that the tutors themselves experienced definite advantages. Being able to teach a subject improved memory retention as well as helping comprehension and understanding. (Cohen, 1986). Tutors also practiced and improved their communication skills (Labbo et al, 1990). Tutors’ self-esteem was improved as they saw the results of their efforts on the
younger students (Cohen, 1986). Knowing they were role models for their younger peers helped improve their behavior as well (Gaustad, 1993).

Successful tutors were also able to experience an ability to evaluate their own thinking processes, also known as “metacognition” (Carberry, 2003). They learned about the demands of various learning activities and how the material is presented. Cross-age tutoring was an ideal model for this type of “learning about learning” since the tutors were presenting reading text that was below their skill level and it was therefore unlikely to overwhelm them (Carberry, 2003).

Not Standard

The question arises that if cross-age tutoring has had such success in programs around the country, why hasn’t it been implemented on a wider scale? Schools often bypass cross-age tutoring when considering ways to improve and meet their academic goals (Jenkins, 1982). Some have speculated educators’ nervousness over charges that the cross-age tutors are being exploited (Scruggs et al, 1986). Another potential problem is that cross-age tutoring requires two teachers from vastly different grade levels to successfully train and coordinate the students. The older grade teacher may not be familiar with early literacy concepts, while the younger grade teacher may not be comfortable in dealing with older students (Cohen et al, 1982).

Ultimately, however, it may be that teachers themselves are hesitant to delegate some of their own work load onto students. This may be especially true if a teacher has experienced serious questions of their own career’s value and worth, as has been the case in our society for over two decades. With this rational, cross-age tutoring could
perpetuate a myth that a teacher’s job can be done by an older student, and cross-age tutoring thus is avoided as a method to produce better academic results (Harvey, 2011).

**Effective Cross-Age Tutoring**

Putting together a successful cross-age tutoring program takes time and effort. Simply putting two students together and hoping for the best will not work. In fact, serious harm may be caused if tutors without proper training resort to threats or scorn on their younger tutees (Cohen et al, 1993). Some cross-age tutoring programs showed no benefit despite the best intention and implementation (Carberry, 2003).

Successful cross-age tutoring programs have the following apparatuses: an intentionally structured lesson format; defined learning objectives relating to classroom curriculum; tutoring content that can be mastered by the students; carefully considered scheduling; proper training for the tutors; positive classroom environment and active supervision; and daily measurements (Jenkins et al, 1982). Furthermore, a successful cross-age program must have the cooperation and support of teachers and administrators within the school due to the fact that the logistics of a tutoring program are a constant problem (Bloom, 1975). In my role as the Lead Teacher at the school, which involves observing, coaching, and training, I feel I am well qualified to coordinate and set up a cross-age tutoring program, which will be called reader role models.
The reader role model program will focus on four main areas: qualifying appropriate tutor candidates; conducting adequate tutor training; scheduling and monitoring sessions for success; and achieving high level objectives.

**Determining tutors.** The first step in putting together an effective cross-age tutoring program is deciding who the tutors will be. Tutors do not need to be high achieving students, particularly in the case of cross-age tutoring (Lippitt, 1975). A sixth grade student with only fourth grade reading skills could be an outstanding tutor for a second grade students who is only reading at a kindergarten or first grade level. In that particular case, the sixth grade student might be able to better relate to the struggles of the second grade student (Lippitt, 1975).

More important than skill level for the potential tutor is attitude. Tutors need a firm commitment to their role as teachers to the tutees. If they see a benefit in being tutors, they will more likely work hard at it (Powell, 1975). Personal benefits could include a feeling of worth in helping out, experiencing freedom outside of the regular classroom, or being in a position of power (Powell, 1975).

According to one study that focused on the cross-age tutors themselves, students who succeeded at the role had positive views on teachers before they even began tutoring (Powell, 1975). They thought of teachers as fair, smart, patient, and funny. These students also said they worked best on their own (Powell, 1975). With these attributes in mind, a questionnaire/interview process could easily be devised to gauge these aspects in potential cross-age tutors. Students should also demonstrate an ability
to be self-reflective if they are to achieve the desirable level of metacognition and the higher academic achievement that can follow (Carberry, 2003).

**Tutor training.** Once the tutors have been selected, the next step will be to train them properly. Cross-age tutors that have been trained properly are much more likely to have success with their tutees (Lippitt, 1975) This process should take a few weeks, and involve developing interpersonal, management and content skills. For example, a tutor must learn the interpersonal skill of properly assisting their tutee without simply giving away the answer. They must also learn the management skill of sitting down with the tutee and running the lesson. Finally, they must also develop the content skill of creating fun follow-up activities to engage their tutee.

Lesson plans used by the cross-age tutors for reader role models should closely mirror what is being taught in the classroom (Jenkins et al, 1982). Since guided reading instruction is the base practice at the school location, the tutor’s lesson will be structured along the guided reading lesson format, with a vocabulary review, picture walk, reading, and comprehension questions. One potential benefit to the tutor should be gaining insight into their own reading lessons at their own grade level (Carberry, 2003).

**Lesson format.** The lessons are very similar to the guided reading practice conducted school wide, starting with a preview or “picture walk” through a text. Tutees will then need to make a prediction about the text. Next, the tutor will model fluency and expression by reading the text first to the tutee. Then, the tutee will read through the text with the tutor keeping a running record of any errors made. Once
completed, tutors will advise the tutee of any errors and allow them to correct, only providing the answer if the tutee is unable to use a strategy to figure out a word. A chart will be maintained, giving a visual picture of the tutee’s reading progress.

Finally, the tutee will need to retell the story and complete a comprehension assessment. The lesson structure also allows the tutor to bring an activity which can be run.

**Tutor Evaluation.** The coordinating teacher will be monitoring the tutors individually with their tutees at least once a week, in addition to hosting a small group session with all of the tutors allowing them to express their successes and concerns at least once a week.

Even when the “Reader Role Models” cross-age tutoring program is underway, tutor training will continue with regular weekly observations and feedback in addition to small group discussions.

**Scheduling setup.** Another potential problem in cross-age tutoring programs is scheduling that works for both classes. Any potential gains received from cross-age tutoring could be offset by the loss of valuable classroom instruction time (Lippitt, 1975). Added into this already complicated scenario is the fact that cross-age tutoring needs to be a regular, nearly daily occurrence in order to be fully effective (Lippitt, 1975).

The second and sixth grade classes in this program will have their reading blocks at nearly identical times. Cross-age tutoring time will occur during independent reading time as much as possible. The plan is for tutors and tutees to meet at least four times a
week for approximately 20-30 minutes a day. An added bonus is that while the cross-age tutors are working with their tutees, the two teachers will have reduced class sizes and may be able to better work with the smaller remaining groups (Carberry, 2010).

**Coordinating objectives.** The most important element involved in designing and setting up a successful cross-age tutoring program is in carefully coordinating its objectives (Gaustad, 1993). Specific, measurable objectives must be established so that the progress of individuals can be evaluated (Gaustad, 1993). Frequent assessment allows for greater feedback and a better sense of accomplishment for the students (Lippitt, 1975).

In addition to comprehension quizzes after each session and regular benchmark assessments every week, the results of reader role models will be assessed by both the second and sixth grade participants’ growth on a computerized reading test.

**Assessing the Program**

For this particular cross-age tutoring program, known as “Reader Role Models,” the ultimate objective is for both the tutors and tutees to improve more than an average year’s growth on their Measure of Academic Progress (MAP) tests of the Northwest Evaluation Association (NWEA). This particular computerized test is given by the school three times a year, in October, January, and May.

In addition, the tutors will also be keeping running records daily of their tutees’ progress, along with giving them daily retelling and comprehension assessments. All of this material will be reviewed weekly by the coordinating teacher.
Additional assessments. The reading material and assessments will be from the Reading A-Z Program, which correlates well with the school’s own reading program. The text are leveled according to the student’s reading skills. There is a large selection of many different books available, allowing some choice and selection by the tutors given the interests of the tutee. The school already has an account with this program, so there is no added expense. The lesson format is the same, which allows consistency and familiarity for the tutors.

Testing the Results

The Measure of Academic Progress (MAP) tests of the Northwest Evaluation Association (NWEA) will be used to track the reading growth of both the second grade and sixth grade students of this study. While this particular test has often not been a good predictor for individual state’s standards (Cordray et al, 2012), it has often been cited for doing a good job of tracking growth (Gray, 2010). Both grade levels will be taking the test three times over the course of the entire school year. These tests will be in October, January, and May.

One unique aspect of the MAP test is that it is actually the same test for both second and sixth graders. The test is designed so that as an individual student answers a question correctly, he or she will be given a harder question. If the student answers a question incorrectly, the next question will get easier. In this way, students will be given a score on a sliding scale. These scores can not only be compared with each other and other grade levels, but to averages across the country (Donhost, 2009).
The MAP tests have received numerous complaints about their merit and value, particularly in view of the preponderance of testing in our modern educational system (Peters, 2010). While it is true that the tests are not good predictors of individual state’s standard skills and assessment (Gray, 2010), they do a good job of measuring a student’s growth in reading skills over the course of the school year (Gray, 2010). This is precisely what is needed the research on this cross-age tutoring program.

Annual reading growth. The MAP test will measure a student’s starting point in October and their finishing point in May, comparing it to an average amount of growth over the entire school year. This average growth is determined by NWEA itself based on all the tests that they are conducting (Gray, 2010). In this way, no control group is necessary in order to compare the tutors and tutees’ scores. The control group is actually everyone taking the NWEA MAP tests across the country.

Because of these factors, the NWEA Reading MAP should be an excellent summary on how well the participants of “Reader Role Models” succeeded in improving their reading skills, both in the second and sixth grade.

Chapter Conclusion

Cross-age tutoring, where older students teach younger students various academic skills, has been around for a long time. Even so, it remains a practice that is not commonplace in our current times. Recent studies showing the tremendous need for early reading skills along with federally mandated testing have led to a renewed interest in educational programs that work. This includes cross-age tutoring, particularly as it applies to reading intervention programs for the early grades.
Much of the research on cross-age tutoring has shown it to be an effective tool for improving reading scores in both the younger and older students who participate in the program. Certain components, however, must be present for this success, however, such as tutor selection and training, clear objectives, frequent timing, and strong supervision.

The MAP test of the NWEA, with its primary focus of yearly growth, is an excellent measure that can be used to ultimately test the cross-age tutoring program and determine if it is effective or not. This is in addition to regular assessments being conducted by the tutors and the tutor supervisor.

With all of these facts in mind, I should be able to answer the central question of this research: “How does a reading intervention program at an urban charter school taught by sixth grade students to first grade students, commonly known as cross-age tutoring, affect the reading test scores of both groups?”

Chapter Three Preview

In Chapter Three, the methods of establishing and analyzing the reader role model program will be detailed. First, the research paradigm will be explained along the reasons for selecting this particular method. Then, the setting and participants for this research will be explored along with establishing a timeline when the program will be conducted. Finally, the tools for collecting and analyzing data will be listed along with the proper safeguards and precautions to be taken when dealing with human subjects.
CHAPTER THREE

Methods

Chapter Overview

As detailed in Chapter One, my own progression from working as a sales manager in the corporate world to teaching the second grade strengthened and increased my love of reading. In particular, I discovered some of my own core values and self-worth by helping younger students develop and expand their own reading skills. Even as I made these realizations, however, I reflected that there had been some shortcomings in my own literacy training prior to becoming a teacher. This was particularly true when it came to actual experience with younger children who were experiencing difficulties with their reading skills.

In analyzing how I might have been better prepared, I thought about how I myself could prepare others to successfully teach reading skills to early grade students. Since I did not have ready access to college-age teachers-in-training or adult volunteers, I focused on the older sixth grade students at my school. This eventually lead to my research question: “How does a reading intervention program at an urban charter school taught by sixth grade students to second grade students, commonly known as cross-age tutoring, affect the reading test scores of both groups?”

Literature review. As I researched early grade reading intervention strategies in Chapter Two, I discovered the intense need for such programs, as a lack of reading skills correlates to increased graduation failure rates later on in life according to a number of studies (Lesnick, et al, 2010; Hernandez, 2011). Many successful early
grade reading interventions focused on a “balanced” literacy approach, and often involved one-on-one tutoring (NRP, 2000). One particular strategy that I discovered was called rapid assessment, which involved testing students 3-4 times a week on their reading abilities (Yeh, 2010). The greatest gains in reading ability were made by those one-on-one instructors focused on comprehension of the text (Juel, 1996).

Analyzing cross-age tutoring showed many advantages and benefits to developing such a program (Lippitt, 1975). Various factors needed to be present for success, however (Cohen, 1993). The skills and attitudes that made for a successful tutor were specifically detailed (Powell, 1975), since that was one of my primary concerns from the beginning of this project.

Also in Chapter Two, I researched and provided information regarding the Measure of Academic Progress (MAP) assessment developed by the Northwest Educational Association (NWEA). Its ability to quantify the growth of reading skills for both the second grade tutees and the sixth grade tutors of the program made it an ideal tool for this particular project (Gray, 2010).

Chapter Three details my research paradigm and my reasons for choosing this particular method. The setting and participants of this research project will be examined. A timeline for this project was developed and will be reviewed, in addition to all of the tools I planned on using to analyze the results. A summary of the entire chapter is included at the end.
Research Paradigm

I chose the “Mixed Method Design” as my research paradigm for this project. Mixed methods involved collecting and synthesizing both quantitative and qualitative data as part of the research study (Cresswell, 2014). I selected mixed methods for a number of reasons.

Beliefs and philosophy. First, this method best suited my own beliefs and philosophy, which Creswell would describe as a “Pragmatic Worldview” (2014). My primary reason for conducting this research project was to hopefully determine something that works in helping both second and sixth graders with their reading skills. I did not seek any universal truth or social cause.

Extensive project. Second, my research project was extensive, especially looking at it from a time consideration. In order to have a chance to be effective, this cross-age tutoring program needed to be ongoing almost daily throughout an entire school year. This time commitment needed to be measured by more than just a single quantitative data point or two.

Triangulation. Third, having multiple groups of both quantitative and qualitative data allowed for better “triangulation”, where research conclusions could be examined from at least three different perspectives (Mills, 2014). For example, quantitative numbers from a single assessment that surprise or disappoint are better explained by qualitative surveys and observations.

Action research. Finally, my desire was to make this project the very definition of “action research.” Action research has the goal of discovering new teaching strategies
to make a positive effect on the school involved (Mills, 2014). I believe the mixed methods approach provided me with the largest variety of data that I was able to use to justify any change I might propose at my school in the future.

School Setting

The setting of this research project was an urban charter elementary school. According to the Minnesota Department of Education’s most recent statistics, in the 2015-2016 school year, there were 281 students in grades K-6. The student population had a high poverty rate, with 99.6% of students receiving free or reduced lunch. The racial demographics showed that 42.3% of its students were Black/Not of Hispanic Heritage, 55.5% of the students were Asian/Pacific Islander, 1.1% were White/Not of Hispanic Heritage, and 1.1% were American Indian/Alaskan Native.

Increasing Asian/Pacific Islander numbers. The Asian/Pacific Islander student population had seen a marked increase over the previous 2 years, as a new immigrant population known as the Karen, a persecuted minority from Myanmar/Burma had been registering in greater numbers at the school. The English Learner rate for the school was 29.5%. This influx of students new to the country was particularly noticeable in the younger grades. My second grade class during the 2015-2016 school year, for example, had 43% Karen (Asian/Pacific Islander), 7% Hmong (Asian/Pacific Islander), 36% African American (Black/Not of Hispanic Origin) and 14% Caucasian (White/Not of Hispanic Origin).
Study Participants

The study had a maximum of 8 sixth grade students (tutors) matched with 8 second grade students (tutees). The numbers may have been reduced if less than 8 acceptable tutor candidates were identified early on in the process. It was expected that the racial makeup of these students were representative of the overall school, although differences may have been present due to the different grade levels involved.

Research Timeline

Summer activity. During the summer, I set up a special section in the library with various Reading A-Z books for the sixth grade tutors to select for their second grade tutees based on subject interests. Allowing the sixth grade tutors to have access to this area in addition to their choice of learning material to present should have benefitted them in perceiving their role as a special teacher of the younger student.

Parental release forms. In late September, parental release forms were sent home to both classes notifying them of this research study and the possibility that their student may be selected to participate. These surveys were for both sixth grade and second grade students in English (Appendix A and C, respectively) along with Karen translations (Appendix B and D).

Reader role model questions. In early October, the sixth graders took a special questionnaire regarding their ideas about teaching (see Appendix E). This survey was to be used to identify up to 8 students with the appropriate attitude for tutoring success. These students were to meet weekly with me to discuss various readings and activities on how to teach younger students better reading skills.
**Benchmark reading levels.** By mid-October, second grade students were
benchmarked by reading ability. The school used the Fountas and Pinnell Guided
Reading benchmarking system, where students are designated with a reading level
ranging from A (early kindergarten) to Z (seventh grade). Using these benchmark
scores, 8 students were to be identified as good tutee candidates. Priority was first
given to students who were below grade level in their reading skill but not receiving
any special interventions (i.e. Special Education, English Language Learner, Title 1,
Americorp Reading). Students who had behavioral difficulties (having had a
suspension within the first month and a half of school, for example) were not going to
be part of the program.

**Reading attitude survey.** Once students had been identified, they were to take a
survey about their opinion on reading, called the Reading Attitude Survey (see
Appendix E). This exact same survey was given again at the end of the year for
comparison purposes.

Sometime in October, both second and sixth grade students took their NWEA MAP
reading tests. These scores were used as a baseline for the student’s reading growth.

It was during this time when I was to be working with the sixth grade students
developing some good practices when it came to tutoring their second grade students.

**Daily meetings.** By the beginning of November, the sixth grade tutors and second
grade tutees should have begun meeting 4 times a week for 15-20 minutes each day.
Each session consisted of a short check-in, reading an appropriate level book (along
with assistance in decoding any troublesome words), completing a running record (see
Appendix F), finishing a test on comprehension, and playing a fun activity at the end. These sessions continued through the end of the year.

**Tutor session observation.** These tutoring sessions were held in a designated area of my second grade classroom to ensure that both students were being monitored at all times. Also during the sessions, I specifically observed each tutor/tutee interaction at least once every other week and completed a form which was then reviewed with the tutor (see Appendix G).

Every other week, I continued to meet with the sixth grade tutors in small groups (2 groups of 4 each) in order to discuss my observations, special readings, and reflections on the program overall.

**Surveys and test retaken.** The second round of Reader Attitude Surveys (see Appendix D) were conducted near the end of May. That same month, the second and sixth grade students took the NWEA Reading MAP tests again. These were analyzed to see how the participants reading skill grew throughout the year.

**Data Analysis**

As stated previous, I used a “triangulation” approach to analyze the data I received from this research (Mills, 2014). I had several key data points which were both quantitative and qualitative in nature.

**Reading MAP scores.** First and foremost, I had two sets of Reading MAP scores from the involved students. The first set of scores were from the beginning of the year, while the second set were from the end of the year. This allowed me to compare the
scores and track the student’s growth over the school year. I also compared these growth figures to NWEA’s own averages from students across the country. NWEA also provided average projected annual growth numbers, so that I was able to compare any individual student increases with what was projected based on the average for that score.

Primarily, I hoped these numbers indicated if the reader role model cross-age tutoring program helped students achieve better than average growth in their reading skills.

**Benchmark levels and running records.** The benchmark guided reading levels also indicated the tutee’s reading improvement over the course of the year. In addition, the tutors provided me with regular weekly running records to show how well their tutee improved in their reading skills.

**Reading attitude surveys.** At both the beginning and end of the year, special surveys were conducted with both grade levels of students in the reader role model program that indicated their attitudes toward reading. These surveys provided me with some qualitative data which may have shown that the program helped to improve reading attitudes for its participants. The surveys were adapted from an online survey provided by the International Reading Association (McKenna, 1990).

**Tutor observation form.** I also be used the Tutor Observation Form to monitor the sixth grade students and provided them with timely feedback when necessary. This form was also adapted from an online survey provided by the International Reading Association (McKenna, 1990).
Human Subjects

With up to 8 sixth graders and 8 second graders participating in the reader role model cross-age tutoring program, I used human subjects for this research. Since they were underage, I was required to receive approval from both my school’s administration and college’s Human Subject Review Committee.

Confidentiality. Because of the human subjects involved, I conducted this research with the utmost confidentiality in mind. Human subjects were never referred to by name. Any identifying information in this research paper was be properly redacted. Any extra observation forms or running records not used in this capstone were properly shredded and disposed of.

Chapter Conclusion

As detailed earlier, I used the “mixed method design” as my research paradigm for this project. I chose this method due to my own beliefs and philosophy in addition to the quantitative and qualitative data I am hoping to collect and analyze. The school where this project occurred was an urban charter school with a high level of racial minorities and poverty concerns. I developed a very specific timeline over the entire course of the school year when data was collected. The data was in the form of computerized testing results, benchmark reading levels, running records, observation forms, and attitude surveys. Human subjects were involved and their safety and confidentiality were a primary concern.

With all of these methods and tools in place, I was better able to answer the research question: “How does a reading intervention program at an urban charter
school taught by sixth grade students to second grade students, commonly known as cross-age tutoring, affect the reading test scores of both groups?”

Chapter Four Preview

In Chapter Four, I will present and analyze the collected data. First, the implementation of the cross-age tutoring program will be focused upon, particularly how closely the reader role model program was able to follow the plan detailed in Chapter Three. Then, the actual data produced by the program from its various tools, such as the NWEA MAP reading test scores, reading benchmark levels, reader role model questionnaire, reading running records, tutor observation forms, and reading attitude surveys, will be examined and interpreted. Finally, after considering all of this data, the research question will be answered.
CHAPTER FOUR

Results

During the 2015-2016 school year, I established the reader role models program to better answer the central research question: “How does a reading intervention program at an urban charter school taught by sixth grade students to second grade students, commonly known as cross-age tutoring, affect the reading test scores of both groups?”

The reader role model program paired second grade students with sixth grade students in daily one-on-one tutoring sessions. In Chapter One, I detailed my own background in reading and teaching that led me to create this program at my school, which is an elementary charter school in an urban setting. In Chapter Two, research showing the need for this program was presented along with research regarding the effectiveness of various cross-age and regular tutoring reading programs. In Chapter Three, the specific methods and tools planned for the reader role model program were detailed.

Now in Chapter Four, the results of the program will be highlighted and analyzed. The first part of this chapter will focus on the general implementation and actual workings of the program. It will show how well the program followed the plan established in Chapter Three along with the resulting outcome when that plan had to be changed after an unforeseen event occurred. The last part will focus on the actual data produced by the program, starting with the second grade data before moving on to the sixth grade data. This data will be taken from many sources, including the NWEA MAP reading tests, reading benchmark levels, the reader role model questionnaire,
running records, tutor observation forms and reading attitude surveys. Finally, other intangible benefits resulting from the program will be shown.

Implementation

In reviewing the overall data about the reader role model program, it was important to see how closely the actual implementation of the program followed the original plan. If there was any significant deviation from the original plan, the data obtained might not be as useful or accurate.

The Human Subject Permission letters (see Appendices A, B, C and D) were distributed as planned in late September. A total of eight second grade students and eight sixth grade students returned their permission slips to participate in the reader role model program. Although somewhat limited, further permission attempts were not needed due to the fact that all responders were acceptable candidates for the program.

**Demographics of participants.** Of the eight second grade students, three (37.5%) were African American (Black/Not of Hispanic Origin), two (25%) were Caucasian (White/Not of Hispanic Origin) and three (37.5%) were Karen (Asian/Pacific Islander). There were three boys and five girls. Of the eight sixth grade students, one (12.5%) was African American (Black/Not of Hispanic Origin), one (12.5%) was Caucasian (White/Not of Hispanic Origin), two (25%) were Hmong (Asian/Pacific Islander) and four (50%) were Karen (Asian/Pacific Islander). There were six boys and only two girls. While not completely matching the school’s overall demographics (particularly with the sixth grade students), I felt the numbers were close enough not to interfere with any data collection. The only problem I could foresee was the differing
number of boy and girl participants from each class, meaning that in three cases a sixth grade boy would need to be matched up with a second grade girl.

Something extremely positive to note was the number of Karen participants in the program. I believe this better participation was due to the fact that the permission slip had been translated and written in Karen.

**Reader role model questions.** In early October, the Reader Role Model Questions form (see Appendix E) was filled out by the eight sixth grade participants. These were reviewed to check for any potential problems or attitudes. All answers given by the sixth graders were found to be acceptable.

All eight students answered the first question (Why would you like to become a Reading Role Model?) with something about helping out the younger students. “I want other kids who are younger to be good readers” was a typical response.

For the second question (What did your favorite teacher of all time do that made them your favorite?), there was more variations to their answers, but several wrote about a teacher that took time to explain something. “When I don’t understand something in reading, she explained things very carefully” was one response.

For the third question (Do you like to work by yourself or with a group better? Why?), seven out of the eight students replied that they liked group work better. “I like to work with a group better because I can learn from other people” was one of the responses.

For the fourth question (Should a Reader Role Model talk or listen more? Why?), again, all eight students answered listen more. “A reader role model should listen
more, because the kids will have a lot to say and will ask some questions,” was one reply.

All of the responses predicted that these eight sixth grade students would be good cross-age tutors based on the research I had previously done during the literature review (Powell, 1970).

It was interesting to note some correlations to the student’s responses to these questions early on with any behavior that needed to be addressed later on in the program.

For example, the one student who responded that he or she liked working alone needed a warning after missing consecutive tutoring sessions. Another student who responded that his or her favorite teacher always took them outside to play needed a warning when they were not completing their assigned tasks in a timely manner.

Setback. Everything proceeded according to the original plan outlined in Chapter Three until late October. Students had taken the first round of their NWEA MAP tests on the computer. They had also taken their Reading Attitude Survey (see Appendix E). Both of these would be used for comparison purposes at the end of the year.

Then the sixth grade teacher I had been working with resigned her position. I decided to delay the program while the class was being taught by a substitute teacher. A few weeks later, a new sixth grade teacher had been hired. I decided to wait an additional couple of weeks while that new teacher adjusted to her new classroom.

Finally, we got together and worked out the details and the program was ready to start. By this time, winter break was already only a couple of weeks away, and I
decided that it would be best to start up the actual reader role model tutoring sessions right after the break.

All in all, the resignation and transition that followed took away about six or seven weeks from the program.

**Positive from the negative.** The delay wasn’t completely bad. It gave me a chance to focus on and analyze the specific needs of the eight second grade participants.

Going into the program, I was prepared to use a program based on the Minnesota Reading Corps model. This model stressed fluency and timed reading tests. Looking at my group of students, I decided they needed more skill at comprehension. I looked into various tutoring research based on comprehension, and discovered both the rapid assessment system (Yeh, 2010) and the scaffolded comprehension model (Juel, 1996). Thanks to this interlude, I was able to better focus the readings and skills that would be covered during the reader role models during their daily sessions.

**Sixth grade instruction.** For two weeks after winter break, I met every day with the sixth graders to instruct them to discuss how to teach reading. We primarily used two different texts, How to Teach Reading (Fry, 1999) and Reading Rescue 1-2-3 (Wilber, 2000) but we also reviewed Reading A-Z and its offerings (Reading A-Z, 2016).

In reflection, I felt I could have provided more engaging material for the sixth graders to learn about teaching reading. I tried to keep the texts as simple as possible, but that also made them unengaging. Also, while the texts used did a good job of concentrating on reading comprehension as the ultimate goal of reading instruction, which my research had shown led to reading skill improvement (Juel, 1996), they did
not address preparing the tutors, in this case the sixth grade students, how to successfully take a reading test, the so-called “metacognitive” testing approach. My research had shown this approach in tutor training had resulted in gains to the tutors’ reading level (Carberry, 2003).

For their part, the sixth graders participated well enough, but it was definitely difficult getting them into any extended conversation. Besides the text presentation, I believe the biggest problem was the location for our regular meetings, which was at a table outside of a busy hallway. Since it was just outside their classroom door, it was quick and convenient to move them into this area. Unfortunately, it also resulted in plenty of distractions.

Program underway. Starting in mid-January, the sixth grade students met with the second grade students every Monday through Thursday, for approximately 20 minutes a day. During that time, they would play a vocabulary sight word game, review vocabulary, read a book while working on a comprehension activity, and then take a comprehension quiz. If they scored 80% or higher on the quiz, they could move on to a new book the next day. If not, they had to reread the book and take the quiz again.

I had very few problems once the program got underway. Overall, the sixth grade students took their duties very seriously and did a good job of working with their second grade student. My research on the traits of a good cross-age tutoring candidates was proven beneficial in this case (Powell, 1970). Any issues that did come up, such as when a student did not come to the reader role model sessions for two consecutive
days but was still present at the school or the students were not completing their work in a timely matter, were quickly addressed and corrected.

**Second Grade NWEA MAP Reading Test Results**

The program ended in late May after all students had taken their NWEA MAP tests on the computer. Here is a table of reading test results for the second graders:

<table>
<thead>
<tr>
<th>Student</th>
<th>Actual Fall 2015 Score</th>
<th>Projected Annual Growth Score</th>
<th>Actual Spring 2016 Score</th>
<th>Met Projected Growth</th>
<th>Growth Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>156</td>
<td>173</td>
<td>175</td>
<td>Yes</td>
<td>+2</td>
</tr>
<tr>
<td>B</td>
<td>144</td>
<td>163</td>
<td>176</td>
<td>Yes</td>
<td>+13</td>
</tr>
<tr>
<td>C</td>
<td>157</td>
<td>174</td>
<td>184</td>
<td>Yes</td>
<td>+10</td>
</tr>
<tr>
<td>D</td>
<td>155</td>
<td>172</td>
<td>188</td>
<td>Yes</td>
<td>+16</td>
</tr>
<tr>
<td>E</td>
<td>184</td>
<td>196</td>
<td>190</td>
<td>No</td>
<td>-6</td>
</tr>
<tr>
<td>F</td>
<td>174</td>
<td>188</td>
<td>193</td>
<td>Yes</td>
<td>+5</td>
</tr>
<tr>
<td>G</td>
<td>171</td>
<td>186</td>
<td>194</td>
<td>Yes</td>
<td>+8</td>
</tr>
<tr>
<td>H</td>
<td>165</td>
<td>181</td>
<td>201</td>
<td>Yes</td>
<td>+20</td>
</tr>
</tbody>
</table>
Here are the results in a chart form:

**Second Grade NWEA MAP Reading Test Results**

![Chart showing NWEA Reading Test Scores for second grade students from Fall 2015 to Spring 2016. The chart includes Fall and Spring scores for each student, with average scores indicated by bars. The average Fall score is 174.7 and the average Spring score is 188.7.]

The chart also shows the average fall, or begin-year, score for second grade students (174.7) and the average spring, or end-year, score for second grade students (188.7) as taken from the 2015 NWEA Measures of Academic Progress Normative Data (NWEA, 2016).

**Second grade test data analysis.** Looking at this data, the only conclusion possible is that the Reader Role Model program was a tremendous success for its second grade participants. Everyone improved their score from Fall to Spring, many by significant
margins. A total of seven out of the eight students (87.5%) met and exceeded their annual projected growth score, four of them by double digits. The one student who did not make the average growth projection started above grade level in the fall and remained above grade level in the spring.

My research had shown cross-age tutoring to have been successful in many different cases (Davenport et al, 2004; Medway et al, 1980; Lippitt, 1975), but the level of improvement of these particular second grade students was fairly unprecedented.

The average increase of all eight students over their projected annual growth numbers was 8.5 points, representing over a half a year’s worth of additional growth above and beyond the average projected annual growth number. Even more significant, three out of the eight students actually raised their score from below grade level to above grade level by the end of the year. Another student finished the year very close to the second grade average, being within .7 of a point.

The fact that most of the second grade students that participated in this reader role model program started below grade level in their reading ability but finished above grade level also indicated that this program was an excellent reading intervention tool.

Second Grade Benchmarking

Testing the reading level of the second grade students throughout the year not only provided them with reading material at or slightly above their level, but it also verified their increased reading abilities shown by the NWEA MAP Reading Test.
Here is a chart showing their progress from the beginning of the year until the end:

<table>
<thead>
<tr>
<th>Student</th>
<th>Fall 2015 Reading Level</th>
<th>Fall Grade Level Equivalent</th>
<th>Spring 2016 Reading Level</th>
<th>Spring Grade Level Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>D</td>
<td>Ending Kindergarten</td>
<td>J</td>
<td>Ending Grade 1</td>
</tr>
<tr>
<td>B</td>
<td>C</td>
<td>Mid Kindergarten</td>
<td>I</td>
<td>Ending Grade 1</td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>Ending Kindergarten</td>
<td>K</td>
<td>Beginning Grade 2</td>
</tr>
<tr>
<td>D</td>
<td>I</td>
<td>Mid Grade 1</td>
<td>L</td>
<td>Mid Grade 2</td>
</tr>
<tr>
<td>E</td>
<td>K</td>
<td>Beginning Grade 2</td>
<td>N</td>
<td>Beginning Grade 3</td>
</tr>
<tr>
<td>F</td>
<td>L</td>
<td>Mid Grade 2</td>
<td>O</td>
<td>Mid Grade 3</td>
</tr>
<tr>
<td>G</td>
<td>I</td>
<td>Mid Grade 1</td>
<td>O</td>
<td>Mid Grade 3</td>
</tr>
<tr>
<td>H</td>
<td>J</td>
<td>Ending Grade 1</td>
<td>P</td>
<td>Ending Grade 3</td>
</tr>
</tbody>
</table>

The grade level equivalent results were taken from a grade level equivalence chart (Fountas and Pinnell, 2015).

**Second grade benchmarking data analysis.** As can be seen in the chart on the previous page, students gained anywhere from 3 to 7 levels in reading. Fountas and Pinnell (2015) have four kindergarten reading levels (A-D) and six first grade reading levels (E-J) before having just three levels per grade through sixth grade. For this
reason, it’s not unusual for students to gain six or more levels at the lower end, which three of the eight Reader Role Model participants did.

It is unusual for higher levels to experience those same increases. As can be seen by the previous table, the two highest students had similar gains, which also correlates with their major gains on the NWEA MAP Reading Test.

It should be noted that while Fountas and Pinnell does have a comprehension component, it is completed through oral response. For this reason, my experience has been that English Language Learners, many of whom are hesitant to verbally answer a question for fear of saying the wrong words, score worse in benchmarking than their fellow native English speakers.

This bears out in the previous table, as the ELL students (B, D and E) averaged four levels of increase, with most of that coming at the lower end of the reading scale. The native English speakers, on the other hand, averaged over five levels of increase, over a level higher than their ELL counterparts.

Second grade data summary. If these second grade results were the only consideration for this program, reader role models should be regarded as a spectacular success. Most of the second grade participants raised their NWEA MAP reading test scores by over a year’s average projection. Their reading benchmark levels increased significantly as well. However the research question was: “How does a reading intervention program at an urban charter school taught by sixth grade students to second grade students, commonly known as cross-age tutoring, affect the reading test
scores of both groups?” This means that the sixth grade students need to be considered as well to consider the program an absolute success.

**Sixth Grade NWEA MAP Reading Test Results**

Here is the table of the sixth grade scores on the NWEA MAP Reading Test:

<table>
<thead>
<tr>
<th>Student</th>
<th>Actual Fall 2015 Score</th>
<th>Projected Annual Growth Score</th>
<th>Actual Spring 2016 Score</th>
<th>Met Projected Growth</th>
<th>Growth Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>210</td>
<td>215</td>
<td>208</td>
<td>No</td>
<td>-7</td>
</tr>
<tr>
<td>B</td>
<td>205</td>
<td>211</td>
<td>212</td>
<td>Yes</td>
<td>+1</td>
</tr>
<tr>
<td>C</td>
<td>211</td>
<td>216</td>
<td>214</td>
<td>No</td>
<td>-2</td>
</tr>
<tr>
<td>D</td>
<td>215</td>
<td>219</td>
<td>216</td>
<td>No</td>
<td>-3</td>
</tr>
<tr>
<td>E</td>
<td>215</td>
<td>219</td>
<td>217</td>
<td>No</td>
<td>-2</td>
</tr>
<tr>
<td>F</td>
<td>203</td>
<td>209</td>
<td>220</td>
<td>Yes</td>
<td>+11</td>
</tr>
<tr>
<td>G</td>
<td>218</td>
<td>222</td>
<td>221</td>
<td>No</td>
<td>-1</td>
</tr>
<tr>
<td>H</td>
<td>221</td>
<td>224</td>
<td>235</td>
<td>Yes</td>
<td>+11</td>
</tr>
</tbody>
</table>
Here are the results of the sixth grade students on their NWEA MAP reading test in chart form:

Sixth Grade NWEA MAP Reading Test Results

The chart also shows the average fall, or begin-year, score for sixth grade students (211.0) and the average spring, or end-year, score for sixth grade students (215.8) as taken from the 2015 NWEA Measures of Academic Progress Normative Data (NWEA, 2016).

Sixth grade test data analysis. Unlike the second grade data, these results are much more mixed, with both good and bad results. All but one student showed improvement.
over the year, for example, but only three out of the eight students met or exceeded their annual projected growth score.

The average increase of all eight students over their projected annual growth numbers was just one point, with the majority of that increase being accounted for by two students (F and H), who both saw eleven point gains over their annual average growth numbers.

While much of the research showed positive growth in reading scores and abilities from cross-age tutoring programs, it is important to note that some of the research showed mixed results similar to the sixth grade scores detailed in this study (Carberry, 2003).

In examining these results, it should be noted that most of the sixth grade students participating as tutors in the reader role model program started off as above average readers and continued to be above average readers by the end of the school year. A total of five of the students started out the year with higher than average scores. While there was one student who then dropped below by the end of the year, another student dramatically increased his or her score to finish above average.

From these results, it might be speculated that only below average readers should participate in the program, however both the lowest scoring student (F) and the highest scoring student (H) in the spring had the most dramatic increases to their scores.

Tutor/tutee correlation. One might expect those tutors whose tutees made the greatest gains to experience better gains themselves. It might be surmised that the data would show the tutors whose tutees experienced the most reading growth according to
their NWEA MAP reading test scores would have the most growth themselves. This was not, however, shown to be the case in this study. Here were the matchups:

<table>
<thead>
<tr>
<th>Sixth Grade Tutor</th>
<th>Growth Index</th>
<th>Second Grade Tutee</th>
<th>Growth Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>-7</td>
<td>A</td>
<td>+2</td>
</tr>
<tr>
<td>B</td>
<td>+1</td>
<td>B</td>
<td>+13</td>
</tr>
<tr>
<td>C</td>
<td>-2</td>
<td>D</td>
<td>+13</td>
</tr>
<tr>
<td>D</td>
<td>-3</td>
<td>H</td>
<td>+20</td>
</tr>
<tr>
<td>E</td>
<td>-2</td>
<td>C</td>
<td>+10</td>
</tr>
<tr>
<td>F</td>
<td>+11</td>
<td>E</td>
<td>-6</td>
</tr>
<tr>
<td>G</td>
<td>-1</td>
<td>F</td>
<td>+5</td>
</tr>
<tr>
<td>H</td>
<td>+11</td>
<td>G</td>
<td>+8</td>
</tr>
</tbody>
</table>

As can be seen by this table, correlating the reading scores of the sixth grade tutors to their second grade tutees added little additional insight. While there seemed to be some correlation between the scores of the tutors and the scores of their tutees at both ends of the spectrum, there was also plenty of ambiguity with the middle numbers. For example, the highest achieving sixth grader (H) tutored the second highest scoring second grader (G). Similarly, the lowest scoring sixth grader (A) tutored the lowest scoring second grader (A). But the table breaks down after that, with a mid-level annual growth loss sixth grader (D) tutoring the largest annual gain second grader (H), for example.
Other Sixth Grade Data

Running records and tutor observation forms. Like their NWEA MAP reading test scores, reviewing the running records (see Appendix F) and tutor observation forms (see Appendix G) of the sixth graders also gave little added detail or insight into the reader role model program. One might expect that those tutors who were most engaged, keeping the most accurate records for example, would have students who gained the most in reading levels or might gain the most themselves. Unfortunately, there were very mixed results in this aspect of the program as well. Those sixth graders who kept excellent records and were highly detailed had the same mixed set of scores as those who did not keep nearly as good of records.

Still, the running records were excellent tools that kept the sixth graders accountable throughout the program. I could quickly and easily determine who had not been doing their complete job simply by reviewing their running records on a daily basis.

The running records also made the basis for some good discussions that the sixth graders had during the small group meetings we had throughout the year. We used them to try and determine any reading mistake patterns being made by the second grade students.

The tutor observation forms were also useful to review with the sixth graders on an individual basis, but like the other records from the sixth graders, did little to show who would improve their reading score or not. Of the 56 tutor observation forms I completed throughout the program, only 4 could be considered negative. With almost
a 93% positive feedback result in the tutor observation process, I think it can be shown that the sixth grade students took their roles as tutors very seriously overall.

**Group and individual meetings.** Throughout the program, I met with the sixth graders in small groups in order to discuss their progress and concerns. These meetings were divided into two small groups of four individuals each. I conducted them every other week.

Too often, these meetings turned into sessions where the sixth grade students discussed different behaviors from their tutees that they had encountered during the week. In my role as a moderator, I tried to steer the discussion back to reading strategies and other ideas to help improve their tutee’s comprehension, but the sixth graders would still bring talk about some specific behavior that was bothering them and we would take the whole time trying to come up with ways to address their concerns.

Dealing with behavior issues is certainly an important aspect for an effective tutor. However, I feel that because they often were the primary topic rather than any reading and testing strategies, the sixth grade students were not able to transfer what they were teaching their tutees into improving their own reading abilities and scores.

Part of the problem was the location of this meeting. I conducted the meeting at a table located just outside their classroom door. While this made for easy and quick access, it also made for a lot of distractions, as people would pass us in the hallway on their way to or from somewhere. It was also possible to hear exactly what was going in their classroom through an open grate just opposite on the hallway wall from the table.
Reflecting upon these meetings along while reviewing their test scores, I should have met with the groups in my own classroom, which was empty due to my students being at their specialist. While this would have taken up valuable time to get there, as it was exactly opposite the sixth grade classroom down a long hallway, the lack of distractions would have been worth the extra time.

In addition to meeting in the groups, I also conducted individual meetings on the off weeks. These were mostly to review the tutorial observation form I had filled out after monitoring them at one of their tutorial session during the previous week. These meetings were extremely short and to the point because of time constraints.

**Sixth grade conclusion.** While these other sixth grade data sources, such as running records, tutor observation form and group meeting notes, often provided excellent tools to monitor and assess students’ participation in the reader role model program, analyzing them shows little correlation to how well or poorly a student succeeded in improving their reading ability.

**Reading Attitude Survey**

The final piece of data to review was the Reading Attitude Survey (see Appendix E) conducted at the very start of the program and at the very end. This survey provided me with insight regarding the reader role model’s attitude about reading, and if it improved through the program. The first page involved questions about reading at home, while the second page had questions about reading at school. Both sixth and second grade participants filled out these surveys.
Survey data analysis. In reviewing the surveys, very little stood out regarding most of the questions. On the first page, for example, responses ranged from Don’t Know to Happy or Very Happy to questions like “How do you feel about getting a book as a present?” Some surveys showed the feeling improved slightly while others showed it going down the same amount, with no set pattern. It was interesting to note that no student picked Unhappy or Very Unhappy, the two absolutely negative responses, for any of the questions on the first page.

The second page was very similar to the first in providing no real pattern. Once again, no students picked Unhappy or Very Unhappy for any of the questions until it came to the sixth grade students and the final question, which was “How do you feel about taking a reading test?” Of all the questions, this yielded the most negative response in the initial survey, with two sixth grade students indicating Unhappy and one indicating Very Unhappy. All three raised their feeling level to Happy at the end of the year survey. My hope was that in constantly administering and grading the comprehension assessments of their second graders, these sixth graders may have been given more confidence and a better attitude in taking reading tests, even if it didn’t show on their final NWEA MAP reading test.

Other Intangible Benefits

Beyond test scores and survey results, there were other benefits to setting up the reader role model program. Some of the side benefits even went beyond the second and sixth grade students participating in the program, directly affecting the school’s
teaching staff. The two most obvious of these were increased staff coordination and knowledge.

**Teacher collaboration.** Working together with the new sixth grade teacher benefitted us both. She often encouraged her sixth graders to take the lead. “I tell my students every day that the whole school is looking up to you to be role models,” she said. “I think the reader role model program just helped prove that to them.”

**Knowledge passed on.** Another benefit was what I learned through the program. Many of the things that I learned were passed on to the rest of the staff. For example, during the month of February, I conducted a Professional Learning Community meeting with the whole teaching staff where I demonstrated what the Reading A-Z website could offer them. This was knowledge I had picked up while setting up the reader role model program. “We’d been told that Reading A-Z didn’t have any comprehension questions,” said one teacher during this meeting. “Apparently that was wrong.” The utilization of the Reading A-Z program has subsequently increased at nearly every grade level. Ultimately, this means that more students are getting reading material at their level and hopefully becoming better readers because of it.

**Chapter Summary**

This paper set out to answer the research question: “How does a reading intervention program at an urban charter school taught by sixth grade students to second grade students, commonly known as cross-age tutoring, affect the reading test scores of both groups?”
After reviewing the data in this chapter, I believe the answer to this research question is as follows: “The reader role model program, a reading intervention program at an urban charter school taught by sixth grade students to second grade students, commonly known as cross-age tutoring, had major positive effects on the reading test scores of the second grade students while having mixed results on the reading test scores of sixth grade students.” As was shown by the data, second grade scores on the NWEA MAP reading tests showed dramatic improvement, with an average additional improvement above and beyond the annual projected growth of over a half a year. Similarly, these students improved their benchmark reading scores as well. The sixth grade scores on the NWEA MAP reading tests showed much more mixed results, with some students dramatically improving their scores, but others not even making their annual project growth amount. Other data sources, such as the Reading Attitude Survey, running records and tutoring observation forms, showed similar mixed results for the sixth graders.

Chapter Five Preview

In Chapter Five, I will further break down and detail this conclusion. I will detail and expand upon what I learned throughout the creation, application and examination of this cross-age tutoring program. Finally, I will look at the limitations and future research possibilities for this program along with communicating and utilizing its results.
CHAPTER FIVE

Conclusion

Chapter Review

My central research question has been: “How does a reading intervention program at an urban charter school taught by sixth grade students to second grade students, commonly known as cross-age tutoring, affect the reading test scores of both groups?”

Chapter One detailed my own background and how I came to this question. In researching and implementing a cross-age tutoring program, I hoped not only to find a better way teach reading skills to my own second grade students, but also to better teach how to teach reading skills and help sixth grade students in their own learning.

Chapter Two reviewed research into this question, looking at both cross-age and general tutoring programs. It detailed the general need for such reading intervention programs in the early grades and studied successful programs that featured scaffolding comprehension and rapid assessment.

Chapter Three examined the research paradigm along with the setting, participants, planned timeline, and analysis tools of the research project that will help answer this question.

Chapter Four focused on the data results of both the second grade and sixth grade students that participated in the program. Using the data, the answer to the central question was determined to be: “The reader role model program, a reading intervention program at an urban charter school taught by sixth grade students to second grade students, commonly known as cross-age tutoring, had a major positive
effect on the reading test scores of the second grade students while having mixed results on the reading test scores of sixth grade students.”

This chapter will expand upon that conclusion, specifically dealing with what I learned throughout setting up, administering, and analyzing the final results of this cross-age tutoring program. I will also look at the possible implications, limitations, and future research possibilities for the program, ending with my final reflection on the reader role model program.

**Major Learnings**

In reflecting upon what I had learned through this research process, I feel that three main components stand out in order to successfully create, run and assess a cross-age tutoring program. These are collaboration, preparation and dedication.

**Collaboration.** Nothing drives home the point that collaboration is hugely important and absolutely necessary for the success of cross-age tutoring than to not have it, or even have it be possible for even a short period.

During the course of trying to set up my reader role model program, the sixth grade teacher I had been working with resigned. This resulted in a scramble to find a replacement and the need to re-establish a working relationship with the new sixth grade teacher in order to get the program back on track.

Ultimately, about four to six weeks of direct tutoring were lost due to this setback. Fortunately, I believe an even stronger sense of collaboration resulted from this change, one that will have a positive impact for years to come.
Preparation. Even though the sixth grade teacher resignation cost the program direct tutoring time, this delay actually allowed me to be better prepared once the program started running on a daily basis. I was better able to look at the pool of second grade students and determine their individual needs as readers.

In particular, this led me to the comprehension strategy I adopted. My research showed that while other components of reading, such as phonics, phonemic awareness, vocabulary and fluency, could be used to help scaffold a reader into comprehension, comprehension was still the ultimate goal of reading (Juel, 1996).

Dedication. Finally, establishing, administering and evaluating a successful cross-age tutoring program takes a significant amount of time and dedication from the teacher. As my research showed, a teacher cannot simply get an older grade student together with a younger grade student and hope that magic happens (Cohen et al, 1993).

One of the most important things I discovered while the program was running was the large amount of extra information I was receiving on my second grade participants. It was almost as if I had eight extra set of eyes and ears to monitor the reader role model participants. By reviewing the running records, I could start to determine words with which my second grade students struggled. Using this information helped me better teach them as they came into my own small group sessions.

Being dedicated to running the program nearly every day of the week also showed me how much my second grade students came to rely on it. If their sixth grade tutors
were unable to make it for a couple of days due to testing, I would always receive questions from my second grade students asking when they would be back.

**Literature Review Connections**

Overall, I think my literature review aligned well with the program. While many studies have shown the benefits of cross-age tutoring (Davenport et al, 2004; Medway et al, 1980; Lippitt, 1975), few have had the level of incredible results experienced by my second grade students. The research did show cross-age tutoring program with similar mixed results experienced by my sixth grade students (Carberry, 2003; Cohen et al, 1982).

Even with the mixed results, however, I believe the literature review showed the urgent need to teach younger grade children the ability to read well, as studies have shown early grade students with poor reading skills were much more likely to not graduate high school on time later in life (Lesnick et al, 2010). This need justifies looking at intervention strategies like cross-age tutoring.

**Implications**

As the testing data showed, the reader role model project had a significant impact on the test scores of the second grade students that participated in it. Unfortunately, the sixth grade test scores were inconclusive enough to state that the program had little effect on them.

It would be difficult for any school to justify the overall program if only one grade level benefitted from it. The time requirement alone, approximately 100 minutes per student per week, could potentially be put to better use, not to mention the teacher time
and effort involved in setting up the program. However, I believe other factors should be considered before discontinuing the reader role model program.

Additional considerations. There may have been more factors beyond the reader role model program that negatively affected sixth grade test scores and should be taken into account.

As already noted, the original sixth grade teacher left the class a little over a month into the school year, and it took about another month before another permanent sixth grade teacher was finally secured for the class. While this series of events certainly delayed the implementation of the reader role model program, it could have also had an impact on the overall class and how they ultimately scored on the NWEA MAP reading test.

In addition, the general classroom attitude toward the NWEA MAP Reading Test could also have affected the test scores as well. In the second grade, the spring NWEA MAP testing is the final high point of the year for the students. It is the last chance to show everything that they have learned through the year. Second grade students look at their score in eager anticipation to see how well they have done.

In the sixth grade, it is a different story. Many times, the NWEA MAP testing seems to be regarded as an afterthought. It is something that is taken after the state standardized tests, which have a much greater emphasis. After taking numerous test every few weeks, including the NWEA MAP winter tests, the OLPA pre-state standardized tests, and then the state standardized tests, many teachers say the students feel burned out by the time they get to the final spring NWEA MAP tests. For this
reason, the NWEA MAP reading test may not be as good a gauge for reading growth for a sixth grade student as it is for a second grade student.

Looking at all of these factors, I would highly recommend setting up a cross-age tutoring program for any school interested in a reading intervention program, even though this particular study showed mixed results for the sixth grade students.

Program recommendations. In order to continue the reader role model program, I am planning on significantly revamping my interactions with the sixth grade students. I plan to expand the readings and activities for our small group sessions during our weekly meetings. I will also work closely with the sixth grade teachers to better coordinate their teachings.

Without the necessary constraints of the HSC process, which required a motivated parent to complete a permission slip in order for their student to participate in the program, I should be able to focus the reader role model program on reading interventions for below-grade level students in addition to matching up students with similar backgrounds and interests. I will also be able to compare the test scores of students that are in the program with students that are not in the program. Since these students are in the same classroom and receiving the same instruction except for the reader role model program, I should get a better idea if the program is being successful in raising test scores or not.

With these changes in place, I will continue to monitor sixth grade student test scores to determine if there are any positive gains. Most resistance and concerns about
the program would be significantly reduced if the majority of sixth grade test scores showed improvement.

Limitations

This research study should be considered as just one of many on cross-age tutoring. While much of the research from Chapter Two showed benefits to both groups of students, the reader role model program was certainly not the first to show mixed results for the older students (Carberry, 2003). With only eight students from each class, it represented a very small sample size of a very specific group of students.

Test questions. In addition, the largest data point from this research was based on a multiple choice computerized test given over the course of a single day or two. The limitations of this method, including the short timeframe and random possibilities, have been extensively detailed in the educational field. For example, I suspected early on that the one second grade student that did not meet their annual projected growth would not be able to meet that goal. I had previously benchmarked him or her at a lower level than the test indicated, and so I had to consider that he or she had simply gotten lucky on some of his or her test answers. The fact that he or she managed to improve his or her reading score and stay above grade level was a further testament to the reader role model program.

Future Research Possibilities

This research paper is only the beginning of my educational journey. I am positive that a cross-age tutoring program can be developed that benefits both the second grade and sixth grade students that participate in it. The reader role model program got me
half way there, with significant results shown in the second grade. I will continue to research, find ways and try new methods to get similar results for the sixth grade students.

As previously mentioned, one avenue of research that could not be pursued within the scope of this paper was comparing the program students with those students not in the program. Since these students would be in the same class and likely experiencing much of the same learning except for the reader role model program, researching this comparison would give a better idea on how well the program functioned.

Communication and Utilization

In my role as the Lead Teacher at my school, I expect to be present cross-age tutoring and its results as a best practice during a future staff meeting. I would hope to get others on our staff to consider developing their own cross-age tutoring program, particularly if I can show them the benefits to both grade levels. In future year, I hope to expand the program into different grade levels. For example, I could see a group of fifth grade students tutoring a group of first grade students and a group of fourth grade students tutoring kindergarten students. This may even help free up our paraprofessional staff and allow them to focus their own one-on-one tutoring reading sessions on that vital third grade level.

Final Reflection

For me, it will always come back to that moment at the end of my first year of teaching. As I watched the little girl tracking the words with her finger and reading every one of them out loud correctly, I knew that this was important. Her ability to
read will have profound implications for the rest of her life. That I had somehow been a part of it inspires me to be a teacher every day. Even beyond being able to teach someone how to read, I want to be able to teach others how to teach someone to read.

I will be starting up another reader role model program in January of 2017. I plan to specifically focus on students whose are reading below grade level. Due to my school’s increasing number of English Language Learners, there is a definite gap between the so-called “newcomer” students that are receiving instruction from the ELL teachers and those that are reading at grade level. I hope that my reader role models can help close that gap, just as they did for my second grade students last year.

More than anything, however, I hope that some sixth grade student in the reader role model program has the same feeling that I had as that first year teacher. Watching their second grade student read, I want them to realize that they are part of something important—teaching someone how to read.
APPENDIX A

Parental Consent Form—Sixth Grade
Permission for Sixth Grade Students

September 25, 2015

Dear Parent or Guardian,

Many of you and your students may know me as a second grade teacher here at Urban Academy. I am also a graduate student working on an advanced degree in education at Hamline University in St. Paul, Minnesota. As part of my graduate work, I plan to establish a special tutoring program called “Reader Role Models” involving select students from the second and sixth grades. The central question for my research topic is: “How does a reading intervention program at an urban charter school taught by sixth grade students to second grade students, commonly known as cross-age tutoring, affect the reading test scores of both groups?”

The purpose of this letter is to ask your permission for your child to take part in my research. If your child is selected for the program, they will be specially trained in teaching reading skills to younger students. They will then use this training to work with a specifically selected second grade student 3 to 4 times a week from November to early May. Their test scores on the NWEA MAP reading tests will be analyzed for growth due to their participation in this program.

This research is public scholarship and the abstract and final product will be cataloged in Hamline’s Bush Library Digital Commons, a searchable electronic repository. It may also be published or used in other ways.

There is little to no risk for your child to participate in this program. They will be supervised at all times. All results will be confidential and anonymous. Participation is voluntary. You may decide to withdraw your child from the program at any time.

I have received approval for my study from the School of Education at Hamline University and from the director of Urban Academy, Mr. Ly.

If you agree that your child may participate, keep this page. Fill out the duplicate agreement to participate on page two and return it to me no later than October 5, 2015.

If you have any questions, please email or call me at school.

Sincerely,

Robert McCabe

Participant’s Copy (please keep for your records)
I have received your letter about the “Reader Role Model” program that you would like to set up at [blank] for the 2015-2016 school year, along with the study you plan to conduct about it. If selected, my student will be specially trained in teaching reading skills to younger students. They will then use this training to work with a specifically selected second grade student 3 to 4 times a week from November to early May. Their test scores on the NWEA MAP Reading tests will be analyzed for growth due to their participation in this program.

I understand there is little to no risk involved for my child, that his or her confidentiality will be protected, and that I may withdraw my child from the project at any time.

__________________________________________  __________

Parent/Guardian Signature  Date

Researcher Copy (Please sign and return to the school)
APPENDIX B

Parental Consent Form—Sixth Grade (Karen Translation)
Advanced degree at Hamline University on Saint Paul, Minnesota. Specializes in Advanced Reading and "Reading Role Models" for urban students.

For more details on Urban students and education, see the article in the "Urban Education" journal.

Public scholarship at Hamline Bush Library Digital Commons, providing accessibility to advanced education materials.

Email: [email protected]

Hamline University: [email protected]

For more information, please contact [email protected]
APPENDIX C

Parental Consent Form—Second Grade
Permission for Second Grade Students

September 25, 2015

Dear Parent or Guardian,

Many of you and your students may know me as a second grade teacher here at [ name redacted ]. I am also a graduate student working on an advanced degree in education at Hamline University in St. Paul, Minnesota. As part of my graduate work, I plan to establish a special tutoring program called “Reader Role Models” involving select students from the second and sixth grades. The central question for my research topic is: “How does a reading intervention program at an urban charter school taught by sixth grade students to second grade students, commonly known as cross-age tutoring, affect the reading test scores of both groups?”

The purpose of this letter is to ask your permission for your child to take part in my research. If your child is selected for the program, they will receive one-on-one reading tutoring sessions from specially trained sixth grade students 3 to 4 times a week from November to early May. Their test scores on the NWEA MAP Reading tests will be analyzed for growth due to their participation in this program.

This research is public scholarship and the abstract and final product will be cataloged in Hamline’s Bush Library Digital Commons, a searchable electronic repository. It may also be published or used in other ways.

There is little to no risk for your child to participate in this program. They will be supervised at all times. All results will be confidential and anonymous. Participation is voluntary. You may decide to withdraw your child from the program at any time.

I have received approval for my study from the School of Education at Hamline University and from the director of [ name redacted ].

If you agree that your child may participate, keep this page. Fill out the duplicate agreement to participate on page two and return it to me no later than October 5, 2015.

If you have any questions, please email or call me at school.

Sincerely,

Robert McCabe

[ Urban Academy Charter School]

1668 Montreal Ave.

St. Paul, MN 55116

(651) 215-9419

rmccabe@urbanacademymn.org

Participant’s Copy (please keep for your records)
I have received your letter about the “Reader Role Model” program that you would like to set up at [redacted] for the 2015-2016 school year, along with the study you plan to conduct about it. If selected, my student will receive one-on-one reading tutoring sessions from specially trained sixth grade students 3 to 4 times a week from November to early May. Their test scores on the NWEA MAP Reading tests will be analyzed for growth due to their participation in this program. I understand there is little to no risk involved for my child, that his or her confidentiality will be protected, and that I may withdraw my child from the project at any time.

___________________________________________  ________________________
Parent/Guardian Signature                  Date

Researcher Copy (Please sign and return to the school)
APPENDIX D

Parental Consent Form—Second Grade (Karen Translation)
83

The reviewer is experienced in the field of urban education, with an advanced degree from Hamline University in Saint Paul. The reviewer has also contributed to the Saint Paul school district with the "Reading Role Models" program, promoting urban literacy and reading.

The reviewer is currently an educator at Hamline University, where they have taught for over 5 years. They have completed the NWEA MAP training and are currently teaching the Urban Education course.

For more information, contact Hamline University: [Contact Information]

Email: [Email Address]

Please see attached resume (in English)
"Reading Role Model" ကို အထောက်အကူပေးခဲ့ပါသည် 2015 - 2016 ခြိုးက စာအုပ်ရေးဆိုင်ရာကို ကြည့်ရှုရန် ပြုလုပ်ခဲ့ပါသည်။

စာခင် ကြည့်ရှုရန် အမေရိကန်သူ့အဖို့ NWEA MAP အတွက် လေ့လာခဲ့ပါသည်။

သင်ကြားနှင့် ဆုံးဖြတ်ခွင့်များ အတွက် အမျိုးသားစီးပွားရေးနှင့် ရေးသားရေးအဖွဲ့အစည်းများကို ဖြေရှင်းချခြင်းပါ။

ပြုစုပြီး အကောင်းဆုံးဖြစ်သော အဖွဲ့အစည်းများကို ဖော်ပြသည်။
APPENDIX E

Tutor Interview Questions
Reader Role Model Questions

1. Why would you like to become a reader role model?

________________________________________________________________________
________________________________________________________________________

2. What did your favorite teacher of all time do that made them your favorite?

________________________________________________________________________
________________________________________________________________________

3. Do you like to work by yourself or with a group better? Why?

________________________________________________________________________
________________________________________________________________________

4. Should a reader role model talk or listen more? Why?

________________________________________________________________________
________________________________________________________________________

5. Do you have any questions?

________________________________________________________________________
________________________________________________________________________
APPENDIX E

Reading Attitude Survey
**Reading Attitude Survey**

<table>
<thead>
<tr>
<th>Emoticon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>:D</td>
<td>Very Happy</td>
</tr>
<tr>
<td>:)</td>
<td>Happy</td>
</tr>
<tr>
<td>:</td>
<td></td>
</tr>
<tr>
<td>:(</td>
<td>Unhappy</td>
</tr>
<tr>
<td>:P</td>
<td>Very Unhappy</td>
</tr>
</tbody>
</table>

**Directions:** Circle the emoticon that best describes your feelings.

1. How do you feel about reading a book for fun at home?

   :D  :)  :|  :(  :P

2. How do you feel about going to a bookstore?

   :D  :)  :|  :(  :P

3. How do you feel about getting a book as a present?

   :D  :)  :|  :(  :P

4. How do you feel about starting a new book?

   :D  :)  :|  :(  :P
5. How do you feel when you read a book during your free time at school?

6. How do you feel when a teacher asks about what you read?

7. How do you feel about learning something from a book?

8. How do you feel when you read out loud in class?

9. How do you feel about taking a reading test?
APPENDIX F

Running Record Form
Running Record

Directions: This sheet must be completed for every Reader Role Model session and turned in to Mr. McCabe at the end of the session.

Name: ___________________________ Date: ___________
Text Title: ___________________________ Level: ___
Assessed By: ___________________________

Errors:

<table>
<thead>
<tr>
<th>Incorrect Word</th>
<th>Error Made</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total number of errors: ___

Retell:

Any additional observations can be made on the back.
APPENDIX G

Tutor Observation Form
Tutor being observed: ______________________    Your Name: ___________________________

Date/time of observation: _________________________________________________________

**TUTOR SESSION OBSERVATION**

1. Draw a diagram of the tutor and tutee’s seating positions.

2. To help focus your observation, answer the questions below by checking “Yes,” “No,” or “Other” and provide a description of what you observe and your feedback.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Other</th>
<th>Observations and Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Did the session begin in a clear manner? (e.g. establish context, objective for session, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Did the tutor use active listening and observing strategies? (e.g., comfort level with silence; who spoke the most?)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Did the tutor encourage active participation and learning (e.g. directed questioning, Socratic method)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Other</td>
<td>Observations and Feedback</td>
</tr>
<tr>
<td>---</td>
<td>-----</td>
<td>----</td>
<td>-------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>d.</td>
<td>Did the tutor check for the student’s prior knowledge or, understanding throughout the session?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td>Did the tutor manage time and organize the session effectively?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f.</td>
<td>Was the tutor’s level of confidence and knowledge of course material present?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g.</td>
<td>Did the tutor exhibit interpersonal interaction with the tutee (e.g. established and maintained rapport, exhibited patience, respect, empathy)?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Describe some strengths of session and provide any recommendations for tutor.
REFERENCES


Cordray, David; Pion, Georgine; Brandt, Chris. (2012). The Impact of the Measures of Academic Progress (MAP) Program on Student Reading Achievement. Final Report.


